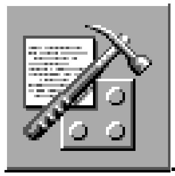
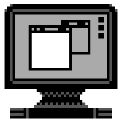
OOP Class Lab
Simple Text Editor

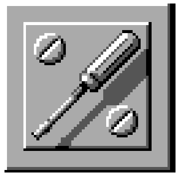
Purpose: This lab is a beginner's Project Builder/Interface Builder exercise. It involves using IB to design a very simple text editor using only IB palette objects, no custom objects.

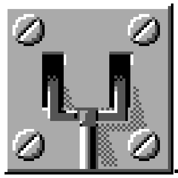
1. Start up **Project Builder** . Begin a new application by selecting **Project**/**New...** on the main menu. A panel titled New Project will pop up asking for the project name. Leave the popuplist labelled "Project Type:" in the Application position. Select the directory where you want the project to be, then type **SimpleEditor** and click OK. A project directory name **SimpleEditor** is created and the project file window pops up.

2. First, you would like to have the application itself display its own icon rather than the default_app_icon.tiff . Click on the Attributes button 

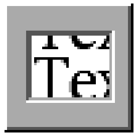
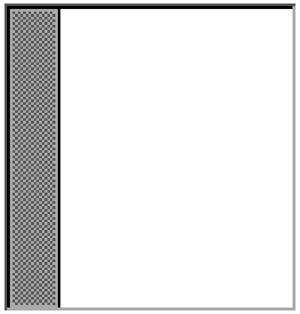
at the top of PB's window. Now go to the File Viewer and find Smiley.tiff in this lab's folder. Drag its icon from the File Viewer to the icon well labelled Application Icon in the lower left corner of PB's window. Notice that the icon well now shows the new icon.

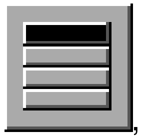
3. Design an interface as described below. First select the Files button 

at the top of PB's window. Choose **Interfaces**/**SimpleEditor.nib** from the PB browser and double-click the icon. Interface Builder  is launched, and it shows the initial main window named **My Window**. You can hide PB if it is in the way.

Note: Below you can test the interface after each step. Test by choosing **Document**/**Test Interface** on the IB main menu. Choose **Quit** in test mode to return to IB, or double-click on the IB icon which will change in test mode to look like: .

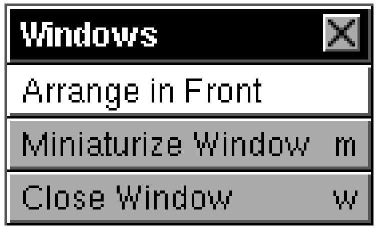
a. Click on your main window; its title bar should be black. Call up the Window Inspector by selecting **Tools**/**Inspector...** on the IB main menu. In the Window Inspector (Attributes), set the window so that it does not have a resize bar or a close control. Also change its title to **Simple Editor** and press return.

b. In the Palettes Window (**Tools/Palettes...**), click on the fourth palette button  . Drag a scrollview  into the main window and release it. Resize it to completely fill the window (move it first to the upper left corner of the window, then grab its lower right corner and pull to the lower right corner of the window).

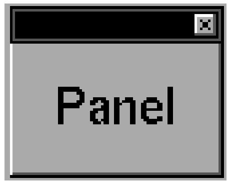
c. From the first palette , drag a Format menu bar 

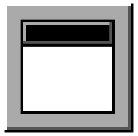
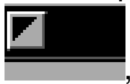
and a Windows menu bar 

to just above your application's main menu and release them.

d. On your application's new **Windows** menu, delete the **Arrange in Front** 

item (click on it and press the Delete key) and the **Close Window** item.

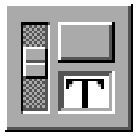
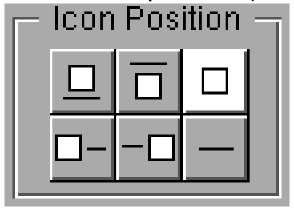
e. Drag a panel 

from the second palette  and drop it somewhere on the screen. It will expand to be a full-size panel. Click on the temporary resize button at the left end of the panel's title bar , and then resize the panel to be a little smaller by grabbing and dragging the resize bar at the lower right corner of the panel . Drag a textField 

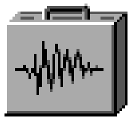
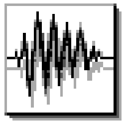
from the third palette onto the panel and release it. Double-click on the textField to select it, and edit it to say something like, "Simple Editor, by *Your Name*". Click on the panel, and then go to the Window Inspector (choose **Tools**/**Inspector...** in the main menu if it is not already up, then Attributes in the Inpsector's popuplist). In the Window Inspector, change the Title of the panel to be **Info** and press return.

f. *Control-drag* from the **Info...** item in the main menu to the new Info panel (either the top bar of the panel itself, or the Panel icon in the File window in the lower left of the screen - click on the Objects button first). Make the connection in the MenuCell Inspector by selecting the **makeKeyAndOrderFront:** action and clicking **Connect**.

g. Drag a button 

from the third palette  onto the right side of the Info panel. In the Button Inspector (Attributes), edit the button so that Icon Position is set for the icon in the center, no title 

. Now type "app" in the **Icon:** field in the inspector and press return. This specifies that the icon on the button is to be the app's icon, which was already set to be Smiley.tiff in Project Builder above. The button should now have the Smiley icon on it. Resize it to show the icon just right and place it to the left of the panel's text. (In Test Interface, the button will have IB's icon on it because IB is technically the running app at this time; but when you build and run your program, the Smiley icon will appear there.)

h. Click on the Sounds suitcase  in the File window. Drag a Frog sound  onto the button in the Info panel and release it. Now close the Info panel by clicking on its close button (upper right corner).

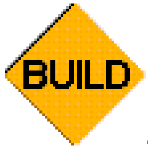
(By the way, there is another recommended way for creating real Info panels, but this simple procedure will give you some practice in IB.)

3. Now test the final product using **Document**/**Test Interface**. Try all of the Formatting features of the Format menu. Try the Info panel. Is everything working?

4. Save the file (**Document**/**Save** on IB's main menu).

5. Now return to Project Builder. You can look through the browser and see all of the files accumulated so far for the project. Save the project as it now stands (**Project**/**Save**).

6. Now let's build and run the program. Click the Builder button 

at the top of PB's window. Now build the program by clicking the Build button 

. If there are no errors shown in PB's window, click on the Run button at the top . (Or, you can go to the workspace File Viewer, look in the Project folder, and double-click **SimpleEditor.app**.) Does it work?