



CS 320 Module Three Milestone Guidelines and Rubric

Overview

As you have learned in Modules One and Two, various types of software testing can be employed for a given situation. For this assignment, you will be creating unit tests using code to uncover errors for a mobile application. You will develop the contact service and contact object.

Prompt

For Project One, which is due in Module Six, you are asked to develop a mobile application for a customer. The customer will provide you with the requirements. Your job is to code the application and provide unit tests to verify that the application meets the customer's requirements. For this milestone, you will focus on delivering the contact services. The purpose of these services is to add, update, and delete contact objects within the application.

The contact service uses in-memory data structures to support storing contacts (no database required). In addition, there is no user interface for this milestone. You will verify the contact service through JUnit tests. The contact service contains a contact object along with the contact service. The requirements are outlined below.

Contact Class Requirements

- The contact object shall have a required unique contact ID string that cannot be longer than 10 characters. The contact ID shall not be null and shall not be updatable.
- The contact object shall have a required firstName String field that cannot be longer than 10 characters. The firstName field shall not be null.
- The contact object shall have a required lastName String field that cannot be longer than 10 characters. The lastName field shall not be null.
- The contact object shall have a required phone String field that must be exactly 10 digits. The phone field shall not be null.
- The contact object shall have a required address field that must be no longer than 30 characters. The address field shall not be null.

Contact Service Requirements

- The contact service shall be able to add contacts with a unique ID.
- The contact service shall be able to delete contacts per contact ID.
- The contact service shall be able to update contact fields per contact ID. The following fields are updatable:
 - firstName
 - lastName
 - Number
 - Address

When you are ready to begin your work, access Codio via the Codio module.

Note: You will need to upload and download files to the Codio virtual lab using Microsoft OneDrive, following the instructions in the Codio Student Guide located in the Codio module. It is also recommended that you periodically save your work to Microsoft OneDrive, following the instructions in the Codio Student Guide.

What to Submit

To complete this project, you must submit a **Contact Service zipped folder** containing the following deliverables:

- Contact.java
- ContactService.java
- ContactTest.java
- ContactServiceTest.java

Module Three Milestone Rubric

Criteria	Meets Expectations (100%)	Partially Meets Expectations (70%)	Does Not Meet Expectations (0%)	Value
Contact Class Meets the Requirements	Verifies the contact class meets all requirements (five requirements)	Verifies the contact class meets some requirements (one to four requirements)	Does not verify the contact class meets any requirements and/or does not attempt criterion	60
Contact Service Class Meets the Requirements	Verifies the contact service class meets all requirements (three requirements)	Verifies the contact service class meets some requirements (one or two requirements)	Does not verify the contact service class meets any requirements and/or does not attempt criterion	40
Total:				100%