**CS324: Advanced Programming in Java**

**Homework No. 7**

**Due on Friday 5th November.**

**This HW can be done in a group of 2 persons.**

In this homework you need to develop a GUI application in JavaFX library. The application is open ended, and you can decide at your own about what to add in this application. Some example applications are:

* calculator
* drawing pad
* database manipulation
* A simple game of tic-tac-toe
* …

**Javafx Installation:**

Download pre-compiled binaries from here: <https://gluonhq.com/products/javafx/>

Choose SDK distribution for your particular operating system.

<https://openjfx.io/>

JavaFX examples:

<http://tutorials.jenkov.com/javafx/index.html>

Extract the files to your computer in c:\

**To compile**

javac --module-path 'C**:**\javafx-sdk-17.0.1\lib' --add-modules javafx.controls,javafx.fxml .\HelloWorld.java

**To execute**

java --module-path 'C:\javafx-sdk-17.0.1\lib' --add-modules javafx.controls,javafx.fxml HelloWorld

**Sample HelloWorld program in JavaFX**

import javafx.application.Application;

import javafx.event.ActionEvent;

import javafx.event.EventHandler;

import javafx.scene.Scene;

import javafx.scene.control.\*;

import javafx.scene.layout.StackPane;

import javafx.stage.Stage;

public class HelloWorld extends Application {

    public static void main(String[] args) {

        launch(args);

    }

    @Override

    public void start(Stage primaryStage) {

        primaryStage.setTitle("Hello World!");

        Button btn = new Button();

        btn.setText("Say 'Hello World'");

        btn.setOnAction(new EventHandler<ActionEvent>() {

            @Override

            public void handle(ActionEvent event) {

                System.out.println("Hello World!" + event);

            }

        });

        StackPane root = new StackPane();

        root.getChildren().add(btn);

        primaryStage.setScene(new Scene(root, 300, 650));

        primaryStage.show();

    }

}