**UI Elements, Interaction Flows, and Error Handling :**

**1. UI Elements**

**1.1 Login & Registration Screens**

* **Text Fields**: Email & Password input fields with validation.
* **Buttons**:
  + **Login Button**: Triggers authentication process.
  + **Register Button**: Navigates to registration screen.
* **Loading Indicator**: Displays during authentication process.
* **Error Messages**:
  + "Invalid credentials. Please try again."
  + "User does not exist. Please register."

**1.2 Dashboard**

* **Navigation Bar**:
  + **Home**: Overview of account balance and recent transactions.
  + **Transactions**: Detailed transaction history.
  + **Payments**: Access to money transfer and bill payments.
  + **Settings**: Profile management and security settings.
* **Account Balance Widget**: Displays total balance dynamically.
* **Recent Transactions List**: Fetches and displays the latest transactions.
* **Quick Access Buttons**: Shortcuts for bill payments, money transfers, and support.

**1.3 Payment & Transactions**

* **Recipient Selection**:
  + Search bar to find contacts.
  + Recent recipients list.
* **Amount Entry Field**: Numeric keypad input with validation.
* **Payment Method Selection**: Options like saved cards, UPI, or net banking.
* **Confirm Payment Button**: Proceeds to transaction confirmation.
* **Success & Failure Messages**:
  + "Transaction successful!" (Green confirmation popup)
  + "Transaction failed. Insufficient funds." (Red error popup)

**1.4 Notifications**

* **Push Notifications**:
  + "New transaction: ₹500 sent to John Doe."
  + "Your balance is low. Consider adding funds."
* **In-App Alerts**:
  + Security warnings for suspicious activity.
  + Payment reminders for upcoming bills.

**2. User Interaction Flows**

**2.1 Login Flow**

1. **User opens the app** → Sees login screen.
2. **User enters credentials** → Clicks "Login".
3. **System validates inputs** → Checks for errors.
   * If valid → Navigates to Dashboard.
   * If invalid → Shows error message.
4. **Login Success** → Stores session token and redirects to home screen.

**2.2 Registration Flow**

1. **User clicks "Register"** → Navigates to Registration screen.
2. **User enters details** → Email, password, and phone number.
3. **Validation checks** → If successful, account is created.
4. **Confirmation message** → User is redirected to login screen.

**2.3 Transaction Flow**

1. **User selects "Payments"** → Navigates to payment screen.
2. **Chooses recipient & enters amount**.
3. **Selects payment method** → Confirms transaction.
4. **Processing animation shown** → Waits for API response.
5. **Transaction Success** → Displays confirmation message.
   * Failure: Displays appropriate error message.

**2.4 Error Handling & Fallback Messaging:**

**Invalid Login Credentials**

* Error Message: "Incorrect email or password. Try again."
* Fallback: Provide "Forgot Password?" link.

**Transaction Failure**

* Scenario: Insufficient funds.
* Error Message: "Transaction failed. Insufficient balance."
* Fallback: Provide "Add Funds" button.

**Network Issues**

* Scenario: API connection failure.
* Message: "Network error. Please check your internet connection."
* Fallback: Retry mechanism with backoff strategy.

**App Crash Recovery**

* If the app crashes unexpectedly, a session restore mechanism will be in place.
* Fallback: "It looks like something went wrong. Restarting the session..."

**3. Transitions & Animations**

* **Screen Transitions**:
  + Fade-in effect when navigating between screens.
  + Slide-up animation for modals (e.g., transaction details popup).
* **Button Animations**:
  + Loading spinner when processing login/transactions.
  + Ripple effect on button press.
* **Notification Animations**:
  + Push notifications slide from the top.
  + Error messages shake slightly to draw attention.

**Branding & Style Guidelines:**

🔹 **Color Scheme** :

| **Color** | **Usage** |
| --- | --- |
| **#0A2540 (Dark Blue)** | Primary color (buttons, headers). |
| **#1E88E5 (Blue)** | Accent color (highlights, active items). |
| **#E3F2FD (Light Blue)** | Backgrounds, cards. |
| **#4CAF50 (Green)** | Success indicators (transaction completed). |
| **#F44336 (Red)** | Error indicators (failed payments). |

🔹 **Typography:**

* **Font:** Roboto (Modern, Clean).
* **Buttons/Text:** Bold for primary actions, Medium for descriptions.

  

    