Mainframe Mini Project

ATM Application

INTRODUCTION

This document outlines a mini project for the Mainframe LOT. The project is to develop ATM application. This document contains the workflow of the system and gives guidelines on how to build the functionality gradually in each of the course modules of the Mainframe LOT.

1.1 SETUP CHECKLIST FOR MINI PROJECT

Minimum System Requirements

• Intel Pentium 90 or higher (P166 recommended)

• Microsoft Windows 95, 98, or NT 4.0, 2k, XP, 2007 Pro

• Memory: 32MB of RAM (64MB or more recommended)

• Quick 3270 secure Software installed on local machine

2.1 OBJECTIVE

Development of an ATM Application.

2.2 ABSTRACT OF THE PROJECT

The ATM application will be used to check the balance money of customer and then allow customer to withdraw money, get statement etc.

2.3 FUNCTIONAL COMPONENTS OF THE PROJECT

Following is a list of functionalities of the system. Wherever, the description of functionality is not adequate; you can make appropriate assumptions and proceed.

• The project aims at performing ATM transactions and balance enquiry of an existing account holder in a user friendly way.

• The user is requested for the card number and his personal pin number for authentication purpose.

• After authenticating the user, the application requests the user to choose any one of the following options:

1. CASH WITHDRAWL

2. CASH DEPOSIT

3. BALANCE ENQUIRY

4. MINI STATEMENT.

• When the user chooses one of the above options, say ‘1’, the balance of the user is retrieved and displayed. The application further requests the user whether or not he/she wants the report to be generated and responds accordingly.

• When the user chooses ‘2’, transaction is performed based on the request of the user with the help of the transaction table.

• Thus after the transaction is complete the user’s account is updated.

• When user wants to generate a record for his/her last 5 DAYS transaction, mini statement is opted where details retrieved from Transaction History Table.

• Updating balance is done when recharge is successful in User-Table and Transaction Table.

• Thus, the application requests the user for further processing and responds based on the input from the user.

2.4 TECHNOLOGY USED:

• Business Logic Components:-

1. COBOL

2. CICS

• Job Control Language

• MVS

• Access Methods:-

3. DB2

3. TECHNICAL SPECIFICATION

The project specifications are:-

COBOL programs with embedded CICS and SQL statements  
- 9 programs

Number of Maps – 8 Maps

Mapset - 1

JCL programs – one JOB for CICS map, one for CICS and DB2.

4. GUIDELINES ON THE FUNCTIONALITY TO BE BUILT:

The functionality and components to be built in each of the course modules of M/F LOT is as follows:

Batch Processing:

Course: MVS, JCL, COBOL & DB2

Start to work with ATM application using file system in COBOL while learning the file handling module. Batch application tasks could be the report creation such as mini statement.

Online Application:

Course: CICS + DB2

Develop the user interfaces for Functional components of the project in an online application mode.

The Phase-wise deliverables of this task would be,

Analysis Phase

- Specifications Document

- Specifications review checklist

- UTC (Unit Test Case) Document

- UTC review document (Optionally)

Coding Phase

- A COBOL Module

- A CICS-COBOL Module

Testing Phase

- UTR (Unit Test Result) document

- UTR review checklist

CONVENTIONS

A. Table Names:

1. T37\_USER\_TABLE

2. T37\_TRN\_TABLE

B. Program Names:

1. P37AP01
2. P37AP02
3. P37AP03
4. P37AP04
5. P37AP05
6. P37AP06
7. P37AP08
8. P37AP09

C. Transaction ID:

1. P37A
2. P37B
3. P37C
4. P37D
5. P37E
6. P37F
7. P37H
8. P37I

D. Map Names:

1. BMSHOM
2. BMSCN
3. BMSPIN
4. BMSATP
5. BMSMEN
6. BMSAMT
7. BMSBEQ
8. BMSMINI

TEST CASES

**Welcome Page:**

AID key checking

If user presses ENTER key (AID key) then control transfers to next program (module/ transaction) i.e. Card program

Else show proper message i.e. Invalid key pressed.

**Card Number:**

Card Number validation

If user inputs valid card number then control transfers to next program (module/transaction) i.e. Pin program

Else show proper message i.e. Invalid Card number.

**Pin:**

Pin validation

If user inputs valid pin then control transfers to next program (module/transaction) i.e. Account type program

Else show proper message i.e. Invalid Pin.

**Account Type:**

Account Type validation

If user inputs valid option then control transfers to next program (module/transaction) i.e. Menu program.

Else show proper message i.e. Invalid option.

**Menu:**

Option validation

If user inputs valid option then control transfers to next program (module/transaction) i.e. Amount (Withdraw/Deposit), Balance Inquiry, Mini Statement program

Else show proper message i.e. Invalid option.

**Amount (Withdrawal):**

**Amount (Deposit):**

**Balance Inquiry:**

**Mini Statement**:

CODING

Welcome Page:

Card Number:

Pin:

Account Type:

Menu:

Withdrawal:

Deposit:

Balance Inquiry:

Mini Statement:

SCREEN SNAPS

Welcome Page:

Card Number:

Pin:

Account Type:

Menu:

Withdrawal:

Deposit:

Balance Inquiry:

Mini Statement: