

## Project2

Implement two interfaces: DepartmentMg and DepartmentView. The implementations should be named DepartmentMgImpl.java and DepartmentViewImpl.java, respectively.

Upload the following Java files to the designated Dropbox folder:

DepartmentMgImpl.java

DepartmentViewImpl.java

Your program will be tested with the instructor's set of JUnit tests, which is more comprehensive than the set provided to you initially. You are encouraged to write additional unit tests if desired.

Provided files:

DepartmentMg.java – interface that needs to be implemented

DepartmentView.java – interface that needs to be implemented

DepartmentMgTester.java – Junit tests for an implementation of the DepartmentMg interface

DepartmentViewTester.java – Junit tests for an implementation of the DepartmentView interface

Manager.java – GUI for the command line application

How to configure the development environment:

1. Download Eclipse IDE for Java Developers ([Eclipse IDE for Java Developers | Eclipse Packages](#)).
2. Extract Eclipse to a desired location.
3. Download Connector/J (Platform Independent, ZIP Archive)
4. Extract Connector/J to a desired location.
5. Launch Eclipse and follow the steps below:
  - a. Navigate to 'Help' > 'Eclipse Marketplace...'
  - b. Search for 'JUnit' in the 'Search' tab and install 'JUnit-Tools 1.1.0'.

Create a new Java project in Eclipse:

6. Go to 'File' > 'New' > 'Java Project'.
7. Provide a project name.
8. Uncheck 'Create module-info.java file'.

Configure project properties:

9. Go to 'Project' > 'Properties'.
10. Choose 'Java Build Path'.
11. In the 'Libraries' tab, choose 'Classpath'.
12. Click 'Add External JARs...' and select the Connector/J jar file.
13. Still in the 'Libraries' tab, choose 'Classpath', click 'Add Library...' and choose 'JUnit'.

Copy provided files (DepartmentMg.java, DepartmentView.java, DepartmentMgTester.java, DepartmentViewTester.java, Manager.java) to the 'src' folder of the project.

Running the Code:

To run the command-line application:

1. Choose 'Run As' > 'Java Application'.
2. Select 'Manager - (default package)'.

To run unit tests:

1. Execute the script smallRelationsInsertFile\_MySQL.sql on the university database using MySQL Workbench.
2. Choose 'Run As' > 'JUnit Test'.

Your development environment is now properly configured, and you can begin working on the project.