CS 320 Module Four Milestone Guidelines and Rubric

Overview

As you have learned in previous modules, there are various types of software testing that can be employed for a given situation. As you did in the Module Three milestone, for this assignment, you will be creating unit tests using code to uncover errors in a mobile application. You will develop the task service and task 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 **task services**. The purpose of these services is to add, update, and delete task objects within the application.

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

Task Class Requirements

- The task object shall have a required unique task ID String that cannot be longer than 10 characters. The task ID shall not be null and shall not be updatable.
- The task object shall have a required name String field that cannot be longer than 20 characters. The name field shall not be null.
- The task object shall have a required description String field that cannot be longer than 50 characters. The description field shall not be null.

Task Service Requirements

- The task service shall be able to add tasks with a unique ID.
- The task service shall be able to delete tasks per task ID.
- The task service shall be able to update task fields per task ID. The following fields are updatable:
  - Name
  - Description

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 **Task Service zipped folder** containing the following deliverables:

- Task.java
- TaskService.java
- TaskTest.java
- TaskServiceTest.java

Module Four Milestone Rubric

Criteria	Meets Expectations (100%)	Partially Meets Expectations (70%)	Does Not Meet Expectations (0%)	Value
Task Class Meets the Requirements	Verifies the task class meets all requirements (three requirements)	Verifies the task class meets some requirements (one or two requirements)	Does not verify the task class meets any requirements and/or does not attempt criterion	50
Task Service Class Meets the Requirements	Verifies the task service class meets all requirements (three requirements)	Verifies the task service class meets some requirements (one or two requirements)	Does not verify the task service class meets any requirements and/or does not attempt criterion	50
			Total:	100%