New Technical Notes
Macintosh

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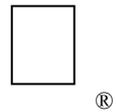
Developer Support

Parameters for MDEF Message #3
Toolbox

Revised by: March 1988
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In order to support popup menus, menu definition procedures (MDEFs) must now respond to a new message, `mPopupMsg`. `mPopupMsg` is message number 3. When your MDEF is called with this message, it should calculate the rectangle in which the popup menu should appear.

The interface to an `MDEF` is

```
PROCEDURE MyMDEF(message: Integer; theMenu: MenuHandle; VAR menuRect:
         Rect; hitPt: Point; VAR whichItem: Integer);
```

For `mPopupMsg`, the `message` parameter will be 3 and `theMenu` will be a `MenuHandle` to your menu. The MDEF should compute a rectangle for the menu such that the item passed in `whichItem` will be displayed at `hitPt`. See the figure below:
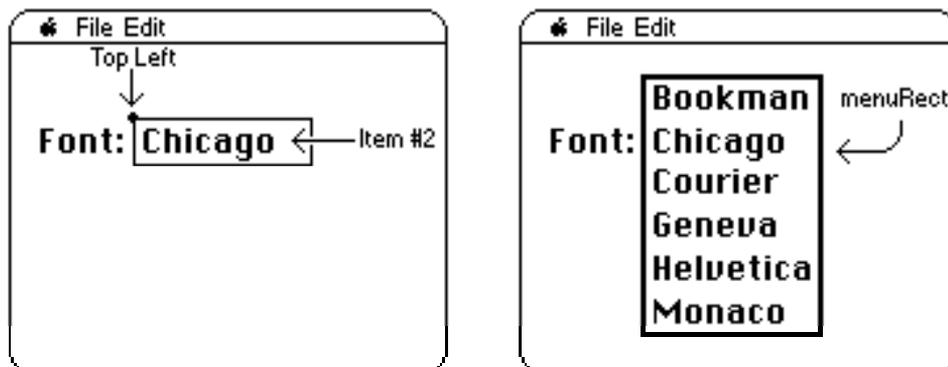
The `hitPt` parameter, though, is NOT a `Point`. Instead, this parameter is used to pass the top left of the item, passing the `top` coordinate and then the `left` coordinate. This is the opposite order of the fields in a `Point`. The values can be used together as a `LongInt`, with `left` in the high word and `top` in the low word, or separately as two `Integers`.

A more correct Pascal interface to the MDEF (for the `mPopupMsg` **only**) would be:

```
PROCEDURE MyMDEF(message: Integer; theMenu: MenuHandle; VAR menuRect:
            Rect; top, left: Integer; VAR whichItem: Integer);
```

Note: The MPW interface files incorrectly list `mPopupMsg` as 4; it should be 3.

Further Reference:
- The Menu Manager