_protoReality

The North Atlanta Newton Users Group Newsletter
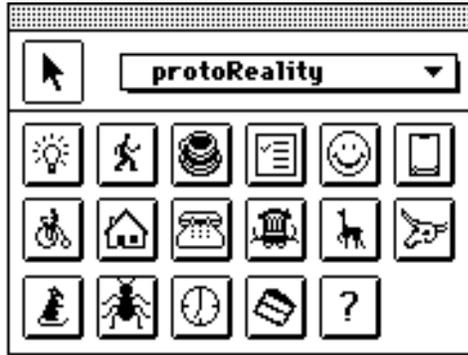
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NANUG Membership Application Form

Below is a membership application to join NANUG. There is currently no membership fee.

The benefits of joining, as opposed to just reading the newsletter? Well, you get on our exclusive mailing list ;-) and can take advantage of our user group discounts on hardware and software (soon to be published). Even better is the general idea of belonging, don't you think? ;-)

NANUG Membership Application Form

Name:

Address:

City/State/Zip:

Country:

Phone:

Fax:

NewtMail:

E-mail address:

You can:

• Print this page and mail it to:

Mark Underwood
NANUG Membership
3381 Claire Circle
Marietta, GA 30066
USA

• Newt Mail your personal Names card to "MarkU" with a subject of "NANUG Membership"

• E-mail your personal information to "mau@sun1.ema.com" with a subject of "NANUG Membership"

From the Orthogonal Office
Mark Underwood

Sorry, we're a little late this month, but we've added over 55 new members in the last 30 days, begun our group programming project, received stuff to review...well, and there are these day jobs we have to show up for! ;-)

Lots of stuff to talk about, so let's get to it!

Newt OS 1.05

Well, the long-awaited upgrade to 1.0x Newton users is here at last, and in a phrase, "have at it"! Yes, system upgrade 1.05 is worth it (especially since it's free), but you have to be careful. For one thing, the update posted on the on-line services can only be used if you have the Newton Connection Kit (or know someone who does, like us). In order to provide the best sort of results, Apple's PIE guys changed the way memory is partitioned inside the Newton--how much is allocated for each component (handwriting recognition, internal store, etc.). The update is also available on a PCMCIA card from Apple.

The steps to perform the upgrade using the on-line posted update go like this: using the NCK, back your Newton up (you don't have to leave your RAM card in--in fact, it will go faster if you don't) by a "synchronize" operation. When the "synch" is complete, download the upgrade package. When it's received by the Newt, you'll get a couple of warnings telling you what's about to happen. **Be sure you have a good backup before proceeding!**

The Newt will restart to perform the memory re-allocation, and it will be like you just opened the box for the first time--the pen alignment drill comes up--do it. Before doing anything else, though, you want to restore your backup, again using NCK. When that's finished, you should reset the time and date.

The upgrade is complete!

What I noticed right away was how quickly things went. Handwriting recognition improved, bringing up Names was much faster, and the dreaded "not enough memory" dialog hasn't shown up yet!

The upgrade is available on all the commercial services, standard ftp sites, and from Apple directly (call 1-800-242-3374 in the US, contact your Apple Authorized Service Provider overseas) in two other formats: PCMCIA card and diskette.

Upgrading from the PCMCIA card is similar to the NCK download, but allows you to do it entirely from the card. Detailed instructions for this come with the update card, but were not available to us when we went to press. Apple is also sending a "spare" 1 Mb card along with the PCMCIA upgrade package, and you have the

option to buy the spare card for $99. The update is also available on either MS-DOS or Macintosh formatted diskette, but does **not** include the spare card.

If you have problems finding the upgrade on-line, drop me (or any other NANUGeer) a note.

X-Books and X-Readers

This is not the first issue of _protoReality that contains NewtonScript code, but it is the first that contains stuff you can use outside the scope of the book! In the "Code Samples" you will find a couple of examples that can be entered into the Inspector. Since you're a Newton owner, you're already on the bleeding edge of technology--but NANUG makes it possible for you to be on the serrated edge itself! ;-)

Hence the "x-book" term--eXperimental books and eXperimental readers (such as yourself). Our experiments generally come in two types: "hacks" and "goodies".

A "hack" is usually a quick, one-time change to your system that achieves a specific fix or change. Use hacks with caution, as they may affect other things. We include them so you can have fun, but be careful! Hacks are marked with the "shark" symbol:

A "goodie" is somewhere between a reusable piece of utility code and a full application. Goodies add to your Newt's functionality without changing other things--and they are marked with the "newt" symbol:

With either one, you won't find anything dangerous (which some may find disappointing, but hey, we've got a reputation to uphold ;-)), and we'll include the instructions (if not an actual piece of code) on how to "undo" or "remove" them.

If there are special restrictions in using an x-code item, it will be marked with a bug symbol:

We've tested these freebies before including them in the newsletter, but as always when

introducing a new program to a computer, it's best to have a full backup of your existing work before trying it out. Drop Scott Portis a note and let us know what you think about this sort of thing--we have a lot more we can include!

Member Bios

A new section this month! I asked our members to write up small "biographical sketches" to include. These should help you to get to know us a little better. In future issues, you might even see a few photographs, courtesy of our staff photographer, Robert Stone! (The *New York Times* has nothing on us! ;-))

Corrections

In the "we goofed" department:

Last issue, in our review of MobileMath, we noted that trying to solve "3+4=" didn't work. It turns out that in order to use this format, you **must** put a space between the equation and the equals sign: "3+4 =".

Tom's list of Newton ftp sites had a slight typo:

UIOWA MIRROR:
ftp.uni-erlangen.de
/pub/Newton

We apologize to our friends in Erlangen!

A NANUG Overview
Mark Underwood

Founded in October of 1993, NANUG was created with these ideas in mind:

• To provide timely and correct information about the Newton and all of its accessories, software packages, and other Newton-related products

• To assist new and experienced Newton users in getting the most out of their purchase

• To provide (hopefully) an un-biased forum for the exchange of user tips, hints, and suggestions

• To provide free or low-cost resources for small to medium Newton development projects

There is currently no membership fee to join NANUG. Meetings are normally held the second Tuesday of the month. Future plans include an "on-line" conferencing system to allow our remote members interactive access to the meetings.

_protoReality, our newsletter, is published one a month (normally during the third week of the month) in three formats: a Newton Book Reader package, a "binary enhanced" text document, and a "plain" text document. Each format strives to convey as much information as possible within the constraints of the media. The "plain" text version, for example, is posted to InterNet, while the "binary" and "book reader" formats are posted to on-line forums and ftp sites that support binary up/down loads (AppleLink, CompuServe, America On-Line, etc.).

NANUG also distributes a "best of" diskette of free or shareware applications, digital books, and other Newton files that are posted on commercial services for the benefit of those who do not subscribe to them. We also provide a software "kiosk" at the meeting to allow our members who don't have a Macintosh or PC to download these files to their Newton.

Minutes of the February Meeting

Meeting was called to order at 7:10 PM.

In the "old business" segment, Mark passed along the reviews and general reaction to the January newsletter, which was phenomenal! NANUG members now exist on just about every continent (see the breakdown in the next section). A mailing list has been started for those readers interested in NANUG activities, but haven't joined as members yet.

The group programming project was discussed, but not finalized as Erica was unable to make the meeting. A special meeting to address these issues was held at Mark's house on the 21st to finalize the plans. [At the special meeting, Erica and Mark finalized the project plans, and created the sample "starter" code for the project teams to begin with. More about the group project in next month's issue.]

In "new business", a discussion was started as to what sort of "on-line" facilities NANUG could provide their "remote" members. InterNet IRCs, a dedicated ftp site, use of CompuServe conference areas, and a plain BBS were all considered good avenues to look into further. A report on the findings will be given next meeting.

Since there was no other new business, members adjourned after 9 PM.

The next meeting will be held on Tuesday, March 15th (Beware the Ides of March!).

NANUG Membership Statistics

Total number of members (as of 2/15/94):   71
      "Local"   19   "Remote"   52

Members by state (US):

GA	19	WA	1
CA	10	RI	1
FL	3	PA	1
MD	3	MI	1
TX	2	NC	1
VA	2	MO	1
NY	2	OH	1
MA	2	WI	1
NE	2	NJ	1
TN	2	AZ	1
MS	1		

Members by country:

USA	57	Austria	1
Canada	6	Japan	1
Australia	3	UK	1
Germany	2		

An Interview with David Dunham
Mark Underwood

If you are reading our digital book version on your Newton, you are holding in your hands the result of David Dunham's efforts. David and the others at Pensee are responsible for the Newton Book Reader application, which allows Newton users to read on-line text, such as this newsletter. David was kind enough to give us a moment of busy time to talk about digital books and the Newton.

PR: Can you tell us how you (and Pensee) got involved with the Newton?

