

2.3 Student database stack

Figure 2.16, is a picture of a card in the **Student Database** stack. Below that, Figure 2.17, is a picture of a button that will take the user to the first card of the **Student Database** stack from any other location that contains this button.

The screenshot shows a Macintosh window titled "Student Database" with a menu bar (File, Edit, Go) and a toolbar (Sort, Find, Add Card). The main area displays a card with the following fields:

- Student ID: 000-00-0000
- Name: {temporarily in use}
Last Name, First Name MI.
- Major: _____ Classes: _____
- Phone Number: - _____
- Comments: _____

On the right side of the card, there are radio buttons for the following categories:

- ☐ CS Major
- ☐ CS Grad
- ☒ Other
- ☐ Faculty
- ☐ Support
- ☐ Consultant
- ☐ Assistant
- ☐ INVALID

At the bottom of the card, the following information is displayed:

- Card created on: Wed, Mar 14, 1990 @7:37 PM
- Card last modified on: Wed, Mar 14, 1990 @7:50 PM
- Last used the lab on: Tue, May 15, 1990 @9:48 AM
- Total time checked in: 16837 280:37

At the bottom of the window, there are navigation buttons (left arrow, right arrow, double left arrow, double right arrow) and a status bar showing "926/926".

Figure 2.16 Example First Card of **Student Database** stack



Database

Figure 2.17 **Student Database** stack button

File Edit Go

Sort
Find
Add Card

Student ID: 123-45-6789

Name: Doe, John M.
Last Name, First Name MI.

Major: C.S. Classes: 101, 211

Phone Number: 987-6543

Comments:

☒ CS Major
☐ CS Grad
☐ Other
☐ Faculty
☐ Support
☐ Consultant
☐ Assistant
☐ INVALID

Card created on: Sat, May 19, 1990 @2:12 PM
 Card last modified on: Sat, May 19, 1990 @2:13 PM
 Last used the lab on:
 Total time checked in: 0 0:00

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Figure 2.18 Sample Student Database card

Student Database is a stack containing cards of all students and their personal information. When logging someone into a machine, the information is taken from the **Student Database** card (Figure 2.18 above) of the corresponding User ID and placed into the machine card (Figure 2.19 below). There is a comment field at the bottom of each card to add comments about each person. These will appear on the machine card corresponding to the machine the student is checked into. If there are any 'bullet' characters, (option 8-'•'), in this comment field, the **Logger** will beep to let the user know that there is a comment that **MUST** be read about this student.

