

TASK-6

User Interface Diagram, State Transition Diagram, and Activity Diagram

Aim:

The aim is to model the User Interface Diagrams, State Transition Diagram, and Activity Diagram for the Online Banking System.

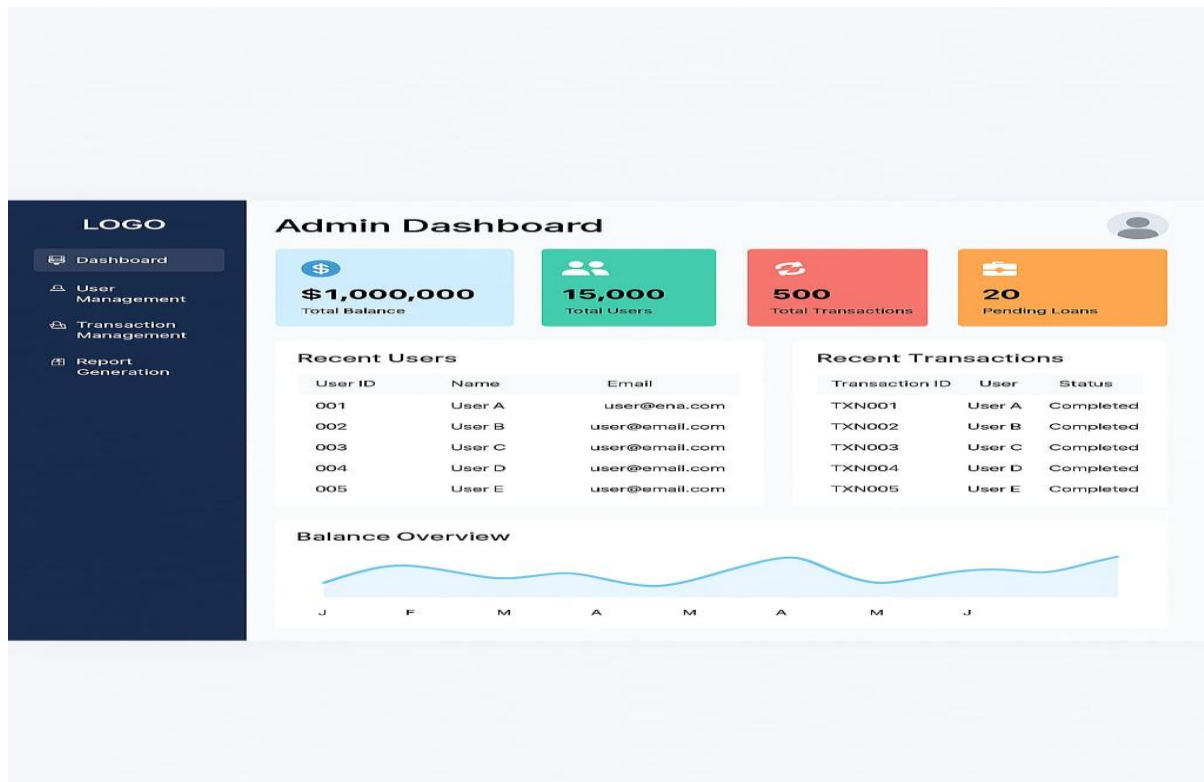
User Interface Diagram

User Interface (UI) design focuses on building interactive, user-friendly interfaces that enable seamless communication between the user and the system.

The user interface design for an Online Banking System aims to provide a simple and secure way for customers to perform banking operations such as viewing account details, transferring funds, checking balances, and managing user profiles.

The interface includes clear menus, navigation bars, buttons, and input fields to ensure users can easily access required services.

Visual elements such as icons for *fund transfer*, *bill payments*, *account statements*, and *logout* are organized intuitively. The design prioritizes simplicity, accessibility, and data security to provide a safe and convenient banking experience for all users.



USER INTERFACE DIAGRAM

State Transition Diagram

A State Transition Diagram (or Statechart) illustrates various states and transitions an Online Banking System undergoes during its operation.

