

Project Description

Our Project, "The ATM System Machine," is written purely in Python Programming Language. This is a simple Console Based Application, which is very easy to Use.

Our project mainly focuses on Structured Programming in which we have used different functions for the respective tasks, which allows a particular (Authenticate) User to withdraw the required amount and various other tasks.

Core Functionalities of the ATM System Machine:

1. **Amount Withdrawal:** Users can withdraw a significant amount less than the current balance.
2. **Transaction Summary:** This functionality will allow User to see all the transactions made by the User from starting date to the end date.
3. **Balance Enquiry:** The user will be able to check the remaining amount.

Additional Features:

We have added some additional features to make it more reliable like: -

1. **Change PIN:** An Authenticated user is allowed to change his/her PIN.
2. **The authenticity of User:** User can only perform certain tasks if she/he is an authenticated user.

The workflow of the ATM Machine System:

1. Since it's a console-based application, it starts with a Welcome Message "THE ATM SYSTEM MACHINE" and one option i.e.
(a) User Authentication (Verify)
Only the Users who are authenticated will be allowed to use the application functions
2. Now, there will be two conditions: -
if the user authentication is successful, the four options on the console will be shown: -
(a) Balance Enquiry
(b) Withdrawal
(c) Transaction Summary
(d) Change PIN

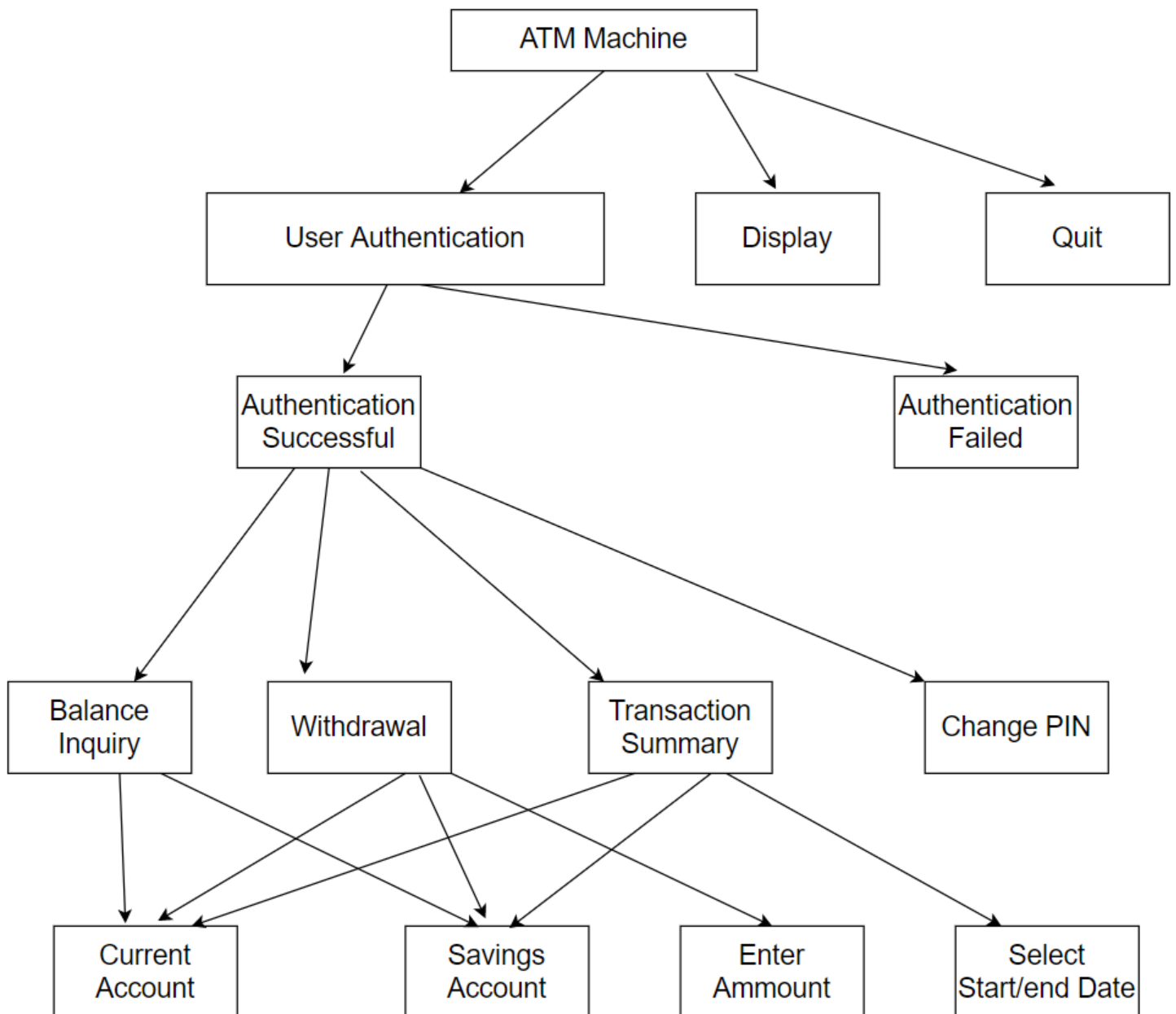
So, User can choose from the above options: -

1. **Balance Enquiry:** After selecting balance inquiry user will have two options on the console i.e., User can select the Account type that is if he/she wants to know the balance of a particular account type (Current/Savings) after selecting the required amount from (Current/Savings) user can see the balance amount of required amount.
2. **Withdrawal:** On selecting withdrawal, two options will be shown from which User wants to withdraw the amount (i.e., from savings/current account). Now, after selecting the account type console asks for an amount, he/she wants to withdraw. If the withdrawal amount is the significant amount i.e., less than or equal to the available balance, then the transaction will be successful otherwise, it will show a failed transaction message.
3. **Transaction Summary:** User can select this option when he/she wants to view all the transactions that were successful, so User has to provide a start date and an end date to view all the successful transactions from the required start and end date.
4. **Change PIN:** This is an additional feature that we have added so that if a particular user wants to change his/her PIN, then he/she can be able to do it. This can be easily done by invoking a function `Change_pin`, which will take User's information to apply changes.

All the above functionality is implemented in such a way that User can quit whenever he/she wants. This can be easily done by invoking a quit method, which will end the running program also, when the User is not an authenticated user, then the running program will end.

So above were some of the functionalities and additional features provided by the ATM System Machine.

Cartesian Decomposition



Modular structure

