Lesson - Week 11:

Course Objectives Alignment:
<<* The Course Objectives (CO##) are listed in the Course Outline *>>

- CO01 – You will be working on a Project Assignment which will require you to practice structured design techniques.
- CO02 – You will be working on a Project Assignment this week.
- CO03 – You will use your IDE to work on a Assignment this week using NetBeans.
- CO04 – Chapter 15 includes the topics of Inheritance, Polymorphism, Abstract Classes, Interfaces, and Event-Driven Programming using Java Swing Libraries.
- CO05 – We will cover Event-Driven programming in this chapter. You will be coding events to respond to the user interacting to Java Swing UI Controls such as buttons.
- CO06 – You will be working on a Project Assignment this week.
- CO07 – Key terms are found throughout the chapter.

Read in Your Textbooks:

- Chapter 15 – sections 15.1 - 15.6

Discussion Questions:

Muddiest Points Forum - Post to this forum as often as you need to when you run into trouble understanding a concept, something in the book, or just have a question. You may assist your classmates by answering. Remember, emailing me is the fastest way to get a response from your instructor but your classmates may be able to offer you help when they are in the course.

zyBooks Participation Assignment:

Look under the Assignments tab in your zyBooks textbook for "Participation Assignment for Week 11 – Chapter 15".

Project Assignment:

You are going to modify the program "Figure 15.10.1: A seat reservation GUI involving a table, fields, and buttons." The first task is to create a project in NetBeans called ProjectWeek11 but you will call the main class "SeatReservationFrame". Copy and paste the "SeatReservationFrame.java" source code into the editor without erasing the package statement. Create a second java file in the same package called "SeatInfo". Copy and paste the "SeatInfo.java" source code into the editor for SeatInfo without erasing the package statement. Compile and get the program to run. Analyze the

source code, the description of the program in the textbook section, and observe the interactions with the program.

Modifications:

1. Change NUM_SEATS to 20. Make sure you change the hard-coded table size to use NUM_SEATS rather than the value of 5. Test the program to make sure it works with the new value and the screen interface changes.
2. Follow the details in " Try 15.10.1: Modify the above GUI." This requires you to modify the SeatReservationFrame program to have an additional JFormattedTextField and JButton component for the purposes of deleting a particular seat reservation. The JFormattedTextField component should allow the user to enter the seat number that should be deleted, and the JButton should trigger the deletion.
3. Add a method that will read the values of certain seats and will make initial reservations. Add the invocation in the appropriate place to load the table with the values read in. The program should then work as it currently does. A text file will be provided to test your program.

The data file for modification #3 is included in the Content folder for the week. You will use the Project Assignment Template file to create a Word Processing document for submitting your work (template file also in the Content folder for the week). You will name your Project Assignment Document as "yourlastname-CST141FA23-ProjectForW11" as either a .doc, .docx, or .pdf. Ex. Smith-CST141FA23-ProjectForW11. Submit the file under the Project for Week 11 Assignment folder in BrightSpace. The assignment is due by 11:59PM on 11/19.Sunday, / 11:59PM.