DD: Apple approached us in 1991, and asked us to develop the digital book tools. We'd been working with the Macintosh since 1984, had a good relationship with Apple, and were already working on digital books for PenPoint.

We started designing the requirements and implementation even before we saw a Newton prototype, which wasn't until early 1992. In the intervening, Newton had changed somewhat. We came away from that meeting and started work on Macintosh prototypes, first in HyperCard and then in C.

PR: How much of the work you guys did on the PenPoint platform went into the Book Reader project?

DD: Pensee worked on two PenPoint applications, one of which, PenBook, was published by Slate. This product was essentially a way to print from your desktop computer to a pen computer -- we captured PostScript. With Newton Book Reader, we took a different approach, where the book is described in a way that doesn't tie it to a particular screen size. We started over from scratch with Book Reader, though we tried to keep in mind what we'd learned.

We also did a lot more testing with the Newton Book Reader, probably because it was easier to get prototypes up and running. We got feedback on each prototype, and kept refining our original designs.

PR: As a developer, the most tantalizing part of the early NTK documentation was the cryptic mention of "authoring digital books". When the documentation in 1.0b7 was finally available, I spent two days converting Word documents to Book Reader format. Am I crazy, or did you expect that sort of response from the average Newton developer?

DD: The Newton is a place to put stuff, and that includes your own information, as well as reference material. I don't think it's surprising that people want to make personal

books. I'm a little more surprised at the large numbers of novels available in Book Reader format.

In some ways, I'm surprised that more developers don't take advantage of books. It's a good way to organize an information product, and you get a lot for free (table of contents, fast searching, consistent interface). And you can put any NewtonScript code you like into a book. Really, the only difference between an application and a book is whether you lay out all the views yourself or let Book Maker do most of them for you.

PR: How did the code names of "Copperfield" and "Tiny Tim" come about?

DD: Digital books deal with information, and my partner, Scott Shwarts, found a quote from Dickens' David Copperfield: "All I ask for is information." So Copperfield became the code name for Book Reader, and Dickens had to be the author tool, Newton Book Maker.

When we were asked to create Newton's on-line help, the specification described a scaled-down Copperfield. Hence, "Tiny Tim".

PR: One of my personal joys with the Book Maker/Reader is at last seeing my frequently rejected stories and novels "in print"--and in a format I can distribute for others to enjoy. During the project, did you realize that you were enabling individuals to become publishers?

DD: We wanted to make Book Maker as accessible as possible (despite the archaic "dot commands," you don't need to know anything about NewtonScript to make a book). But I hadn't realized people would be writing and publishing their own works in quite that way. I'm very pleased to be empowering individuals.

PR: NANUG chose to use the Newton Book Reader for distribution of the newsletter primarily because of the ability to imbed Newton Script. We've received a lot of "gee, I didn't know you could do that" comments on our "personalized" membership form, which was really simple to do. What's the most interesting or complicated use of scripting in a book you've seen?

DD: Certainly the Fortune Guide (where you can see a graph comparing financial data for two companies) or Fodor's (where you can get directions from your hotel to a restaurant) are complex scripts. But I think you can get a lot of use out of much simpler scripts, like the one in the Quick Astrology Guide which calculates your birth sign.

Like I said earlier, there's really no difference between an application and a book. Both can run NewtonScript.

PR: Something we (NANUG) could really use is a way of saving a page (or pages) of a

book to the NotePad, so they could be modified, beamed, or e-mailed. Obviously, there's a potential problem with copyright violation, which I suppose you could address by adding a specific directive to allow "saving" of a content

section at the author's discretion. Will we see something like this in a future release?

DD: This is the sort of question I can't answer. I know that many publishers are uncomfortable with the idea of people distributing modified versions of their work (is it still a Rand McNally map if you've erased the earthquake-collapsed streets and drawn in your house?).

PR: The on-line help in the Newton doesn't receive a lot of press. Is that because it's so seamless, or because people aren't really aware it exists?

DD: I don't know enough about how most people use their Newton to answer this. [My personal bias is that reviewers place too much emphasis on on-line help and not enough on good design.]

PR: Is a separate book/manual planned on authoring digital books--something more along the line of a "non-programmer's" guide?

DD: I don't know, but I'm aware of an article in progress, which will probably appear in PIE Developers magazine. And Apple has greatly improved the digital book chapter in the next draft of the Newton Toolkit manual.

PR: Do you think we'll see Book Reader packages for sale in Waldenbooks? Or see them in the Library of Congress?

DD: I don't see why not. You can already buy two Book Reader packages (Fortune 500 and Fodor's).

PR: Are there any "undocumented" features of Book Reader that you can tell us about?

DD: PIE Developer Information Group has done a good job of completing the Book Maker documentation, which will be in the next NTK release.

As far as Book Reader, you could argue that *all* its features are undocumented, since the (1.0b4 and earlier) Newton manual doesn't mention it. But there's nothing hidden.

PR: I understand you drive a Miata. In Atlanta (at least), those normally draw extra hits from radar and laser guns. Have you run across that sort of attention?

DD: Not yet. But I've only had the car a week, and don't have a radar detector or other electronic countermeasures.

PR: What (aside from the Book Reader, of course) is your favorite Newton feature?

DD: I don't think it's a feature per se that makes the Newton, but rather its hint of playfulness, like the sound effect and cloud after you scrub something, or the crumpling trash.

A question for you: does Newton really need user groups? You see them for computers, because computers are so hard to use, but you don't see them for toasters or other appliances. Is Newton falling short of its goal to be an assistant rather than a computer? Or is this just an old term we're stuck with, but you're really closer to an enthusiast's club (like some sports cars have)?

PR: Well, you hit the nail on the head! I thought about using "Newton Ham Club", but it was too confusing for the people I tried it out on (Newton Sandwiches?). In a way, since you can "program" a Newt, the parallel between it and a computer is stronger than it and a calculator or Day-Timer. It's bound to be a term we're stuck with until someone comes up with a better one! Thanks for your time, David.

An Interview with David Alford
Erica Sadun

PR: Tell me about yourself and your Newton Pioneer company.

DA: WriteWare, is a partnership made up of myself, Robert and Linda Hine, who are my housemates as well as my business partners. I originally had the idea, and had the first prototype made, for SNAP. Bob is the creative artist of the group, and does all of our artwork, and graphics, while Linda is the administrator for the business end of the company. WriteWare is a new company that we formed at the beginning of 1994, and took our name from what we do. There is hardware, software, and a company named Adaptec uses the term I/O ware for their SCSI interface products. We decided to make our name indicative of what we do.   We are basically the first company in the marketplace dedicated to the input devices used for the PDA and the PCA (Personal Communication Assistant)...

This may sound like somewhat of a narrow niche marketplace, and currently, it is. However, if you look at the current size of the writing pen market, and the size of the writing media market (paper), versus the media market we are addressing, you begin to realize what potential size we could grow to. Currently, there is the Casio Zoomer, Apple Newton, Sharp ExpertPad, Sharp Wizard line and Amstrad with PDAs on the market. AT&T, Sony, and Siemans have all announced plans to market products based on Newton, or General Magic technology. These are not small players, and the market place for styluses is going to grow.

As for myself, I have been in the computer industry for 15 years. I am currently selling Electronic System Design software for a Swiss company here in Silicon Valley. I have owned a Macintosh since 1984 (Would you believe I actually had a LISA first?). I have been in California for about six years. I'm single, with no children.

PR: What does SNAP mean? Where did you get the name?

DA: S.N.A.P. stands for Stylus Not a Pen, and the original name was developed by Bob Hine. We tend to have brainstorming sessions when it comes to naming our products and our Company. The three of us sit around, and bounce ideas and names off each other, which usually brings a "I don't like this part of what you just proposed, but I do like the second part, what if we modify it, and call it this" from someone else. This has occurred for the company name, the first product and subsequent products. Usually when Bob has an Idea! that we tend to go with, I can literally see the light bulb come on above his head, and he gets very dramatic, and presents it to us with a big flair. It is a very synergistic process, that we enjoy doing.

PR: What gave you the idea of manufacturing stylus replacements for pens? How did you start tossing the idea around and what brought you to realize that you could actually go ahead and do this?

DA: I came up with the idea of the product due to the fact that I bought a Sharp ExpertPad instead of a Newton. Frys' ran a sale on them, and I went down and plunked down my credit card, and started having fun. After only two weeks of using the Sharp supplied stylus, it began to crack around the support area of the tip. I switched over to the backup pen, and after reading about the recall of the Sharp Styluses on comp.sys.newtion.misc. I sent in my broken stylus, and barely got my replacements in time, because the second one had already started to break, and I was using scotch tape to keep it together (I felt like a real nerd, you know, one of those guys who uses tape to keep their glasses together at the bridge, just above their nose).

