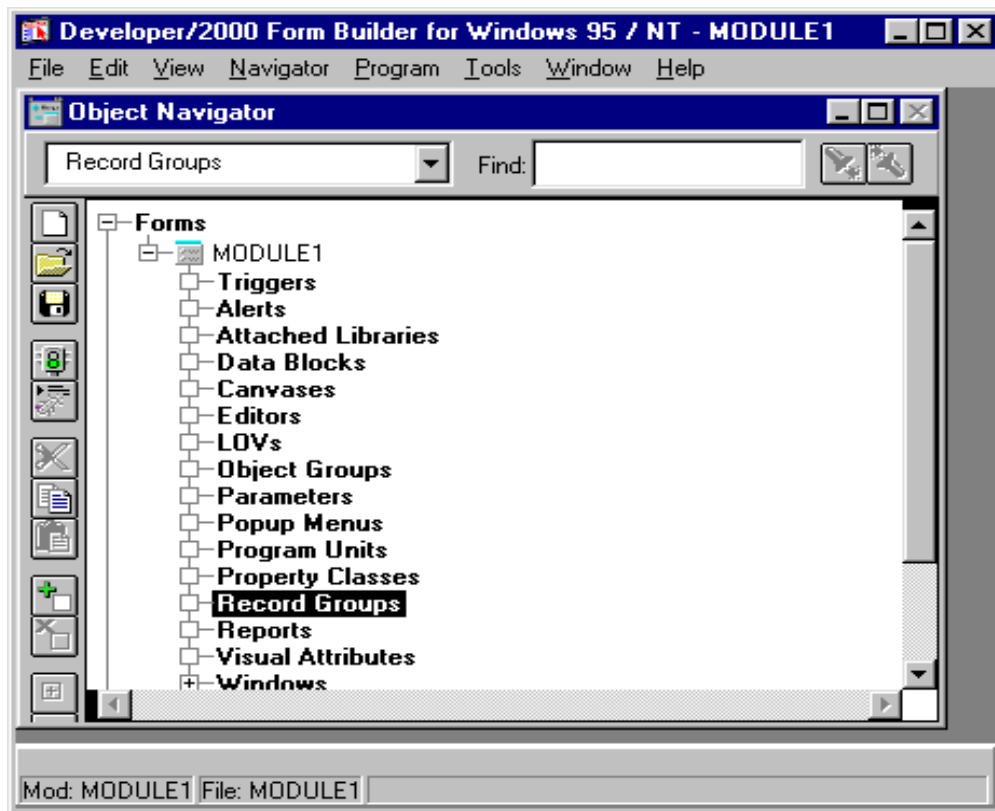# Creating Oracle Data Block Forms

Login procedure to system to create a Form

- **Using <u>Form Builder</u> (wizard) in Titan:**
  In Windows95, select Oracle (e.g., Start→Program→Oracle) → Developer2000 R2.1 → **Form builder** (there are also Form compiler, Form runtime, etc.) → Build a new form manually (there are other options such as Use the Data Block Wizard, Open an existing form, etc. you can choose from) → OK → You will see the following window: → File → Connect → type your user_name/password.

- **Using <u>Form Designer</u> in other Oracle environment:**
  Oracle for Window 95 → **Developer/2000** for Win95 → **Form Designer** → File → Connect → type your user_name/password

Form Designer Components and the object navigator

- **Object navigator**: form objects in **Ownership view** (by object types), **Visual view** (hierarchical view).
- **Form module** (or form) contains all of the form object types.
  e.g., Form Module contains Windows; **Windows** contain Canvases; **Canvases** contain items (e.g., data fields, labels).
- **Layout editor** shows a visual view of the canvas items. Items are the GUI objects that users see and interact with on the canvas (e.g., check box, button, radio button, text item).
- **The property sheet, PL/SQL editor.**

Creating a Single-Table Data Block Form

Data blocks are created to display database table fields. When you create a data block, the system automatically generates the text fields and labels for data fields, create the code for inserting, modifying, deleting, and viewing data records.

(1) Creating a form designer file
     Change to **Visual View** by clicking View → Visual View in the Form Window. You may need to change Visual View and Ownership view back and forth.

     MODULE1 → type your form name (e.g., click slowly twice and type usually table name, CUSTOMER) → Save (clicking Save button or File → Save)

✓ The extension of the form designer file is **.fmb**, which is a form program file that <u>needs to be compiled</u>.

(2) Creating a canvas: WINDOW → type your window name (e.g., CUSTOMER_WINDOW) → Add a Canvas (by clicking + button or double clicking Canvases icon) → type your Canvas name (e.g., CUSTOMER_CANVAS) → Double-click the Canvas icon for Layout Editor

(3) Creating a New Data Block (general, items, layout, master/detail)
     Follow the Data Block Wizard and Layout Wizard → Save

✓ You can open the form designer file anytime using Object navigator tool bar (open in file menu).

(4) Formatting, Deleting, Editing, Moving, and Aligning Groups of fields and labels
   - Modifying item properties: <u>Right-click the item</u> → Change the properties
   - Formatting the Canvas layout (basically <u>click and drag</u>)
   - Deleting form objects (select an object and press Delete key)
   - Creating Text Labels (click Text tool [T] and click label, and type it), Use format menu
   - To rearrange and align the items: click and drag to position itmes → Arrange → align object→ choose options: e.g., align to each other, horizontally align left, vertically distribute → Ok

<u>If you are using **Form Designer** you may have to follow the following procedure:</u>
Tools → New block → Select base table (better to put your user_name for the base table)
→ Item → Select column → choose items and item options → Layout → choose options
→ Ok → Save

Running the form

The executable form has extension **.fmx** (you may need to associate this with f45run32.exe or similar file depending on the Oracle version if you are using Windows95)

- To run the form, Click **run button** or press **Ctrl+R**
- Viewing table records: Enter Query → **F8** to execute it, you can use Wild card (%) to search records, or press F8 to view the records.

For searching/inserting/removing records, you will find appropriate **buttons** in the window or you can look at the **menu** as follow:

- Clearing the form fields: Record → Clear, or Action → Clear all for exit
- Inserting new records: Record → Insert
- To update a record: Execute a query → Save
- To delete a record: Execute a query → Record → Remove → Save
- To exit a form runtime: Close button (x) or Action and Exit

☞ Make sure you have the executable form file, **.fmx** in your directory.

Creating a Multiple-Table form (Master/Detail Block Form) using the Form Builder

Idea: create a Master block first (*one-side*), then create a Detail block (*many-side*), and link them (by joining, e.g., join-condition)

(1) Create a Master form using the previous steps (e.g., the same steps for creating a single-table data block form). Note that it is recommended to create a **Form format** for the Master block instead of **Table format**.
(2) **In the same Canvas**, create a Detail Data Block. The wizard will ask you whether you are creating a Master/Detail block form.

    ☞ *Note that if the table has no foreign key relationship between two files, DBMS may not automatically identify the Master/Detail relationship.*

(3) Click create relationship: specify the Master block name and join condition
(4) In Layout window, create a **Table format** for Detail block instead of Form, so that you can display many related records for each record in the Master block.
(5) Format the new data block and Save.
(6) Run the Master/Detail block forms and Test it.

Creating a Master/Detail Block Form using the Form Designer
(1) Create a new form → open the Layout Editor (by double-clicking the canvas)
(2) Create a Master Data Block: Tool → new block → items → … → Layout → Ok
(3) Creating a detail data block: Tool → … → Layout → don't check the button palette box → Master/detail→ specify the master/detail relationship (master block name and join condition) → Ok
(4) Format the new data block and Save