

# Test Design Techniques

**User Story :** User Login with Valid and Invalid Credentials

**Title:** User Login Functionality

**Description:** This requirement ensures that users who have previously registered can log in to the banking application using their valid credentials. It covers the validation of correct email/username and password combinations, redirection to the user dashboard upon successful login, and secure session handling.

This requirement also includes error handling for invalid credentials and system feedback (e.g., "Incorrect username or password").

**Type:** Functional

**Test Cases:**

- 1. User Login with Valid Credentials
- 2. User Login with Invalid Credentials

**Applied Test Design Techniques :** Equivalence Partitioning (EP), Boundary Value Analysis (BVA) and State Transition Technique

**Equivalence Partitioning (EP)**

- 1. Used for validating combinations of valid/invalid credentials.
- 2. Helps ensure that all possible input classes (valid, invalid) are covered.

Equivalence Partitioning (EP)		
Field	Valid	Invalid
Email	"user@example.com"	"user@.com", Blank, orspecial characters only
Password	"password@123"	"wrongpass", empty, short strings

**Boundary Value Analysis (BVA)**

- 1. I apply BVA to password field assuming Min: 8 characters, Max: 20 characters.

**Boundary Value Analysis (BVA)- Password**

Invalid	Valid	Invalid
7	8, ....., 20	21

**State Transition Technique (ST)**