Anyway, I don't know if you remember this particular episode, but the problem was due to Sharp designing their stylus for the Japanese writers, who write with their pens perpendicular to the writing surface by 90 degrees--American writers are trained in elementary school to write at an angle some 20 to 30 degrees off perpendicular, say around 60 or 70 degrees. This puts sideways stress on the tip of the pen, and the plastic wall of the Sharp stylus was never designed to take the sideways stress, and would begin to split and break.

When my Sharp stylus (Which actually looks more like a carpenters pencil as opposed to the more stylish Apple stylus) broke, I got the idea that there was going to be an after-market for replacement styluses in the PDA market. Everyone tends to lose a cheap pen, or someone picks it up and walks off with one that is on you desk, they run out of ink (not a problem for the PDA, though), or are broken. The cost of a injection mould was over $6000, so I looked for an alternative. We decided to use existing ink replacement cartridges for our models, and I had one prototyped for a Parker Pen that I had lost the cap for, and could no longer carry around in my pocket. Once the concept was proven, I had other prototypes made. The styluses are machined with numerical control lathes, which is not exactly cheap to do in small quantities, but makes a very nice looking product.

PR: Which pen lines do you support and will support?

DA: We currently support MontBlanc, both the MeisterStück and Rollerball models, Parker, Sheaffer, Cross, and we are about to announce a line of pens that we are going to carry ourselves. We are also having a run of generic SNAP product for the cheap give away pens that you find nearly everywhere. We are staying away from the BIC line. We want to address the upscale Pen marketplace, and provide a status symbol for PDA users, as well as give them a product that will not break, and is not apt to be lost, or picked up and walked away with, due to being within an expensive pen. I think you can feel the difference that comes from writing with an instrument that has the weight and feel of

something that you have written with almost everyday.

We don't claim better handwriting recognition from your Newton, but we do claim better handwriting from the writer since they are using something that feels more

comfortable, as opposed to a carpenters pencil. We are somewhat breaking one of the cardinal rules of sales and marketing by selling something that will not give us a continuing stream of sales due to wearing out, or using up. However, we feel that we would rather sell one quality product to everyone, and make a name for ourselves, and have good word of mouth advertising, than put out a product with planned obsolescence.

PR: How are you getting the word out about the SNAPs? Are people really liking it? Do you consider Radio Shack's pens to be a threat?

DA: As a matter of fact, we saw a stylus begin bundled with Newton shareware on a disk at MacWorld. It was entirely made of plastic, and was shaped like a pen, but really did not differentiate itself that much from the Newton stylus in look and feel. We on the other hand got a great deal of excited reaction when we handed people a real pen that they could use on their Newton touch screen. I knew that we had a winner, when I heard for about the fourth or fifth time "This is really cool". The people in the Newton corner of the Apple Pavilion gave me an open invitation to stay around and sell my product, and show people how it worked. We had all of the Newton demonstrators using a pen with a SNAP product in it during the show.

As we are bootstrapping into this business, we are using press releases, newsletters like yours, word of mouth, InterNet announcements, and trying to open distributor channels. The Apple Retail Store currently has the product for sale for their Cross pens, and we do mail order. We are going to go for bundling a card in IN magazine, the Intelligent Newton magazine, and we have already set up with several software companies selling Newton products to put the same card into their packaging. It is starting slow, but it is building up. We want to accelerate the growth, and to that end, we will be making some announcements in the near future. However, we are getting Trademarks and applying for patents on these new ideas before we release them.

We have had no complaints from anyone who uses the stylus. What we have heard is disappointment, if we don't have a SNAP for a particular Pen model. As there are hundreds of types of pens out on the market place, we are trying to design SNAPS that will cover multiple models. We have not found the golden one-size-fits-all-pens design yet, and never will. So we selected a market niche, and have gone with the upscale market. This has not given us the growth that we desire, so our next step is to sell a value added pen. This will eliminate the question of can you fit my 'xyz' pen, and we will be able to offer an alternative to the 'xyz' pen owners that will allow them to use our product by purchasing a whole stylus within a pen. However, these pens will really be a value added high-tech offering. Stay tuned. I am not aware of the Radio Shack pen--should I drop by a store and look for it?

PR: The Radio Shack Zoomer Pen looks like a very cheap MontBlanc--you know, the big pen style. I ordered one before I got your SNAP but it came in damaged. It

was very lightweight but not bad looking. Do you find your sales going more towards the Newton or Zoomer communities? What does this say about the communities?

DA: I don't think that I can identify any direct or mail order sales that we have made to a Zoomer owner. We are in negotiations to place the product with a company that sells all of the PDA products, so we might start making an impact in that direction. For this reason, I can't really comment about the rest of the question.

PR: Are there any other products you can see openings for in Newt's future? What might these be?

DA: Although we will not comment on unreleased products, we have some ideas clicking in our heads concerning OCR products that might plug directly into the Newton's serial port. This would be a Newt product only, and would really be entirely different from our current line. However, it does attract my interest, and I am always thinking up new products which can advance the state of the art. We have not really addressed what we call the active stylus market. These are specialized styluses that are used on the EO, the new Compaq machines, and a handwriting recognition system available for the Macintosh. As our current product line is passive and the margins are good, I expect we will stay there, and not go into that market place. We are designing custom styluses, and have been approached by Apple to give them samples of our product for the next generation Newton stylus. We were very flattered, and have been pursuing a relationship with the Newton group.

PR: Thank you very much for speaking with _protoReality!

DA: Don't forget to send me a copy of your article!

Views and Reviews
Erica Sadun

This has been a rather busy month here in Atlanta. As you know by now, the Cowboys trampled over the Buffalo Bills and traffic became impossible here in Atlanta for several days. Friday, we went downtown to hit a coffee-house and found that at 10:30pm, traffic was non-negotiable. You can't believe how many limos we saw! In some nightspots, only customers with limos were being allowed in! On the other hand, these people could afford Superbowl tickets so I guess that limos just came in with the deal. Street prices for the tickets were running at $1750/pop in the late afternoon and settled just before game time to about $1300 (In most past games, right before kickoff, you could generally get a ticket for about $200, I'm told). So let's do the math: two people, a hotel room (running at triple the normal price--Fairfield Inns whose rooms normally go for $25/night were charging $90 per night plus tax--and what the Ritz Carlton was charging just boggles the mind), a limo, dinner at all the best places (again the restaurants were charging double), Superbowl tickets, misc. expenses and air fare. Easily, the trip is worth an Indy (SGI's Killer UNIX-based graphics system -Ed.), a Duo--with Dock, a nice new back-lit Newton, a super-nice Quadra, and a large heaping of misc. software to boot. Kind of makes you wonder about people's value systems, eh?

Speaking of Indy, I completely failed to win an Indy last month. Byte Magazine was running a "I want an Indy" in twenty five words or less contest. I submitted at least fifty gems of slogans but somehow failed to earn an Indy of my own. You be the judges: "I want Indy to improve dental hygiene and promote world peace". "I want Indy because if my desire does not exceed my grasp, then what are contests for?". "I want Indy because there is a large rectangular aqua hole in my life." Think I should have won? Why not drop a line to byte@sv.poppe.com and tell 'em so!

For those of you who spoke to me after the December Newton Developers Conference, some sad news. Unfortunately, Apple has changed its mind about publishing my game. Its hard to figure out how actually to make some money programming this beast. I put out two shareware packages recently--Peekaboo and the Figgles Utilities. To date, after about four weeks on the net, I have received zero checks for Peekaboo and after two weeks for the FigUtils, four checks for a total of $80 (Thank you LE, DL, R(B)M, & RW). Not a large amount by any stretch of the imagination for however many programming-months. Do the math. It gets very depressing. Someone suggested that I track down EASE--does that ring a bell for anyone? CE software didn't return my calls and I can't seem to find anyone else interested in doing publishing of either utilities or games. Gimme a write at erica@cc.gatech.edu if you're a business tycoon. (I'll put a general plea in at this point to support shareware--c'mon, guys and gals!!! Help keep Erica's efforts going--send in your fees!!!-Ed.)

SNAP

On the Newt front, I received a beautiful stylus (a **SNAP** from WriteWare, $8.95) from David Alford (See the interview with David earlier in this issue-Ed.). This particular stylus fits into my Cross pen (the pen with the really neat NeXT logo on it). Now, I have a stylish pen to carry around and wow the hoi poloi when I let them test-run the Newt. Inserts fit Cross, MontBlanc, Parker, and Sheaffer pens. David says they'll be supporting other pens REAL SOON NOW too. So keep your eye on this space. Of course, a real pen won't fit in the side slot of your Newt, but quite frankly, a real pen is just plain *nice* to use. I failed to be wowed by Apple's aluminum pen offering but I really like the idea of using gift-pens languishing in my closet. The SNAP receives four and a half lizards on my scale of one to five Newts.

