# Chap 4 – What is a Business Object?

* The Concept of a Business Object

A Business Object is an object that will hold data for some Business entity. Usually this data is help somewhere in between the database and the GUI. Business Objects can be used for any database and/or any front end code, like a JavaFX App, or a Web App or even a Char-Based App.

The Business object usually has properties that it reads form the database and will display back to the user in a GUI. So you look in the database to get an idea of what properties you will use for each Business Object.

Examples of Business Objects: A Student object, to hold one Student’s data; An Account Object to hold one Account’s information; A Book Object to hold information about a single Book.

* The Structure of a Business Class

The Business is a regular Java class, that has Properties/Constructors/Methods, etc. I usually include a main() method to test the Business Object.

You also include 4 additional methods to read/write data to/from the database. These methods are: selectDB() – which reads data from the database; insertDB() - which inserts a new row of data into the database; deleted() – which will delete one row of data from the database; and updateDB() – which will change the data in one row of data in the database.

These 4 methods will be called by the GUI code to accomplish one of these 4 tasks: Select, insert, Delete and/or Update.

* How to Build a Business Object in NetBeans

In NetBeans you right-click on the name of your Project located on the left hand side of NetBeans in the Project Manager window. Once you right-click, choose add Java class. It will ask you to name your class, then it will create you a class template. You add your code(properties/constructors/methods/etc) to this code template. Don’t forget to include selectDB(), insertDB(), deleteDB() and updateDB().

* Testing your Business Object in NetBeans

Add a main method to your class. In this main method test out any methods you need to, including selectDB(), insertDB(), deleteDB() and updateDB().

* Using a Business Object in a Servlet

The same code you used in main for Testing, will go in servlet, the difference being that in the servlet you use data you read from the previous HTML page.

Ex code:

Account a1;

a1 = new Account();

a1.selectDB(“90001”); //read data from the database for Account # 90001

a1.display(); //print data to output window to make sure the data is correct.

//lastly send data to the HTML that he end user will see.