**Assignment 1**

As a software development professional, you will run into all kinds of projects and situations within those projects. This assignment is designed to present you with a fictitious situation and ask you to identify the stakeholders, functional and non-functional requirements

A software is to be built that will control an Automated Teller Machine (ATM). The ATM machine services customers 24 x 7. ATM has a magnetic stripe reader for reading an ATM card, a keyboard and display for interaction with customer, a slot for depositing envelopes, a dispenser for cash, a printer for printing receipts and switch that allows an operator to start/stop a machine.

The ATM services one customer at a time. When a customer inserts an ATM card and enters the Personal Identification Number (PIN), the details are validated for each transaction. A customer can perform one or more transaction. Transactions made against each account are recorded so as to ensure validity of transactions.

If PIN is invalid, customer is required to re-enter PIN before making a transaction. If customer is unable to successfully enter PIN after three tries, card is retained by machine and customer has to contact bank.

The ATM provides the following services to the customer:

1. Withdraw cash in multiples of 50
2. Deposit cash in multiples of 50
3. Transfer amount between any two accounts
4. Make balance enquiry
5. Print receipt

Each of the above transactions must be made within 60 seconds. In case the time exceeds 60 seconds, then the transaction is cancelled automatically. Also, if the machine is not used for more than two minutes after entry of card, the card is retained by the machine.

An operator panel with a key-operated switch allows an operator to start and stop the servicing of customers. When the switch is moved to the “off position”, the machine will shut down, so that the operator may remove deposit envelopes and reload the machine with cash, blank receipts, etc. The operator is required to verify and enter the total cash on hand before starting the system from this panel.

* List all the stakeholders
* Identify at least 8 functional requirements
* Identify 5 non-functional requirements

Time: 30 minutes

Mark: 10 marks

save your work in your full name and upload to visiona

TSE 2231 Software **Engineering Fundamentals**

**Assignment 1**

Functional and Non-functional Requirements

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| --- | --- | --- | --- | --- |
| Name | Student ID | Major | Contact number | Group |
| Follow alphabetical order |  | AI |  | Lab 1A Group 1 (follow your lab section) |

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