Mr. Advisador

I finally got a chance to use **Mr. Advisador**, the historically significant (read "first") Newt shareware offering. I was charmed. Download and give this baby a try. You may not keep him on your Newt long-term, but your personal digital advisor will greatly amuse you. You can ask Mr. Advisador a question directly or leave him in "auto advice" mode. He'll pop up discretely on occasion (during important demos usually) and if you click on his head, he'll offer unsolicited advice--often of a hilarious nature, especially when you let him use names from your Names database. Ben Sharpe created a little gem here and it's well worth checking out. Mr. Advisador gets a reptilian three on the one to five Newt scale.

List-It

List-It is a list organizer product from the very French Macapa people in Quebec. Apparently this is the logical heir of the ShoppingList app of olde. List-It is a fairly good program. It lets you create multiple lists of apparently arbitrary lengths. At first, I was put off by my first (default) list which had all sorts of financial stuff on it--clearly a holdover from "shopping" days--but I soon discovered the options button and within a few seconds, I had a lovely to do list with a little comment slot next to each item.

I used keyQuick to pop up keyboardPRO and immediately began entering information into the slots using the Appointments keyboard to mark "Important" and "Remember" in the comment column. They fit in the column nicely. Next, I used Typomatica to try loading in a list directly from the Macintosh but had to give up because carriage returns did not take me between fields. I'd really love to see that feature included because I usually do my "to-do-list" brainstorming at home and then take Figgles along with me to go through my lists. I also could not "import" a bulleted list. Pasting from the clipboard worked just fine--but could be tedious since every time I wanted to add something to the clipboard I had to leave the app and then get back in. There wasn't enough memory to

use kbdPRO's scrapbook with List-It running.

There were a few other rough edges. When I tried to hit the index dot (between the up and down arrows) and then move below my existing application it kept beeping at me. I'd prefer a notification window saying "No more lists below". A routing sheet lets you print, fax or delete individual lists, but doesn't let you delete items from the middle of lists. When I tried to delete a single item, I accidentally deleted my entire list! I couldn't undo it either. I'd really prefer to see a confirm dialog "Do you really mean to delete the ENTIRE list?". After a list deleted, I consistently got error -48204. I'd also like to see an option of "Delete Checked Items" included. Also, it might be nice to have different types of pre-built popups for the comments field ("Important", "Delay", "Note", maybe?)

I really liked List-it's "endless roll" approach to lists. Users shouldn't be limited to one page lists and Macapa beautifully provides scrolling. If shopping is your fetish, List-it is perfect. The financial lists not only let you sum up you shopping list but you can also hit the little scale icon and compare prices. Very nice. List-it looks like a very promising product which I hope to follow in the future. On my scale of five Newts, List-it gets three geckos with the promise of more to come.

Soup Utilities

As a side-note, if you are feeling uncomfortable with your soups -- "Your Newton Still Needs Your Card"-- you might want to download **StewPot**, **Souper** or **keyboardPRO** (part of the Figgles Utilities). Sometimes shareware applications leave behind data files called "Soups" even after they are deleted. This can cause problems when removing your card. In general, you shouldn't be afraid of your soups--they aren't that scary--but rather feel confident about removing data just as you might want to remove a file from your Macintosh.   In general, just don't mess with any soup that has the words "Notes", "Backup", "Calendar", "Directory", "Inbox", "OutBox", "System" or "To do" in its title. KeyboardPRO does this automagically, only allowing you to delete custom soups. StewPot and Souper are more general Soup viewing and editing utilities and are highly recommended as indispensable. They get five kiloslugs on a scale from one to five newtons. (I also rate The Figgles Utilities at five kiloslugs but its sort of hard to keep reviewing your own software). [By the way, a newton = kg-m/s/s, or about .22 pounds while a slug = 14.59 kg].

Finally, our first **_protoReality** seems to have gone over very nicely. I got several very complimentary letters.   It was really neat to see the newtbook come together so professionally. After seeing the work and hours that Mark Underwood put into it, I felt obliged to award him a six-lizard out of five rating for his efforts. (<Blush> -Ed.)

Availability Information:

You can purchase a "Stylus, Not a Pen" S.N.A.P. insert for $8.95 plus $2.50 s/h + tax (tax only for people from California though). Specify pen model. Send a check to:

WriteWare

1428 Sunshade Lane
San Jose, CA 95122
USA

You can register Mr. Advisador by sending a check for $7.95 to:

Ben Sharpe
520 Frederick St. #38
San Francisco, CA 94117

You can register List-It 2.2 by sending a check for $10 to:

Macapa Software
440 Upper Edison #7
St-Lambert, Quebec, CANADA J4R 2V5

You can register the Figgles Utilities by sending a check for $20 (until 3/1/94, $25 thereafter) (Utilities include keyboardPRO, keyQuick, keyMaker, Typomatica, 24, Thyme and Monitor) to:

Erica Sadun
112 Hampshire Court
Avondale Estates, GA 30002
USA
Attn.: Figgles Utilities

To register Souper send a check for $5 to:

Stephen Rose
23 Oak Street
Whitehorse, Yukon
Canada

To thank Mark for StewPot, send a very nice note to:

Mark Underwood
MAUi Software
3381 Claire Circle
Marietta, GA 30066

(<Blush again> Or e-mail me at mau@sun1.ema.com -Ed.)

Do you have Newton software you would like to have reviewed?

Send it to:
Erica Sadun
112 Hampshire Court
Avondale Estates, GA 30002

or electronically to:

erica@cc.gatech.edu

MobileCalc
Scott Portis

MobileCalc v1.00 from MobileSoft Corp. is a spreadsheet application for the Newton. This application allows the user to perform modeling and calculations using handwritten input. The app. is very complete for a first version. It comes with a manual that is over 80 pages long that is clear, but fairly concise -- explaining everything from installation to the built-in functions.

MobileCalc is available on two media: Macintosh and Microsoft Windows floppies, or on a Newton application card (PCMCIA). The system requirements are fairly substantial: either a 1 MB Newton Storage Card or a 2MB Newton Flash storage card. Either must have at least 340K of free space. Technical support is available directly from MobileSoft from 8:00 AM to 5:00 PM Pacific, although not at a toll free number. You may also reach them through AppleLink.

I was excited to get my first look at a shipping application, and since I am interested in creating a super-sell Newton app., I wanted to see what the Newton environment really was capable of doing. Installing the application was fairly easy, although entering the serial number was pretty much a pain. The serial number was at least 15 characters long (come one MobileSoft, are you planning on shipping that many copies?) and forces the user to re-install if it is entered incorrectly. Downloading takes about 3 minutes.

MobileCalc opens up with a new spreadsheet. You can write in the cells directly, or you can double-tap the cell to get one of two available keyboard dialog boxes that helps to enter functions. The functions on the first keyboard are available by selecting descriptive icons under which the sets of functions are grouped. The following types of functions are available: general arithmetic, mathematic and trig, statistics, financial, and date & time. The second keyboard groups the functions into alphabetical lists. Selecting a function from the keyboard brings the function and its parameters up to the editing line. The parameters for the functions can be filled in either by writing on the edit line, or by tapping a single cell or dragging a group of cells. The user may write any text in the cells. The rows and columns can be sized by dragging the row/column labels.

There are several icons at the bottom of the screen that provide additional functionality. Right of the standard clock icon, there is a Worksheet menu that contains several general commands for working with the worksheets. For instance, you can create a new worksheet, format ranges of the cells, clear selections, and copy formulas from one cell to a range of cells -- among others. Next there is a Keyboard icon that switches between the two available keyboards. The next icon is the Recalculation icon. It toggles on and off the automatic recalculation for the worksheets. In the middle the icons are the left and

right scrolling arrows, and the Page Scroller, followed by the Recognizer icon. The Recognizer aids in numeric or

alphanumeric recognition by toggling between the two modes. Finally there are the standard Filing Folder, Routing Slip, and Close box icons.

OK, so that's the basic overview. Now for my opinions. MobileCalc is a very complete spreadsheet. The designers did a good job with the user interface. It is simple to use if you are familiar with other computer-based spreadsheets. The manual is really not needed, but it does help to figure out the shortcuts. There are several things that I do not like as well. One of my main complaints is the performance. Everything moves at a glacial pace. A simple double-tap in a cell takes 2-3 seconds before you even get the sound for the double-tap, and then another 2-3 seconds for the Keyboard to appear. Scrolling takes several seconds -- even on a blank sheet. Drag and drop one cell - burn about 10 seconds. I don't like the way the worksheets are saved. The application automatically saves the blank worksheets every time you open it, even if you make no changes. To delete the sheets, the user has to open each one and delete it, or use a soup tool to delete it. Either way it is a nuisance. Another problem is that the application does appear to have some bugs when evaluating the functions. Several times I would enter a function in a cell, only to have it display the text of the function instead of evaluating it. It would not evaluate the function even if I turned the auto-recalc button off and back on. I also expected to be able to dump the worksheets to a comma delimited file so that the data can be exchanged with other platforms, but this feature is probably coming in a future release.

