**Ex 1- Analysis and Identification of the suitable process mode**

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ATM Management System (AMS)

1. Introduction

The software AMS is to be developed for the Automated teller machine (ATM). An Automated Teller Machine computerized system that will provide a secure platform for customers of banks to perform financial transactions in public places such as roads, malls, offices, etc.; without any human intervention. This system will provide a user-friendly interface to access financial facilities provided by banks.

2. How does an ATM Management System (AMS)works?

The system makes use of client-server network methodology, where the server will be situated in a branch of the bank and the client will be situated at the ATM. As soon as the user punches the ATM card in the ATM the server is responsible for the functions to be executed. The server is responsible for executing relevant functions provided in the software. Besides, an explicit operator will have access to the server and connect the ATM through the internet.

3. Process Model

Waterfall Model is adapted as a process model for the development of AMS. Waterfall Model is chosen for the development of AMS because the waterfall model supports the development of software in phases, the output of each phase serves as input to the next consecutive phase. Due to this software development progresses in understandable and explainable phases. Besides, it is important to complete previous phases before starting the next phase, scheduling is flexible in the waterfall model.

MODEL PROCESS FOR AMS

1) Problem Definition.

Our project ATM Management System aims to develop a dynamic, secure, and user-friendly system for financial institutions like banks. Besides, it will provide a platform for banks as well as users to connect. Users can access the services provided by the banks without physically going to the bank. Computerization is necessary for this area because traditionally the bank's services were accessed by actually visiting the bank and in some situations, users need to access bank services urgently besides branches of banks are not open 24x 7 hence it is very important to computerize this system to provide the user with services 24 x 7.

2) Requirement Analysis.

The software ATM is to be developed for Automated Teller Machine(ATM). An Automated Teller Machine is a computerized system that will provide a secure platform for customers of banks to perform financial transactions in public places such as roads, malls, offices, etc; without any human intervention. The requirements are gathered from the end-user by consultation, these requirements are analyzed by our ATM.

3) System Design.

The ATM Management System is designed to understand the complex relationship between the various Attributes and the functions of the ATM Management System. The User Interface is Very Simple andYet User Friendly the design is not too complicated and the GUI can be used by all users of all Age groups.

4) Testing.

The testing of the project is done based on various Result construction of software. Software undergoes various types of testing.

Following Steps are involved in most of the type Software:

1. Create an ATM Testing plan that can check the capability of the software.

2. Executing the program and making it work on all the systems and all the operating systems.

3. Making the Program Bug free and making it smooth with no lags whatsoever.

5) Implementation:

The project of the ATM System includes various codes and languages by making the software by following all software engineering procedures. The Work of ATM is divided into modules/units and then actual coding work has to start. The ATM system is first developed in small programs called units, which are integrated into the next phase. Each unit is developed and tested for its functionality; this is referred to as unit Testing. Unit testing mainly verifies if the modules/units meet their specifications.

6) Maintenance:

In this, our ATM Management System project will be in the never-ending phase which means it is a very long process. And the problem occurrence ie the errors are not found during the development cycle. Most of the problems do not come into the picture directly we have to find and make them work we cannot find errors in our project quickly which means the problem arises from time to time and needs to solve hence this process is referred to as maintenance. In our ATM System, there are various databases that will be linked on the backend and should be properly maintained so

that it is not vulnerable and can’t make open access to

Hackers. So it is necessary to maintain the ATM System Timeto Time.

4. System Requirement Specification (SRS)

SRS stands for System Requirement Specification it is a document that acts as an agreement between the software developer and clients about the general description of the software to be developed. It is a formal document created before the development of the project besides it contains the general functional and non-functional requirements of the software which is to be developed.