# TaskRepositoryImpl Unit Test Specification

This document outlines the unit test specifications for the TaskRepositoryImpl class. Each test case includes a description, expected behavior, and verification method. The tests are written in both English and Chinese.

## Test Case: insertTask

Description: Verify that the insertTask method correctly calls the TaskDao.insertTask method.

描述: 验证 insertTask 方法是否正确调用 TaskDao.insertTask 方法。

Expected Behavior: The TaskDao.insertTask method should be called with the correct Task object.

预期行为: 应使用正确的 Task 对象调用 TaskDao.insertTask 方法。

Verification Method: Use Mockito to verify that the TaskDao.insertTask method is called with the correct Task object.

验证方法: 使用 Mockito 验证 TaskDao.insertTask 方法是否使用正确的 Task 对象调用。

## Test Case: updateTask

Description: Verify that the updateTask method correctly calls the TaskDao.updateTask method.

描述: 验证 updateTask 方法是否正确调用 TaskDao.updateTask 方法。

Expected Behavior: The TaskDao.updateTask method should be called with the correct Task object.

预期行为: 应使用正确的 Task 对象调用 TaskDao.updateTask 方法。

Verification Method: Use Mockito to verify that the TaskDao.updateTask method is called with the correct Task object.

验证方法: 使用 Mockito 验证 TaskDao.updateTask 方法是否使用正确的 Task 对象调用。

## Test Case: deleteTask

Description: Verify that the deleteTask method correctly calls the TaskDao.deleteTask method.

描述: 验证 deleteTask 方法是否正确调用 TaskDao.deleteTask 方法。

Expected Behavior: The TaskDao.deleteTask method should be called with the correct Task object.

预期行为: 应使用正确的 Task 对象调用 TaskDao.deleteTask 方法。

Verification Method: Use Mockito to verify that the TaskDao.deleteTask method is called with the correct Task object.

验证方法: 使用 Mockito 验证 TaskDao.deleteTask 方法是否使用正确的 Task 对象调用。

## Test Case: deleteTaskById

Description: Verify that the deleteTaskById method correctly calls the TaskDao.deleteTaskById method.

描述: 验证 deleteTaskById 方法是否正确调用 TaskDao.deleteTaskById 方法。

Expected Behavior: The TaskDao.deleteTaskById method should be called with the correct task ID.

预期行为: 应使用正确的任务 ID 调用 TaskDao.deleteTaskById 方法。

Verification Method: Use Mockito to verify that the TaskDao.deleteTaskById method is called with the correct task ID.

验证方法: 使用 Mockito 验证 TaskDao.deleteTaskById 方法是否使用正确的任务 ID 调用。

## Test Case: getAllTasks

Description: Verify that the getAllTasks method correctly returns the LiveData from TaskDao.getAllTasks.

描述: 验证 getAllTasks 方法是否正确返回来自 TaskDao.getAllTasks 的 LiveData。

Expected Behavior: The LiveData returned by TaskDao.getAllTasks should be correctly returned by the getAllTasks method.

预期行为: TaskDao.getAllTasks 返回的 LiveData 应由 getAllTasks 方法正确返回。

Verification Method: Use Mockito to mock the LiveData returned by TaskDao.getAllTasks and verify that it is correctly returned by the getAllTasks method.

验证方法: 使用 Mockito 模拟 TaskDao.getAllTasks 返回的 LiveData，并验证它是否由 getAllTasks 方法正确返回。

## Test Case: getTasksByStatus

Description: Verify that the getTasksByStatus method correctly returns the LiveData from TaskDao.getTasksByStatus.

描述: 验证 getTasksByStatus 方法是否正确返回来自 TaskDao.getTasksByStatus 的 LiveData。

Expected Behavior: The LiveData returned by TaskDao.getTasksByStatus should be correctly returned by the getTasksByStatus method.

预期行为: TaskDao.getTasksByStatus 返回的 LiveData 应由 getTasksByStatus 方法正确返回。

Verification Method: Use Mockito to mock the LiveData returned by TaskDao.getTasksByStatus and verify that it is correctly returned by the getTasksByStatus method.

验证方法: 使用 Mockito 模拟 TaskDao.getTasksByStatus 返回的 LiveData，并验证它是否由 getTasksByStatus 方法正确返回。