Overall, the application is very good for a first release. There are a few problems, but these will be addressed in the future I am sure. If you do travel or are in an environment where having instant access to a spreadsheet on a platform that is smaller and more convenient than a laptop, then this is a good application. MobileCalc shows the power of the Newton.

MobileSoft may be reached at:

MobileSoft
307 Orchard City Drive, Suite 207
Campbell, CA 95008

or through AppleLink at: MobileSoft.

TermLimit 1.1
Mark Underwood

Terminal emulation software for the Newton has been viewed as the missing piece of its communications abilities. Part of this is due to the rapid growth of on-line services, such as CompuServe, America On-Line, and the InterNet. But either because vendors don't see the Newton market as worth their time, or because the communications API for the Newton is not like anything else, there are only two public domain programs (StupidTerm and TermLimit) and only one announced commercial program (PocketCall from ExMachina).

Newton terminal programs must address the concept of how to represent 80-column text on a 30-40 column wide screen. Wrapping the lines as they come in works, but it's not easy to read. Another problem is handwriting in system commands to the machine you're dialing into. Most system commands aren't recognizable English words.

Ed Anuff's program has presented a very clean approach to those two problems. For the display, he has vertical and horizontal scroll bars (borrowing the look from the Macintosh-kind), so you can scroll right and left to view the lines. For the commands, he has easy-to-use "macros"--single taps from a menu that expand into three lines of text. The program also allows the saving/selection of multiple session settings.

Because of a restriction in the current proto serial endpoint, the last bit of received text may not be shown directly, so Ed has added a "More" button to make sure you get it all. He also has a routing button, which can print, fax, or save to a note the contents of the receive buffer (the scrolling display). I like the "copy to note" command a lot.

With TermLimit, I was able to access my UNIX mail, CompuServe account, local BBS, and terminal server, all without problems.

If you need basic TTY-terminal emulation, you can save lots of bucks by getting TermLimit (and registering it if you keep it!). PocketCall is supposed to provide some sort of full-screen, VT100-style of interface (in addition to the TTY-style), but until it gets into the hands of users, we can only speculate how well it was done.

TermLimit 1.1 is available on all the major on-line services, or contact Ed Anuff through e-mail at:

edanuff@crl.com

Accountable
Mark Underwood

If you need to keep track of one or more checking/saving/etc. accounts, and want to use your Newton, **Accountable** (Nomadic Technologies) is the app to get! Even though a version of Quicken™ for the Newt was announced early on, it hasn't arrived yet--but Accountable has.

I reviewed a copy of the product and found that it worked quite well. On opening the app, you are shown the list of accounts you have set up. An account can be one of five types: checking, saving, credit card, frequent flier, or general. When creating an account, you enter the account name, number, and starting balance. You'll probably want to password protect your Newt and your financial information from the guys at work who want to play with your Newt. Accountable works in dollar and cents--and other currency formats as well! I opened an account in yen, which uses no decimals, and you can even use the proper monetary symbol (¥). Accounts can also have a "customized" icon to help make them easy to find.

Selecting an account displays the register for the account, and allows you to add credit or debit entries. Each entry can be "categorized"--utility bill, ATM withdrawal, service charge, etc. New categories can be created or removed as needed. As you add entries, a running balance is displayed at the bottom. There is even a small check box to allow you to indicate whether a transaction has "cleared" or not! When you add new payees and merchants in paying bills, they are remembered by the program, and can then be chosen from the list--saving you from always having to "handwrite" their names in.

Accountable has a reconcile function that allows you to take a bank statement (or account billing statement), select the account, enter the statement's balance, add service charges, and you'll get the amount outstanding. It even allows you to credit/debut that amount automatically as a new transaction! You can print or fax a formatted register of an account, either the whole thing or a date range. Using the Mac NCK version 1.0 (or later), you can automatically export your account information to Mac-based applications, such as Excel or Quicken.

What use is a Newt app without Assist? Accountable allows you to enter quick phrases, and through Assist, create transactions of the appropriate kind. Entering "Pay Joe 15", for example, creates a debit of $15 in your checking account with payee of "Joe". "Charge 50 at Acme for shirt to AMEX" creates a debit in the AMEX credit card account for $50, the payee of Acme, and puts "for shirt" in the "memo" area!

If you want to keep tabs on your money woes on your Newt, this is a serious product.

Quicken for the Newton, if and when it appears, will probably have most (if not all) of the same functionality, but will probably be three times the size and cost of Accountable, and twice as slow! Plus, there may be a lot of things you don't need. I liked Accountable because it's clean, fast, and flexible.

Those who buy Accountable before July 1, 1994, will receive an upgrade guarantee from Nomadic Technologies that entitles them to receive automatically and free of charge every Accountable upgrade released during 1994. Whether it's the final availability of the Newton Connection Kit version 2.0, the arrival of compiled Newton Script, or enhanced features in Accountable itself, buyers can be assured that they will gain the advantages of upgraded software with no additional cost or hassle. There will be at least one upgrade in 1994 to distribute **Accountable Report**, a companion Newton application that will generate reports from Accountable data.

The price is $39 plus shipping/handling and applicable sales tax.

You can read Nomadic Technologies at:

Nomadic Technologies
19948 Laurel Ave.
Rocky River, OH 44116

CompuServe: 76377,470 (preferred)
AppleLink: TOMUNKEFER

Phone: (216) 331 5771
FAX: (216) 331 5887

The German Newton
A Brief History of Time (Delay)
Uwe Hauck

(Editor's note: Uwe is NANUG's official German Corespondent, and he will be bringing us news of how the Newton is faring in Europe, along with reviews of EuroNewtware. A big Güten Tag to Uwe!)

The Day Apple Sent Us the Newton

On December the 15th the German Newton was officially presented to the German public in a big event, including a TV-interview with Baestians, Germany's Apple CEO on the private TV-Channel Sat1. Previous announcements stating the 15th of November as official release date had been delayed due to some problems with the localization (especially the differences in the style of American and German handwriting and the announcement of a major ROM update by Apple US led to the delay). Finally, on Friday afternoon the 17th, my phone rang and a very(!!) excited voice on the line told me: "It is here, we've got it, we have two Newtons in stock right now. Come and get yours." As I found out later, they only got those two on that day, the one I had ordered in September (!) and a demo system--and they had preorders that exceeded the announced number of 4000 localized Newtons totally. Preorders made after the middle of November presumably got their Newton after X-mas but for me it was my perfect X-mas Gift. Jumping into my car, heading towards my local dealer and getting my hands on "my" Newton happened almost in an instant...

So that's what a German Newton "looks" like!

It comes in a nice "multicolored box" with an introductory video, a 2 Mb Flashcard, holding demos of "Fortune500", "Colombo's Mystery Capers", "GoFigure" and "Money Magazine Business Forms". The price is 1690 DM including the 2 Mb PCMCIA Card, that's round about $1000. The Connection Kit goes for another 150 DM and the power supply costs about 50 DM. Also included is a registration form for the NewtonMail starter kit (not available in Germany right now, announced for summer 94) but...no external power supply. Yes, there is a battery pack. My dealer explained that Apple Germany had decided that they'd rather give their customers a system with more RAM, and after using my Newton for about a week, I found this idea to be a good one. The system version, as stated in the configuration is 1.11 and the recognizer works quiet good in my opinion. I am a lefty and was rather concerned about how well the Newt would recognize my rather ugly handwriting but was positively surprised. After about 2 weeks of work, my Newton reached a recognition rate of round about 97-98 % and that is, as I must confess, even better than the recognition rate of most of my friends ;-).

The overall appearance is just like its American counterpart, despite the fact that all messages have been translated into German. ParaGraph had to completely rewrite

the internal lexicon and the letters you can choose from in the setup. Something rather interesting was the selection of "prototype letters" they chose. They also include some "Altdeutsche" letters, and the German "Umlaut". Even the some of the Easter Eggs have been translated: For example if you reset the German Newton, tap undo and then scroll back to the first error message it isn't the first man on the moon date but the date of the German reunion...;-)

The next thing I did was connecting it to my Powerbook and trying to download some software I had transferred from the InterNet servers using Peter Kaas incredibly useful Newton Package Downloader. This piece of software is a must have for all newbie Newtoneers. It allows you to download Newton Packages via Drag and Drop and the best thing is: it is available on the InterNet. Some of the first applications I tested included Steve Weyer's Newt, ExtraExtras, RemoveIt! and some games like Minefield, Morpion and Yathzee. They all worked fine with the localized version and kept me awake for almost my whole first night with the Newton. (Thanks to the authors of those programs: you made a great job and Shareware-Donations are on their way.) The above programs and ListIt!, an application that helps you in handling all kinds of lists and which can be customized to your special needs, are my personal must haves up to today. The unique architecture of the Newton enabled me to work with all those programs, despite the fact that the messages by the programs still appeared in English.

