

# SE 350: Object-Oriented Programming

## Homework 4

DUE DATE: March 9, 2022. 5:45PM

### Goal:

Refactor Homework 3 code to utilize the Proxy pattern to log a message to the console each time a Flight is created or retrieved by ID.

### Grading:

Your submission will be evaluated to ensure you're reasonably adhering to the design guidelines discussed thus far and implementing the specified design patterns.

### Prerequisite Steps:

1. Completed homework 3, if you have not see Week 8 Github for a solution to reference

### Submission note:

For homework 4, you can simply continue building upon the Github repo you used for homework 3 by simply pushing additional commits for homework 3. If you prefer, you can create a new repository for homework 4, but this will take more effort on your part.

### Requirements:

**Utilize the Proxy pattern to extend the FlightManager class to log the following messages each time createFlight() is invoked and getFlightByFlightNumber() is invoked.**

Upon **createFlight()** execution, the message "A flight is being created." should be logged to the console before delegating execution to the FlightManager singleton to create the flight.

Upon **getFlightByFlightNumber ()** execution, the message "Flight number: " + flightNumber + " is being retrieved." should be logged to the console before delegating execution to the FlightManager singleton to retrieve the flight.

See lecture 9 for an example of utilizing the Proxy pattern to perform logging.

### Submission Requirements

1. Create a commit and push it to the repository you used to submit Homework 2 Github (alternatively, you can create a new repository for Homework 3, please see note on page 1.)
2. Create a .txt file named "homework3.txt", paste a link to the Github repository with your code for homework 2 and upload it to the "Homework 3" D2L dropbox.

### Late Submission

Late submissions are not accepted.

