

Islamic University Of Gaza

Faculty Of Engineering

Department Of Computer Engineering



Discrete Mathematics

Lab Project

Report

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- Introduction:

This report is for the project of Discrete Mathematics lab which is :

Given the month and the year, display the month calendar.

- I made it in java language using javafx library with Scene Builder as a framework for the GUI.

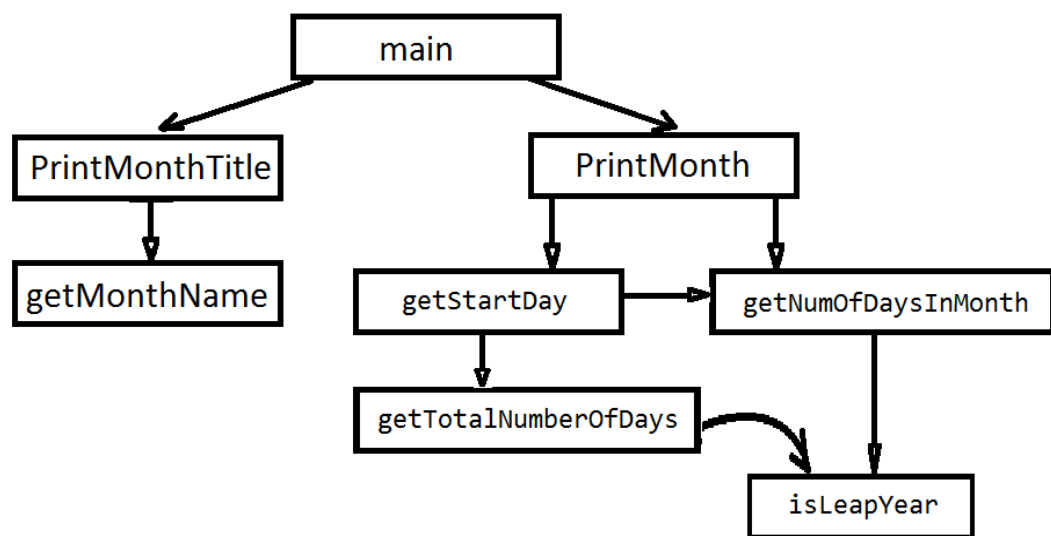
- Explanation:

- To display the month calendar we need to display the month title and the month body.
- In order to display the month title we need to find the month name given the month number(using switch).
- In order to display the month body we need to find both the start day and the number of days in that month.
- To find the start day we need to compute the total number of days since 1/1/1800 as a reference we will use in our calculation because it is already known that day is a Wednesday (number 3 with respect to Sunday as 0).

- Project Hierarchy:

My project consists of two classes which are :

1. The main class which is used just to launch the program by creating the main stage of the program and loading the scene from the sample.fxml then assigning the scene to the stage, after that showing the stage.
2. The Controller class which are used to connect the FXML components with the java methods.



After that I used the next() and prev() methods to increment and decrement the month, respectively, and display the calendar again with the new month.

- Some Challenges:
 - The most difficulties that I faced was how to connect the mark-up language components which is in (FXML) with the programming language.
 - I've watched a course about javafx and its Scene Builder framework.

Completed with God Willing