



INFO 5100 - Application Engineering & Dev

Homework to Chapter 14

Submitted By:

Abdul Haseeb Khan

NUID: 002844724

khan.abdulh@northeastern.edu

In the following pages, I will answer the questions in the Midterm Exam, providing detailed responses. Your feedback is greatly appreciated, and I am open to any additional guidance or expectations you may have for this assignment.

Non-Programming Assignment

1. How can we add GUI to a Java program?

Ans: We can add GUI to a Java Program using Swing or JavaFX libraries which involves creating a visual interface with buttons, labels, and other interactive elements.

2. What is AWT - Abstract Windowing Toolkit?

Ans: AWT, or Abstract Window Toolkit, is a set of application programming interfaces developed as part of the Java Foundation Classes. AWT provides a way to create graphical user interfaces (GUIs) for Java applications. While AWT was the original GUI toolkit for Java, it has been largely superseded by Swing and JavaFX in modern Java development. Swing, which is also part of the Java Foundation Classes, provides a more extensive and flexible set of GUI components and is often preferred for building sophisticated and visually appealing user interfaces.

3. What is Swing?

Ans: Swing is a set of GUI (Graphical User Interface) components for Java. It is part of the Java Foundation Classes (JFC) and was developed to provide a more advanced and feature-rich alternative to the earlier Abstract Window Toolkit (AWT). Swing is built on top of AWT but provides a more extensive and flexible set of components for creating

graphical user interfaces. Swing has been a crucial part of Java's GUI development for many years. However, in more recent Java versions, JavaFX has gained popularity as a successor to Swing,