The Newton and the (German) Press

Yes, Germans are rather careful with new technologies and one could immediately realize this fact by following the news about "First Impressions with a Newton". "Der Spiegel" a weekly magazine made some rather discouraging remarks about bad recognition and lots of mistakes, but they only tested the Newton for a day and used an English version to recognize German words and letters. So the magazine totally ignored the factor of training and the factor of differences between countries and the way people write (besides I am very interested in the Japanese version--presumably the version with the best overall recognition rating). Another weekly magazine - "Focus" - in opposite voted the Newton the "must have PDA" as soon as the price would drop. They also announced the availability of their magazine via NewtonMail! So, despite some bad press most of the news at least realized the potential the Newton technology carries and are awaiting future developments.

Conclusion

You have to give the Newton time. Time to be trained, time to be accepted and time for some features to be improved. But one can't ignore the fact that Newton technology is the next step in human computer interaction. And that having those limits we have

learned about in several articles and stories about the development process of the Newton the result in my opinion is impressive. I am working in an AI-Department and I don't know a better handwriting recognition system at the moment. And by the way, I would never expect my friends to be able to recognize

all of my scribbling. Just as the Newton. I haven't used a piece of paper for a whole month now and I really don't miss it. ;-)

Startupscreen Newt
 Bill Kearney

Here's a nifty little hack for the inspector:

```
getRoot().sleepscreen.viewSetupFormScript:=
func() begin
self.country:=userConfiguration.country;
userConfiguration.country:="Graceland";
inherited:?viewSetupFormScript();
end;


getRoot().sleepscreen.viewSetupDoneScript:=
func() begin
userConfiguration.country:=self.country;
inherited:?viewSetupDoneScript();
end;
```

This will let you have the Newt startup screen appear instead of the normal light bulb logo. This is a temporary patch--resets will kill it.

I've put it into the install and remove scripts of an app of mine, and it works nicely. Remember to nil the slots on a remove.

It is possible to replace the startup screen with a totally different image, but I've not yet figured out how to do it without using around 30K of memory.

The above patch appears to consume about 3 to 5K.

What it does:

The Newton has an app called sleepscreen. Guess what it does? It's the app that gets called when the switch on the side of the Newton is pressed while the Newton is asleep. The setup for sleepscreen looks at the userConfiguration.country slot, and if it's "Graceland", it swaps the normal startupscreen for the Newt. The above hack sets the existing country code aside in the base view of the sleepscreen app, in a new slot named "country". It then replaces the current value with "Graceland". This lets another part of the sleepscreen app do its thing. Once the app's done, it replaces the user's country code with the original value and exits.

Changing the screen to a different image entirely **is** possible, it just takes up a lot of RAM. For that matter, changing the startup behavior of the Newton is possible as well. Stay tuned for a nifty little hack...

Joining the "Gang"
Mark Underwood

You can add your name to "the Gang"--the list of people on the Newton project--that is shown where you write "About Newton" and tap "Assist".

```
myGang:=Clone(getRoot().theGang.authors);
myGang[66]:=EnsureInternal("Mark");
// 66 thru 71 is open...
getRoot().theGang.authors:=EnsureInternal (myGang);
```

(Editor's note: To add yourself to the Gang right now, tap the script above, then select the phrase "About Newton" and tap "Assist")

Of course, you could replace the whole crew, but out of deference to a job well done, please stick with array slots 66 through 71, which are empty at the moment.

Your changes will be undone when you reset the Newton.

Programming Tip
Jennifer Minge

Problem: You use the Intelligent Assistant to fax a note to "Bob." When presented with the fax slip, you can select which Bob you want if more than one is listed in your Names soup. Ever wanted to be able to do this from within your program?

Solution: Use the command *smartCFQuery* to get a list of all entries from the Names soup that matches your search criteria. For example:
smartCFQuery("Jennifer") on my Newton returns the following:

```
#44166F9  [{sortOn: "Minge",
      cardType: 0,
      phones: [#44126F1],
      email: "minge@crl.com",
      company: "",
      address: "11555 Boxford Place",
      address2: NIL,
      city: "Alpharetta",
      region: "GA",
      country: "USA",
```

```
        postal_code: "30202",
        bday: 30646390,
        name: {#4412941},
```

        _uniqueID: 6,
        _modtime: 47393034}]

        On closer look the name frame contains these entries:

        name: {first: "Jennifer",
                class: person,
                last: "Minge",
                title: "Sr. Telecommunications
                Analyst"},

Adding Intelligent Assistance
 Jennifer Minge

Implementing Intelligent Assistant within your programs is a very simple task. This programming sample shows how to add IA to your program utilizing the smartCFQuery command detailed previously. For this example, we will add the command "choose" to the Intelligent Assistant.

To implement Intelligent Assistance you must first define a *task template*, one or more action template, and optionally a target template. The task template specifies the action to be performed and includes slots in which to store information required to complete the task, synonyms for invoking the task, a task slip view to display to the user, and specific instructions for executing the task. The task template is registered with the Assistant using the regTaskTemplate() command and is removed with the unRegTaskTemplate() command. The task template relies upon other templates that define actions and potential targets of those actions. These templates are called the *action template* and the *target template*, respectively. You always need to define one or more action templates when specifying a new task to the Assistant; however, you may not necessarily need to define a target template.

Action Template

This sample will define a single action template and no target templates. The action template must define the slots *value, isa,* and *lexicon*.

The *value* slot is currently not used but is required for future compatibility.

The *isa* slot identifies the object type of the frame created from this template. I will use the predefined symbol 'dyna_user_action.

The *lexicon* slot specifies a list of words or phrases that the Assistant is to associate with the template. This demo defines "choose" as our lexicon. You may define more than one lexicon.

Our action template is defined in the Project Data which is shown later.

Task Template

All task templates must define five required slots: *isa, primary_act*, *preconditions, signature,* and *postparse*.

The *isa* slot identifies the object type of the frame created from this template. Task templates must store only the value 'task_template in this slot.

The *primary_act* slot stores a reference to the primary action template. (In this demo: kChooseAction).

The *preconditions* slot stores an array of symbols specifying the names of slots that the Assistant creates to store information required to complete the task.

The *signature* slot is a list of all possible frame classes that may be used to create frames stored in the task template.
Note: The preconditions array must have the same number of elements as the signature array because the Assistant uses these two arrays in parallel.

The *postparse* slot stores a reference to an action template that is invoked after the Assistant parses the user input.

The following is our task template:

```
{
        isa: 'task_template,
        primary_act: kChooseAction,
        preconditions:  [ 'action, 'who,'generic_action ],
        signature: [ kChooseAction, 'person,'dyna_user_action ],
        postParse: func() GetRoot().(kAppSymbol):PostParseCommand(self),
}
```

Post Parse

After the Assistant has stored all of the objects that were created when matching object types specified in the signature array of the task template, it invokes the postparse method. Our postparse function parses the frame returned by the IA to find the name the user entered when IA was invoked. Once the name has been found it calls the function DisplayEntry to display all entries from the Names soup that matches the search criteria. This is our PostParseCommand:

```
func( taskTemplate)
begin
// if our application is not open then open it
```

```
local isApplicationOpen := GetView( self ) <> nil;
:Open();

local newMailMsg := Clone( defaultChoosePerson );

for i := 0 to Length( taskTemplate.input) -1 do
        begin
                local template :=taskTemplate.input[i];
// search template to find the person to choose
                if Isa( template, 'person ) then
                        newMailMsg.person :=taskTemplate.phrases[i];
        end;

// display all entries that matched
:DisplayEntry(newMailMsg);

GetRoot().assistant:Close();   // close the IA slip
end
```

DisplayEntry

This function takes the name parsed from the IA and searches the Names soup to find all matching entries. All matches are set as the labelCommands for the protoLabelInput called choosePerson. If a match is found, then the first entry is displayed in the text field of the entry.

```
func(aName)
begin
local names := [], hits;

if not ( StrLen(aName) = 0) then
        hits := SmartCFQuery(aName);
        if hits then
          begin
                for i := 1 to Length(hits) do
                  AddArraySlot(names,hits[i-1].name.first && hits[i-1].name.last );
                choosePerson: SetLabelCommands(names);
                if names then
                  SetValue(choosePerson.entryLine,'text, names[0]);
                else
                  SetValue(choosePerson.entryLine,'text, "");
          end;
end
```

