## **SE 350: Object-Oriented Programming**

Homework 1

**DUE DATE: January 19, 2022. 5:00PM** 

#### Goal:

Using what we learned about creating a robust Class in week 2, create Java classes per the spec below. We will iterate on this assignment in the coming weeks to add additional functionality.

#### **Grading:**

Your submission will be evaluated to ensure you're reasonably adhering to the design guidelines discussed in week 2:

- Each class should be well named and encapsulated.
- Each class should have toString(), equals(), and hashCode() overridden
- Classes should be secure and make use of getters and setters and information hiding
- Each class should have a constructor which can initialize the class's internal state
- Invalid input should yield a Java exception or a user-defined exception

#### **Prerequisite Steps:**

- 1. Create a new Java project using IntelliJ
- 2. Have a Github.com account and Git installed.

#### **Requirements:**

Create the following objects to facilitate the described functionality:

**Class: Airport** 

Member Variable	Requirements
name: String	Must consist of 3 alphabetic, capitalized characters

**Class: Airline** 

Member Variable	Requirements
name: String	Must be less than 8 characters

**Class: Flight** 

Member Variable	Requirements
airline: Airline	N/A
origine: Airport	N/A
destination: Airport	N/A
flightNumber: String	A random String (consider using a UUID)
departureTime: Date	A Date consisting of a date and time

#### **Class: TravelManager**

Contains a main method which initializes one Airport, one Airline, and one Flight.

After initializing the above classes, perform a System.out.println() call passing in your flight. The flight's internal data should be printed.



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### **Submission Requirements**

- 1. Initialize a Git repository in your project directory.
- 2. Create a commit and push it to a new repository on Github.
- 3. Create a .txt file named "homework1.txt", paste a link to your Github repository in the file and upload it to the "Homework 1" D2L dropbox.

#### **Late Submission**

Late submissions are not accepted.

