**Addis Ababa Science and Technology University**

College of Electrical and Mechanical Engineering

**Department of Software Engineering**



Group Project Documentation

## INPUT

1. Manually we inserted some customer information
2. Inserted bank management defaults
   1. Available account types with specifications
   2. Available transaction types
   3. Initial values for variables
3. Customer personal information for registration
4. Customer security information for granting access
5. Transaction information for services
   1. Withdraw transfer deposit amount
   2. Transfer account number
6. Various option inputs for interacting with the program
7. Automatically retrieve transaction date and time

## OUTPUT

1. Displaying menus and options
2. Displaying the welcome, prompt, success and error messages
3. Displaying customers information
4. Write all users data on storage disc

## PROCESS

1. Store customers personal information
2. Make security checkup while logging in
3. Accepting inputs and checking for type validity
4. Making transactions between customers' accounts
   1. Transfer
   2. Deposit
   3. Withdraw
5. Making account management
   1. Create account with desired account type
   2. Deactivate account
6. Extracting and arranging customer information for formatted display

# DESIGN THE PREGRAM

## OUTSIDE ANY SCOPE

* 1. Define the storage format and structure for customer data
  2. Set the defaults of bank management system
  3. Declare and Initialize variables
  4. Insert some predefined sample customer data
  5. Declare all the programs' functions

## THE MAIN FUNCTION

The job of the main function is to display the main menu and the account home menu then call corresponding functions to the options listed. Based on the return value of the functions it decides to jump into either main menu or account home menu.

## THE LOGIN FUNCTION

The job of this function is to allow the user to access his/her account by performing the necessary security checkup. It returns 1 and leads to account home page if the user logged in correctly or returns 0 and leads to main menu if the login was unsuccessful.

## THE TRANSFER FUNCTION

This function allows the user to transfer money from his account to another specified by the amount recipient account number. It conducts the transaction and returns 1 to the main function.

## THE DEPOSIT FUNCTION

The deposit function allows user to add money to their accounts by specifying the amount.

## THE WITHDRAW FUNCTION

This function is made to perform withdraw transaction. The function allows the user to withdraw any amount between the maximum withdraw and minimum remaining balance.

## THE DEACTIVATE FUNCTION

This function deletes the user’s record stored in the storage. It returns 1 if the user successfully deactivated or returns 0 if the user canceled the operation.

## THE CREATE NEW ACCOUNT FUNCTION

This function is used to register a new customer. It lets the user to enter all his required personal information and checks for their validity before saving it.

## THE ACCEPT FUNCTION

This is an overloaded function which uses to accept user input and check for validity of the type entered. We can use it to input numerical or alphabetical inputs from the user. This is intended to avoid checking validity with if statement every time we accept input.