Name of the Experiment: Write a Java application which will take Name, Designation and Basic Salary of Employees of CU through Java frame and save those into a file named "employee.dat" file.

Introduction: we will be defining a central main class for main window that derives from Java frame. All the UI and ~~non~~ central controlling components will be handled by this class.

Objective:

- to learn how to use Java GUI
- to learn how to use event handling

Analysis: After analysing the problem, we found the following components,

- a main window class that will derive from the JFrame class, which will contain all the UI code and logic behind ~~writing~~ will use the helper ~~code~~ class to write the information into "employee.dat" file
- a helper class that will open the given file and write the information given to the object
- ~~the main window class~~ the main window class will contain the main method which will contain ~~the~~ a main window classes object, and will simulate the solution.

From above analysis the conceptual class diagram is given below in Figure-1:

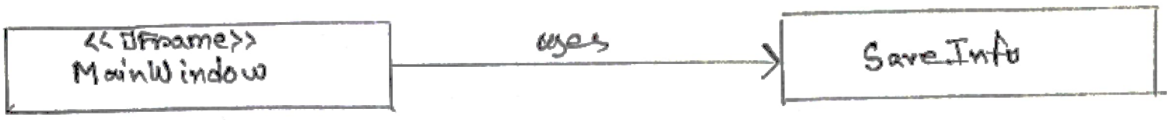

Figure-1: conceptual class diagram

Design: From above analysis, the design description of the solution is given in figure-2:

- class MainWindow: the main window class of the program that inherits from JFrame class.
  - Data Members:
    - contentPane: an object of JPanel
    - textField: an object of JTextField that will work as input holder for user name.
    - textField_1: this will work as input holder for user designation
    - textField_2: this will work as input holder for user basic salary
    - sInfo: an object of type SaveInfo
  - Methods:
    - main: the main method of the program
  - Constructor:
    - MainWindow(): window builder will generate the constructor auto with UI code.
- class SaveInfo: the class that will open the output file and write data
  - Data Members:
    - fw: an object of type FileWriter

- Methods:
  - write : writes the string using the fw obviecet
  - close : closes the fw object.

From above design description the architectural class diagroam is given below in figure-2:

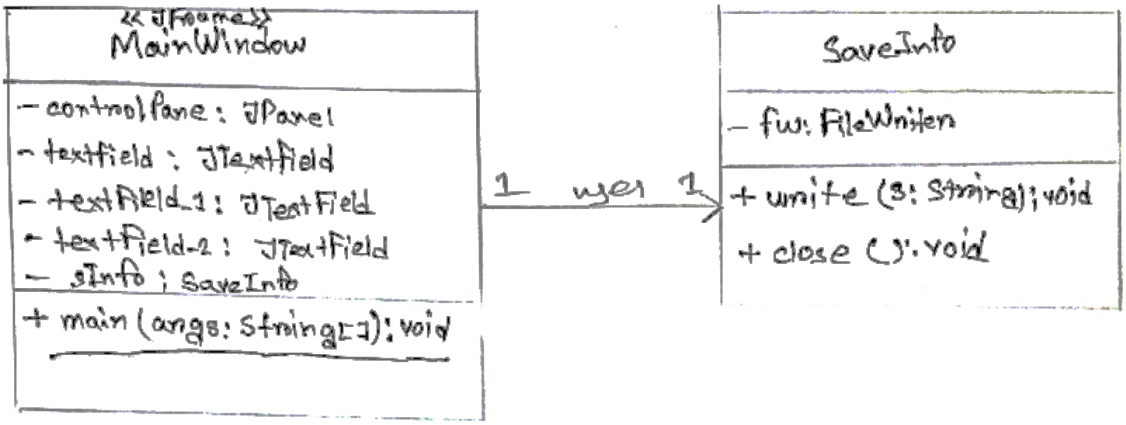

Figure-2: architectural class diagram

From above design description, the pseudo code of the methods below,

SaveInfo :: write ($tr):
    write the str string to the file

SaveInfo :: close-():
    close the file writer object

MainWindow :: main (args):
    create a MainWindow object and set it visible

Implementation: * implementation is attached with the report *

conclusion:
we created a main window class that inherits JFrame, it implemented all UI code and used a helper class to write the contents info a file.