# Title: Refactoring Assessment

**Module:** Software Design Patterns

# Lecturer: Patrick Matthews

# Student Number: D12125625

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# - Removed unused imports for java.io.EOFException, java.util.ArrayList in RandomFile.java

# - Removed main class and createAndShowGUI from EmplyeeDetails.java and put it into Main.java

# - Created an object of EmployeeDetails in Main class and called the methods required

# - Added Interfaces to all the classes

# - Added variable static final long serialVersionUID = 1L in Class: EmployeeDetails (The serialization runtime associates with each serializable class a version number, called a serialVersionUID, which is used during deserialization to verify that the sender and receiver of a serialized object have loaded classes for that object that are compatible with respect to serialization. If the receiver has loaded a class for the object that has a different serialVersionUID than that of the corresponding sender's class, then deserialization will result in an InvalidClassException) and

# Method: detailsPanel()

# as well as Class: EmployeeDetails. Method: detailsPanel()

# - added a new function in EmployeeDetails.java where this function have action listeners for every button instead of the IF ELSE condition.

# - Class: EmployeeDetails

# Added variable static final long serialVersionUID = 1L

# The serialization runtime associates with each serializable class a version number, called a serialVersionUID, which is used during deserialization to verify that the sender and receiver of a serialized object have loaded classes for that object that are compatible with respect to serialization. If the receiver has loaded a class for the object that has a different serialVersionUID than that of the corresponding sender's class, then deserialization will result in an InvalidClassException

# - Explanation and class same as above Method: detailsPanel()

# - Class: EmployeeDetails Method: detailsPanel()

# If the above code is compiled without @SUPPRESSWARNINGS ("unchecked") annotation, the compiler will complain like this: EmployeeDetails.java uses unchecked or unsafe operations.

# Employee Summary Dialogue.java Type safety: The return type Class for getColumnClass(int) from the type new DefaultTableModel(){} needs unchecked conversion to conform to Class<?> from the type AbstractTableModel

# Class: EmployeeSummaryDialog. Added variable static final long serialVersionUID = 1L

# In SummaryPane() I have Added variable static final long serialVersionUID = 1L

**- removed a simiColon in the Random File in DeleteRecord()**

**- Refactored the codes in the RandomFile.java where it check if the file is not null and it has it into more than a function so basically I have created an object method of randomAccessFile class and function that does the job at the beginning on the class. I have called this function in the places that used to be the original codes (createFile(), closeWriteFile() and closeReadFile() )**

**- added in both searchByIdDialog & searchBySurnameDialog classes a serial Id, private static final long serialVersionUID = 1L; to remove the warnings**

**- as well as JTextFieldLimit.java I have added the serial id to remove the warnings.**