



**ESPRESSO!™**

---

## **Additional Object-Oriented Development Tools for App Kit & DB Kit**



ESPRESSO! Developer is a third party Interface Builder object palette that provides a suite of extensions to existing App Kit and DB Kit objects, as well as providing new objects that increase the object-oriented development capabilities of the environment. ESPRESSO!Developer supports Objective-C methods under Test Interface mode but also provides its own language that is very easy to learn and can be mastered in days.

As advanced as NEXTSTEP is, it falls a little short in two areas for database programmers.

First, it requires knowledge of Objective C (Objective C, an object-oriented superset of C, is the native language of NEXTSTEP). Many database programmers are much more comfortable with a 4GL designed specifically for database programming than they are with C (not to mention Objective C or C++). These programmers need an environment that harnesses NeXTSTEP but lets them use a 4GL in the places where coding is required.

Second, Interface Builder's "Test Interface" mode just tests the NEXTSTEP user-interface objects, not the behavior that a programmer's code adds to the application. For the non-graphical components of an application, you still have to revert to the traditional, tedious development cycle: edit, compile, build, test.

ESPRESSO! fills the first gap with ESPRESSO! Script Language (ESL), an easy-to-learn 4GL with a library of routines for database programming. It fills the second gap with a unique Interface Builder "palette" that lets you link in your ESL code and run your entire application right inside "Test Interface" mode.

## **ESPRESSO! Script Language**

ESL is far easier for novices to learn than is C. However, C programmers pick up ESL in no time, since the syntax is similar. ESL is a compact, general-purpose scripting language that comes with a complete library of routines for database operations. It lets you manipulate and extend the NEXTSTEP graphical objects without having to learn anything about object-oriented programming.

ESPRESSO! Developer also supports Objective C. You can hook ESL or Objective C routines to the graphical and database objects, effectively extending the objects' functionality.

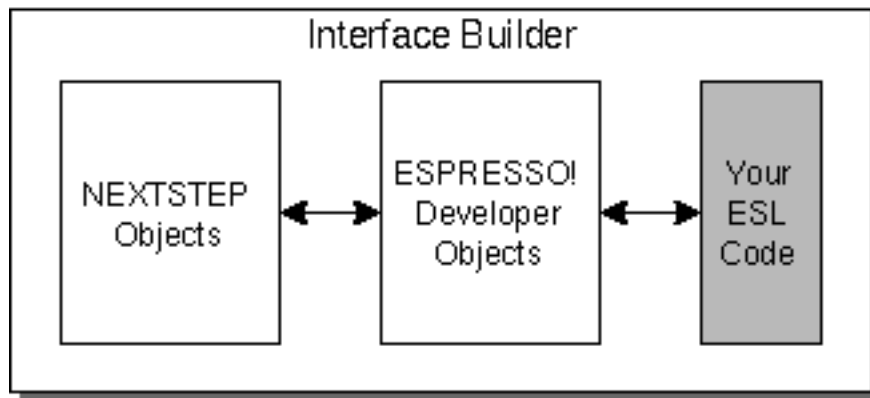
## **The ESPRESSO! Palette**

ESPRESSO! Developer's Interface Builder palette contains a set of eight objects. Some serve as extensions to the Application Kit and Database Kit objects. Other objects, such as the DragView and MultiView, provide convenient features not supplied by the NEXTSTEP objects.

The palette objects do most of the work. In fact, it's possible to write a database application that requires very little additional code. With no coding, you can: define all

the attributes of the graphical objects; make the connections between the database and the graphical objects; specify a wide variety of templates for each text field used for entering or displaying data; set numerical bounds on data; and display dates or monetary amounts in the format appropriate for the user's geographical region. For additional data validation, it's simple to hook an ESL routine of your devising to the object that displays the data. Fetching data and writing to the database require just a couple of ESL statements.

The ESPRESSO! objects act as intermediaries between the NEXTSTEP objects and the ESL code that you write, as in the following illustration:



Note that your ESL code is linked in within Interface Builder. Thus you can execute your entire program from Interface Builder's Test Interface mode—a unique advantage that radically shortens the development cycle. To test changes in your code, you need only recompile the procedure in question, which takes virtually no time. There's no need to build a stand-alone program until your application is completed!

### **Extensibility**

ESPRESSO! Developer includes a complete Objective C API (application programming interface). You can add new functions to ESL. You can even create new palette objects that interact with NEXTSTEP and with the other ESPRESSO! objects. Now that's complete flexibility!

### **Features:**

- Support of DB Kit's database independence; apps developed with ESPRESSO! Developer will recompile on any database with a DB Kit adaptor.
- Developing applications with ESPRESSO! requires no prior knowledge of the App Kit; this feature allows you to train programmers while they develop mission critical apps.
- No royalties or licensing fees; applications developed with ESPRESSO! Developer compile into independent applications that do not require ESPRESSO! Developer to run.

### **Templates:**

Templates for NEXTSTEP text fields and DB Table Views. They do data validation and view formatting:

- money
- date/time
- character field
- text field
- floating point field
- integer field

### **Objects! Objects! Objects!:**

ODModule lets you easily define qualifiers without coding, sort order of the data in your DB Table view and specify the loading sequence of your data

ODPickField is a convenient object that lets users choose from a large number of items without cluttering the screen and slowing down the application since it loads the data from the database only upon request and keeps it in memory

ODDragView provides the icon-dragging behavior that a number of graphical applications include (move or copy data from one location to another) but is not explicitly supplied in Interface Builder

ODMultiView saves screen space by allowing the display of various windows over the same window area (switch views). Used extensively throughout NEXTSTEP, ESPRESSO! now offers an object that enables designers to create overlaid views

graphically

## **Language**

ESPRESSO! Developer provides a fourth generation language. It is easy to learn, can be mastered in days. An API is available for further customization. Objective C methods and ESL (ESPRESSO! Script Language) functions can be used jointly in the development of apps

Requires NEXTSTEP Release 3.1 or higher. Now shipping in Multi-Architecture Binary (MAB) format.

ESPRESSO and ESPRESSO Developer is a registered trademark of Professional Software. All Rights Reserved.

---

To place orders:

1.800.452.7608

303.799.1435 fax

info@alembic.com