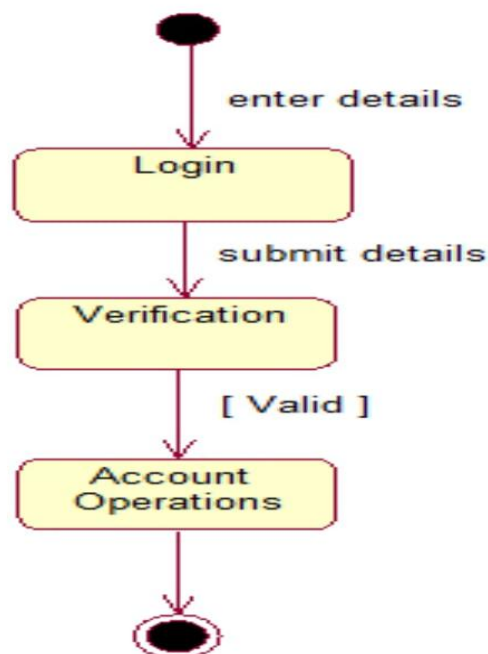
In this system, the initial state is “Idle”, where the system waits for a user to log in. After successful login, it transitions to the “Authenticated” state, allowing the user to access account features.

From here, the system can transition into multiple states such as:

- “Viewing Account” (when the user checks account balance or statement)
- “Transferring Funds” (when the user performs money transfers)
- “Paying Bills” (when settling online payments)
- “Updating Profile” (for password or details update)

After completing transactions, the system returns to the “Idle” or “Logout” state.

This diagram helps visualize system behavior and the logical sequence of operations during user interactions.



STATE TRANSITION DIAGRAM

Activity Diagram

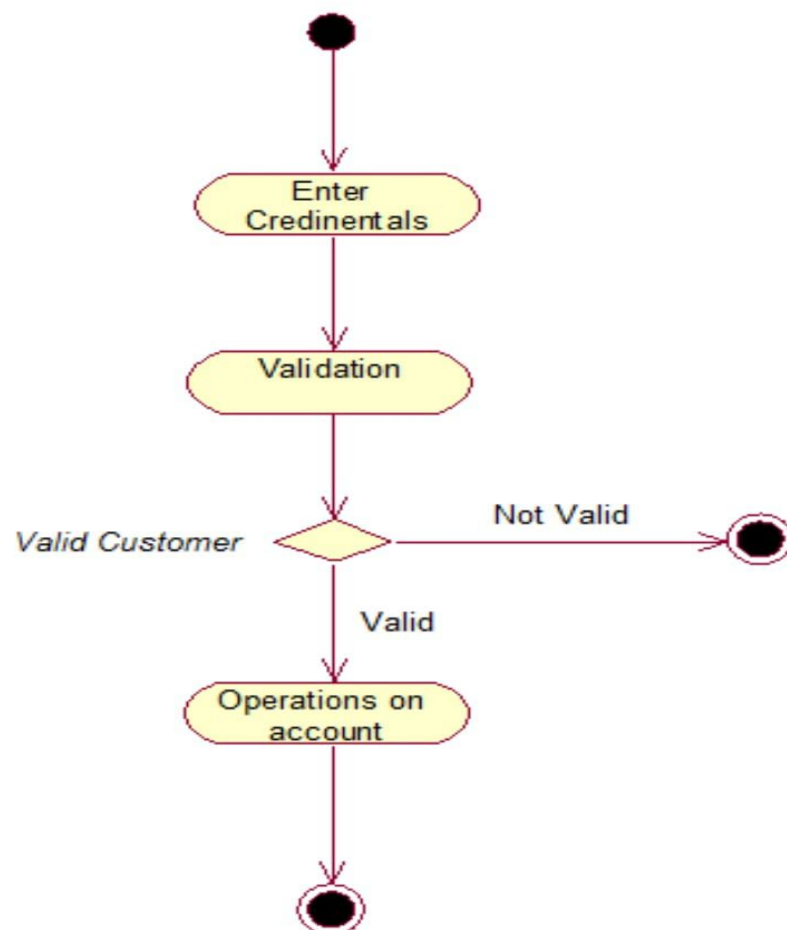
An Activity Diagram represents the workflow of activities performed in the Online Banking System from start to completion.

The activity begins when a user accesses the login page and enters valid credentials. Once authenticated, the user can select actions such as checking balance, transferring funds, paying bills, or viewing transaction history.

Each selected operation proceeds through its own activity flow — for example, in *fund transfer*, the user enters the beneficiary details, specifies the amount, confirms the transaction, and receives a confirmation message.

Finally, the activity concludes when the user logs out of the system.

This diagram simplifies understanding of the process flow and shows how the user interacts with different banking features.



ACTIVITY DIAGRAM

Result:

Thus, the User Interface Diagram, State Transition Diagram, and Activity Diagram for the Online Banking System have been successfully designed, illustrating the structure, state flow, and activity sequence of the system.