

## COP2805C Module 1 Graded Programming Assignment

For our first graded assignment we will apply some of the language features of Java 17 to a simple Java application. Use the Module 1 practice exercise as a reference for this assignment.

Design and implement a Java program which creates appointments for a group of contacts.

1. Start by creating a class to represent a **Contact**. This class must include the following private attributes:

- Last Name
- First Name
- Email address
- Phone Number // e.g. (904) 111-2222
- Provide an overloaded constructor and getters for each of these fields (no setters are necessary).
- Provide a method which returns the contact's "friendly name" as "FirstName LastName", e.g. "John Smith".
- Provide an overridden toString method which displays the contact's information in a readable format.

2. Create a class to represent an **Appointment**. This class must include the following private attributes:

- Title // title of appointment, e.g. "Checkup with Dr. Roberts"
- Description // a brief 1-2 line summary of the appointment
- Date // date of the appointment, e.g. Jan 17, 2024
- Time // time of the appointment, e.g. 10:30:00
- Contact // Owner-Scheduler of the appointment, this is a reference to a Contact object
- Provide an overloaded constructor and getters for each of these fields (no setters are necessary).
- Provide an overridden toString method which displays the appointment information in a readable format (this is not the reminder). The Contact information should be included by calling the Contact class's toString method.

3. Create a main application class. I called mine "AppointmentApp". This class will contain the application's main method. It must also include the following private attributes:

- an array of **Contact** objects with a size declarator of **10** (should also be a constant)
- an array of **Appointment** objects with a size declarator of 10 (use the previous constant)
- Provide an overridden toString method which returns a String containing the appointment information for all contacts in the array (be sure to display the contact information).
- Provide a main method which instantiates an application object, inserts 3 contacts into the contact array, inserts 3 appointments for those contacts in the appointment array, then displays the appointment information for the appointments in the array.

Additional non-functional requirements:

- The application must use the **var** keyword to demonstrate LVTI (Local Variable Type Inference).
- One or more **text blocks** must be used to format the appointment information to demonstrate the text blocks feature.
- **All classes must be saved in a single .java file**; only the application class should be declared public.
- Use the following package name for your application:

**package edu.fscj.cop2805c.calendar**

Submit your project to the GitHub Classroom repository. There is no Canvas submission for this assignment.

Sample output is shown below. No user input is required for this application.

**Appointment:**

**Title: Test Appointment 1**

**Desc: This is test appointment 1**

**Contact: John Smith, John.Smith@email.com, (904)-555-1212**

**Appt Date/Time: 1/17/2024 10:30:00**

**Appointment:**

**Title: Test Appointment 2**

**Desc: This is test appointment 2**

**Contact: Sally Rogers, Sally.Rogers@email.com, (904)-555-2323**

**Appt Date/Time: 7/13/2024 14:00:00**

**Appointment:**

**Title: Test Appointment 3**

**Desc: This is test appointment 3**

**Contact: Rodney Davis, Rodney.Davis@email.com, (904)-555-3434**

**Appt Date/Time: 11/2/2024 08:45:00**