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Course: BSc (Hons.) Web & Multimedia Development

What does this Program do?

- Create a Graphical User Interface (GUI) and a Java Program that mimics the function of an ATM Machine. (with features as per – but not limited to – requirement sheet)

Pre-Requisites:

- Some Java IDE
  (Tested on:
  → Eclipse IDE for Enterprise Java Developers.
     Version: 2019-03 (4.11.0)
  → IntelliJ IDEA 2019.1.1))
- Java (Version Used: 11.0.2)
  (Recommended same is used or Potential User will have to re-compile)
- MySQL-Connector JDBC Driver
  (mysql-connector-java-8.0.15.jar used) – Included in Project Folder for ease of use
- Basic understanding of your IDE to configure the buildpath

Included:

- 3 JAVA files (in src folder)
  → atm_main.java (**Main Method**)
  → atm_gui.java (GUI **Class**)
  → ConnectDatabase.java (**Class** Responsible to establish Primary Connection)
- mysql-connector-java-8.0.15.jar
- Basic Flowchart demonstrating the flow of ATM Execution

How to launch?

- Import the Java Project Folder in IDE of choice (Tested in Eclipse and JetBrains IntelliJ IDEA) → Project folder is 'ATM'
- Configure Buildpath to use your Java version (Tested on 11.0.2) **and** to link JDBC Driver (Tested with mysql-connector-java-8.0.15.jar – Included)
- Edit 'Database Credentials' in **ConnectDatabase.java** to match your own database otherwise program will **not** even launch (As an additional 'Security' Feature)
- Once again, if Primary Connection with Database is **not** established successfully, GUI will **NOT even** launch.
- Run Main Method (if everything went fine, a successful message should appear in the Console – only for developer use; **&** GUI should appear for client)

What Works?

- Simply everything that was asked in the requirements
- **What was Tested?**
  - → Everything
  - → In eventuality of wrong Pin codes (both after single tries and the 3 wrong tries)
  - → Menu options
  - → Successful withdrawals while updating Database
  - → Unsuccessful withdrawals due to insufficient funds (and 3 seconds delay after printing adequate message before **automatically** showing Options Menu again)
  - → Unsuccessful withdrawals due to Transaction exceeding Rs 2000
  - → Unsuccessful withdrawals due to Invalid Amounts (example: withdrawing less than Rs 100 **or** withdrawing non-multiples of 100)
  - → Eventuality that someone wants to withdraw everything from his/her account and empty the latter
  - → Ability to clear screen if Amount input was a mistake (to note that the clear button acts literally as a CLEAR button and not a BACKSPACE button) – Also, to note that this works only while entering Amounts and not for Pin Code
- Ability to verify **NEW** balance by clicking 'OPTION 1' after successful transaction without having to exit and launch program again.

KNOWN BUG:

- If card is inserted again in the same launch session after having clicked Exit (Did not bother to fix it because it is beyond Requirements Scope)
- That's all.