Project Data

The action template is defined in the Project Data as well as the InstallScript and RemoveScript for our IA entry. The following is the Project Data;

```
constant kAppSymbol := '|IA Demo:EASE|;
constant kAppName := "IA Demo";
```

```
constant kChooseAction := '{
  value:   "chose action",
  isa:     dyna_user_action,
  lexicon:  [ "choose" ],
};
```

```
// Install task template so "choose" appears in IA
InstallScript := func(packageFrame)
begin
  packageFrame.taskTemplateID := RegTaskTemplate(packageFrame.theForm.taskTemplate );
end;
```

```
// Remove our IA entry so we make a clean exit
RemoveScript := func(packageFrame)
begin
 if packageFrame.taskTemplateID then
   begin
     UnRegTaskTemplate(packageFrame.taskTemplateID );
     packageFrame.taskTemplateID := nil;
   end;
end;
```

Final Product

The screen shot below shows the final output of our demo. ("choose jennifer" was entered in the Assist dialog box).
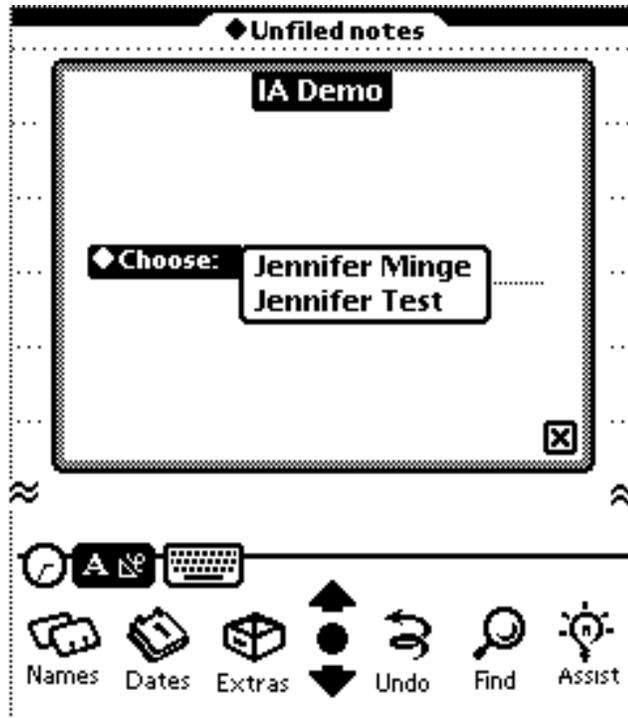
[Editor's Note: The full source of Jennifer's IA example will be on NANUG Distribution Disk #6. If you don't have access to our diskettes, please e-mail Jennifer for a copy.]

Tips, Hints, and Secrets
NANUG Members

From Kerry McCarthy
[72520.1334@compuserv.com]:

Some tips I've found:
To enter business cards, the deluxe case holds the card on the right side above the Newt at a 45 degree angle.

Try creating several notes within each folder with a text header for easy recall. For example we sell many products, Mr. Coffee, First Alert, all grouped within the folder Factories. Notes for each are in ink, and looked up easily with the overview button.

From Hardy Macia
[hardymacia@online.apple.com]:

Store your RAM cards in the slip case that comes with the Newton. There is a velcro'd compartment holding the metal plate which protects your Newton screen. I stuff my RAM card in there when I'm not using it. I saved $69 on a leather case!

From Carl Scholz
[scholz@osf.org]:

To format text:

Select a block of text by encircling the text with the heavy selection pen (in the same manner that you select a drawing). The block of text will now have gray box around it and be highlighted.

- Tap on the gray box to cleanup the text (remove all newlines and extra whitespace).

- Drag one of the box sides to reset the width of the text (and reformat appropriately, while maintaining newlines/whitespace).

- Drag any part of the highlighted text body to move the entire block.

Undo works with all of the above operations.

From Robert Stone
[stone@phoenix.cs.uga.edu]:

Newton Drawing Hints

Tip #1: If you want to draw a small detailed picture, select the smallest pen size and draw a full-screen version of your drawing. Align all of the shapes carefully, then

"box" the entire drawing and drag one of the corners until you have scaled the drawing to the size you need. Move your drawing to the "clipboard" (screen edge) and then move it off to wherever you need it. Using this method you can make some suprisingly detailed drawings at a very small size!

Tip #2: If you find yourself drawing a lot of maps, use the above method to draw yourself a library of map symbols. File all your map symbols in a new folder so you can quickly flip to them.

Tip #3: Take a little time to experiment with drawing different shapes and observe the amount of memory used by different ones. (You can see the size of the current note by clicking on it's "info" icon in the left side of its seperator bar.) Turn off the shape recognition and try to approximate the same shapes. Observe the different amounts of memory required to store shapes and freehand strokes. Then try drawing the same shapes at larger and smaller sizes. You may notice that shapes don't change in memory usage as they change in size, but freehand strokes drawn large will take up more space than freehand strokes drawn small. Strangely enough, you may find that small strokes often take up less memory than small shapes! Taking some time to optimize your drawing techniques for memory usage can pay off by allowing you to fit more into each note's 4K memory limit.

:Messages
Scott Portis

Unfortunately, we have received very few responses directly to the :Messages column of the newsletter. We will publish the few letters we received last month in the next issue (hopefully with lots of new ones -Ed.).

Letters may be sent to *_protoReality* via the InterNet at:

SCOTT.PORTIS@APPLELINK.APPLE.COM

directly through AppleLink at:

SCOTT.PORTIS

or through the mail at:

Scott Portis
C/O _protoReality
3044-C Spring Hill Rd.
Smyrna, GA 30080

We cannot guarantee a response to every letter, but we will do our best. We will publish a subset of the letters that we receive in the :Messages column. A FAX telephone number may be provided in the future if there are enough requests for one.

The Sharper Knife
Elaine Barrett

Popularity for PDA devices have increased ten-fold from the introduction of the Newton--therefore it would seem natural for other companies to jump on the bandwagon. General Magic is one of those companies, formed by two ex-Apple, ex-Macintosh employees: Andy (Finder) Hertzfeld and Bill (HyperCard) Atkinson. Apple owns a portion of General Magic.

Magic Cap (Communication Applications Platform) is General Magic's front end. Telescript--a scriptable, agent-driven programming language--is also included in the package. Telescript will be licensed and available for other platforms, such as the Newton and the Macintosh.

Magic Cap's "geographical" user interface could use a lot of work to bring it up a couple of intelligence levels. It looks like a kid's view of Sesame Street™. General Magic must think if it's not cute enough, potential customers will not buy the product. Everyday, more and more consumer products are advertised to us as though we were children, and aren't very intelligent. But "easy to use" shouldn't mean "look and feel silly as you use it".

Magic Cap does have a few good features once you get beyond the exterior. Its very flexible, easy to modify interface toolkit is coded in C (meaning cross-platform capable), and is complete with browse, authoring, and scripting modes (very similar to HyperCard). The addition of Telescript turns networked devices into contiguous applications. Telescript allows messages that can have complex delivery instructions and imbedded programs roam the net, collecting stuff like PDA review articles, or setting up airline tickets. The main drawback of this technology is that everything--the client, the server, and the connection between--must be Telescript enabled. And Telescript is currently only available with Magic Cap.

Magic Cap's user interface, along with the future hopes of Telescript, is the only thing that makes this PDA any different from the rest--but since they do not expect Telescript out until sometime next year, the whole state of PDA-art may be drastically different by then. Apple's policy of licensing Newton technologies is a smart one, from many angles. By doing so, you indirectly create a PDA standard, since other hardware solutions will see the addition of Newton technology as a way to get their hardware faster to market. General Magic seems to be taking a page from that marketing handbook with Telescript, but it will need to move quickly before other vendors--or even Apple itself--moves to nail down the loose corners of the PDA communications arena.

-•-

Would you like to post an ad or other Newton-related classified item in _protoReality? If so, please send your ad copy, via e-mail, to:

mau@sun1.ema.com

with a subject of "NANUG Ads". Items will be carried in the current month's issue is received before the 15th of the month, otherwise it will be in the following month's issue. NANUG reserves the right to refuse publication if the content is deemed unsuitable for our audience.

Currently, there is no fee to list an item. Please limit the size of your text to no more than two Newton Book Reader sized "pages" (about a single typed page). If you want to include graphics, they should be no larger than 3"x 4" (8 x 10 cm).

-•-

The Toronto Newton Users Group (GNUT) has chosen their list op Top 10 free/shareware programs for the Newton:

(1) List-It
(2) Keyboard
(3) CopyMachine
(4) StewPot
(5) Resto 1.3
(6) Date Util
(7) Solo
(8) Newtris
(9) Convert Metric
(10) Hot Buttons

Congratulations to NANUG members Erica Sadun for picking up #2, and Mark Underwood for picking up #4! And we salute GNUT and their President, John Marman, who is now an honorary NANUG member! Here's to another friendly competition between Atlanta and Toronto!

-•-

What is it?

A CD-ROM disk published bi-weekly, featuring Personals and Classifieds.

Advertise with:
Pictures, sound, video, and unlimited text, and receive the CD_ROM disk free of charge (Mac or PC format), or buy the CD-ROM for $7.50 and check out the ads!