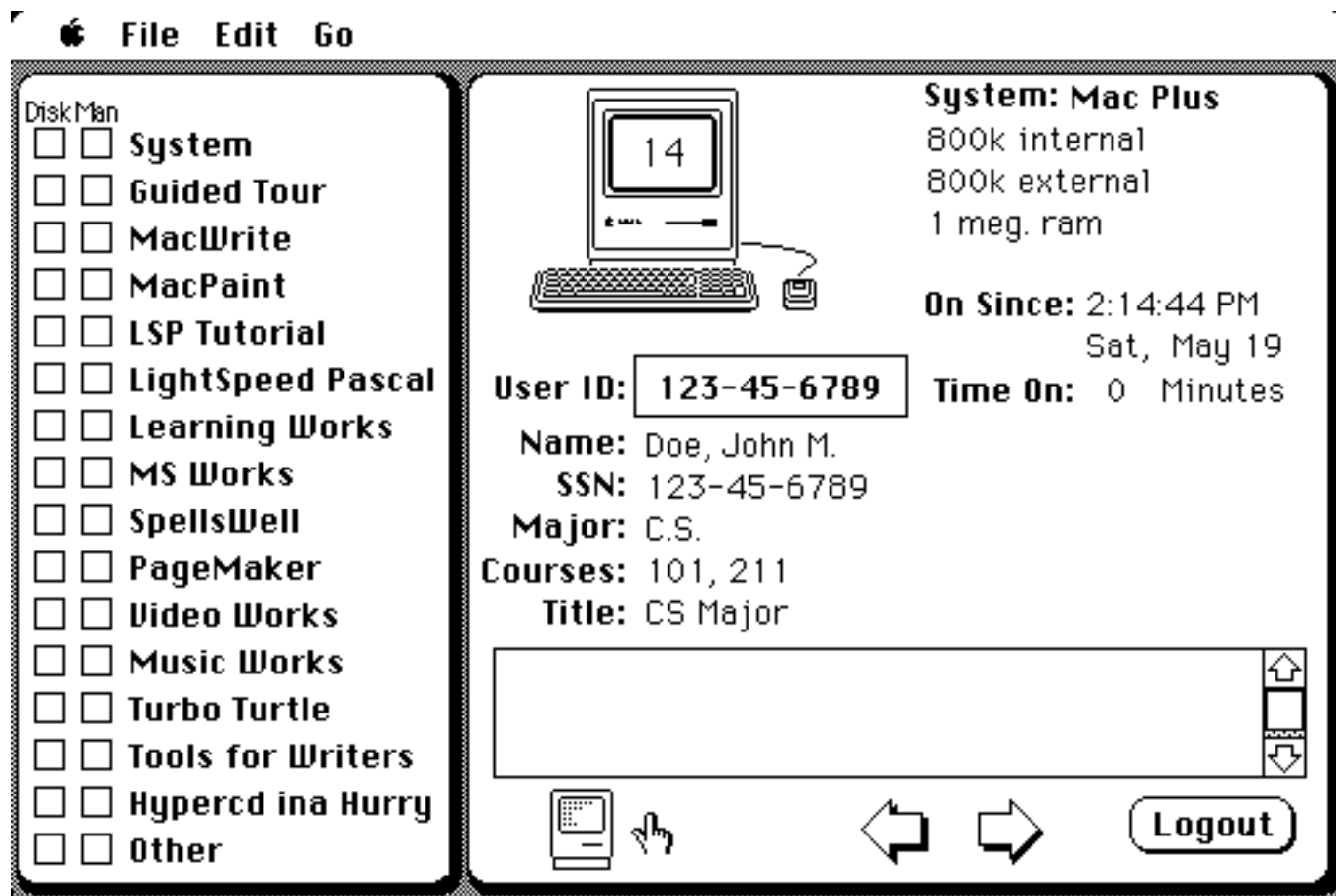



Figure 2.19 Sample Machine with Student Information

A description of some of the features of the **Student Database** are necessary. Some of the fields are self explanatory. These include the field containing Lab Card number, or User ID number as it is referred to in the **Logger**. There is also the Name field, the Student ID, or Social Security field, the Major field, the field for any relevant classes, the Phone number field, and the Comments field.

Other fields that are worth mentioning include the field containing the date that the card was created (refer to Figure 2.18 above). This is located below the Comments field. There is also a field below that contains the date in which the card was last modified. Modifications may be due to the addition of comments, a correction of a students card, or changing the title. Below this is a field containing the date and time of the last time this student used the lab. The field below that contains the total minutes, and the total hours and minutes the student has used the lab so far for this term. In the bottom right corner

there is a field that contains the card number and the total number of cards in this stack in the form of "#/#."

There is one other field that needs attention. It is the title field. It is located under a group of 8 radio buttons on the right side of the card. It contains the title of the person on the card, determined by choosing one of the 8 buttons. The radio buttons have the labels, "general", "special", "grad", "staff", "support", "consultant", "assistant", "INVALID". They correspond the title of the current student that wishes to use the lab. Their purpose is for general information, except for "INVALID". If the title is "INVALID", then this ID# is bad and should not be accepted for some reason. Possible reasons are : the student has two ID's, the student has lost his/her privileges to use the lab, or the student has lost their ID card and have recieved a new one with a different number. The radio button  refers to the chosen title among the above listed title choices.

Buttons that need mentioning are as follows :



Sort Button - allows the user to sort all student cards by either User ID#, or by Student Name in ascending order. A more detailed description of the **Sort** process will be discussed in Section 6.1.2.



Find Button - allows the user to find a specified string anywhere in the **Student Database** stack. A more detailed description of the **Find** function will be presented in Section 6.2.



Left Arrow Button - will send user to the previous card. In this case, it will send the user to the previous student card in the **Student Database**.



Right Arrow Button - will send user to the next card. In this case, it will send the user to the next student card in the **Student Database**.



Return Button - will send the user to the **Logger** stack.



Title Buttons - There are 8 radio buttons with the labels, "Other", "CS Major", "CS Grad", "Faculty", "Support", "Consultant", "Assistant", "INVALID".

They correspond the title of the individual that wishes to use the lab. The chosen title is contained in a field just below the "INVALID" button after the selection of the students title.



Add Card Button - will create a blank card for a new student in the **Student Database** (Figure 2.20 below), and will allow the user to fill in all details for this new student. To add cards to the **Student Database** stack, click on the "**Add card**" button. A new card is created with the correct background already in place. All the user has to do is add the statistics for the student. These statistics include the User ID #, the Student Name (Last name first), the Student Social Security Number, Major, Title, Phone Number, any classes relevant to the lab, and any comments that may be necessary. Since HyperCard saves all changes automatically, this new card is now saved into the **Student Database**.

File Edit Go

Sort Find Add Card

Lab Card #: _____

Name: _____
Last Name, First Name MI.

Student ID: _____

Major: _____ Classes: _____

Phone Number: _____

Comments: _____

☒ general
☐ special
☐ grad
☐ staff
☐ support
☐ consultant
☐ assistant
☐ INVALID
general

Card created on: Mon, Aug 1, 1988
Card last modified on:
Last used the lab on:
Total time checked in: 0 0:00

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Figure 2.20 Empty Student Database card