

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 birthday greeting 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