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Ads only cost $25 if you can supply the information in digital form--i.e., word processing file, sound fie, etc.

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$5/page to prepare text
$5/30 seconds of sound sampling
$5/page of scanned images
$10/30 seconds of digitized video

Modem: 415 626 6342
Tel: 415 861 2706

Mark Underwood
Fifteen year veteran of the Cyberspace Wars, currently working with Electronic Data Systems in their Utilities Division, located in Atlanta Georgia. Bought the second Macintosh 128K available in Atlanta in 1984, bought the first Newton available in 1993--still has both (Notice a trend here?). Collects comics (partial to X-Men), cards, coins, and dust--not necessarily in that order (wife claims more dust in his room that anything else). In his spare time, somehow manages to write fiction (SF and Mystery, mostly). Has seen Hitchcock's *Vertigo* and Lucas' *Star Wars* at least 77 times each--and still claims to have his insanity.

Uwe Hauck
Graduate student of Computational Linguistics & Artificial Intelligence at The Institute for Semantic Information Processing, Osnabrueck, Germany.

Several Jobs including: Development of Time Management Systems, SysOp and Network Administrator for AIX RS6000, Natural Language Database Interfaces, Software Development for IBM Germany. Fluent in several languages including C(++), Pascal, Prolog, Lisp, English...(I just couldn't resist the joke) Currently an Independent Software Developer for Macintosh, RS6000 and IBM and soon for Newton Technology.

Hobbies: Everything related to Computers and Star Trek, Japanese Food, Literature and Role-playing Games.

Scott Leapman
I am an Electrical Engineer specializing in Human Factors (Ergonomics, HCI, etc.) Currently I am looking for employment within that field while working as a technical writer for IBM in Boca Raton, Florida. My Newt and I have been going steady since September, and are considering going all the way pretty soon. I can't spend a day without turning it on! I am 25 years old, and also own a Saturn. I guess I'm just an early adopter of new products. My car as well as my Newt haven't disappointed me yet. My hobbies include fitness, robotics, and shopping.

Grey Mull
        Student Representative
        Apple Computer, Inc.
        North Carolina State Univ.
I am studying International Business and I plan to graduate 12/94.

Frank McPherson

My name is Frank McPherson. I live in Farmington Hills Michigan and I am currently employed as a system engineer. A graduate of Michigan Technological University, I am a native of Michigan's Upper Peninsula. My hobbies include tennis, bowling and playing the French horn.

I am an avid member of Cyberspace, holding membership on CompuServe, Delphi and Newton Mail. Through Delphi I frequent the UseNet.

Michael B. Edwards
CEO-HealthCare Communications of Lincoln, Nebraska.
HCC is a 10-year old developer of Macintosh products for the health care marketplace. Our Newton development is a new venture, and our products include Hippocrates (for physicians) and a new flat file database called FilePad, which is now in beta testing. I enjoy my work and my family, and obviously, computers!

Mike Brais
Mike Brais is your typical Gay technogeek saved from coke bottle glasses only through the wonders of modern optometric technology. He runs a small consulting firm dealing with customized and downsized OLTP applications for the banking and hospitality industries. He is permanently attached to his Newton.

Steve C. Linke
• Graduated 5/93 from San Diego State University BS: Information Systems
• Apple Student Representative, SDSU
• Manager, SDSU Computer Store
• Became Newton user, 10/93
• Started personal computer consulting company, Smarter Solutions, 1993
• Full-time job, Chaparral Computers & Networks, Sales Representative

Hobbies: Outdoor sports, cycling, tennis, soccer, reading, computers, Newton

Future Plans:
San Diego Newton User Group (SDNUG!), Newton programming, Masters Degree, Travel, Successful Computer Consulting Company...Sports Bar!!

Robert Stone
Robert Stone is presently employed part-time as programmer for the University of Georgia's cooperative extension service in Athens, Georgia doing various computer tasks ranging from small LAN management to AI implementation. Previously employed at COSMIC (NASA's software technology transfer branch), he attended the University of Georgia briefly and then quit after becoming extremely dissatisfied with the standard higher-educational paradigm.

Currently he is adding Newton programming to his repertoire of computer skills while collaborating with another NANUG member to start a new company that will be

releasing Newton shareware packages in the near future.

In addition to a number of computer things, he enjoys drinking several traditional styles of beer, brewing these styles of beer himself, publicly criticizing the American educational institution among other faulty institutions in this society, and doing

volunteer work at a local elementary school. He dislikes trashy hack "literature", casseroles of any sort, and just about everything on MTV besides "Beavis and Butthead." Don't try to tell him to "be satisfied that things aren't worse" because he can't be satisfied until "things" are better.

Krishnan Aghoramurthy
Just moved to Austin to take up a position with Tivoli Systems ... currently working as one of their Product Marketing Managers ... currently using my Newton as a productivity tool (have all my phone numbers on it, as well as my complete schedule ... also used to keep track of action items, fax short notes etc.) ... relying on it
extensively! (I don't keep a paper calendar any more!).

Hardy Macia
Computer engineer at the Naval Ship Systems Engineering Station in Philadelphia. I'm the author of "AssistCalc", and working on my next Newton package. My hobbies include snowboarding and biking.

Jennifer Minge
Jennifer is an independent consultant doing Newton programming for the world's largest soft drink company, headquartered in Atlanta, GA (subtle hint-Ed.) Prior to this she worked for four years at Apple Computer. Her journey with Apple started in Cupertino, CA, where she was a Network Engineer providing technical support to customers who purchased and of Apple's Networking and Communications products, such as SNAps, DAL, ARA, AppleShare, and the InterNet Router. After living through the 1989 earthquake, she started making plans to return to terra firma in her native state of Georgia. Her next stop with Apple too her to Nashville, TN, where she worked as a System Engineer for a year before finally succeeding in returning to Atlanta. While there, she continued her work as an SE for Apple, covering large business accounts in three states.

When she is not programming, she enjoys jumping out of perfectly safe airplanes, driving at unsafe speeds, collecting Britain Toy soldiers, and raising two adopted kittens. As a new homeowner, she is also a budding gardener who claims that she only has to wait until March to determine if she has the skills or not to continue with this "hobby".

Dean Cookson
My name is Dean Cookson and I am a Newton owner. I'm currently working as a UNIX system admin. for the MITRE Corp. in Bedford, Ma. My experience with Apple products goes back to 1981 when I bought an Apple][+, and I now run the Connection Kit on a 1987 vintage Mac II. In my spare time I ride my motorcycle, take photographs of anything that will sit still long enough and get into flame wars on the net.

Alan Suding

I've been in information technologies for 23 years. Involved with mainframes, PC's, and Macintoshes. My current role involves developing proof-of-concept prototypes, including the use of Newton when integrated within the rest of our computing and business context.

My hobbies include motorcycles, reading, walking, and computing.

I'm located in the Los Angeles area.

Rob Dreyfoos
Proud Newton owner since September 24, 1993. I am an electrical engineer by training and head up a R&D group developing professional photographic equipment. I have been interested in computers / calculators since before the HP 35 came out and have worked on (programming) systems from GE time sharing in the early 70's (today it is GEnie service), Apple II, PDP-11, 128K Mac, PC's... UNIX workstations, even some time on an IBM System 38. My interests are diverse but now as a father of two boys (2.5 and 3.5 years old), my primary interests include studying God's Word, spending time with my family, and exploring on the various computer systems I have access to (Mac, Newton, PC, Sun - UNIX, on-line services AOL, CIS, GEnie, AppleLink). I feel that Newton is a great new technology which is at the fore-front of the future of computing!

David Bozak
Associate Professor in Computer Science and Psychology departments (joint appt) Chair of Computer Science--likes gadgets--kept buying HP calculators, stopped at the 48sx.

Wanted some kind of PDA that was hyper-oriented; held off on the Newton (always buy it the 2nd year!) til my wife suggested I get it as a Christmas present--and I caved in.

It works for me; still need to work on handwriting but now that 1.05 has been downloaded, it should improve some more.

Just downloaded QuickFigure--it really needed a better calculator as a default (no sqrt? no memory? gads!)

I live at the North Pole (or at least so Oswego seemed this winter).

Tom White
I am a senior at the University of Georgia in Athens. I am interested in all types of user computer interface issues ranging from computer support for cooperative work to non-encumbering artificial realities. I recently completed an internship with Myron Krueger in which I did most of the software development "Small Planet" which was featured in the Siggraph 93 art show in Anaheim, CA. My future plans are completely undecided...

and unpredictable. :-)

Elaine Barrett

I was born the fourth moon of Jupiter, the one that causes most of the natural disasters. Macintosh support person by day and a college student by night. Some of my other interests are minature knife collecting, restoring old pickup trucks, and comics. I am also an avid Doctor Who fan.