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Functional and Non-Functional Requirements of Online Banking System (লেনদেন)

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Project Title: Online Banking System (লেনদেন).

Functional Requirements:

1. **User Registration:**

   User shall be able to create account by clicking the button. Using OTP validation via email.

2. **User Authentication:**

   User shall be authenticated upon login and access token.

3. **Account Management:**

   Every user will require a minimum balance of 1000 BDT to open an account.
   Every user will be able to update their personal information.

4. **Money Transfer:**

   The user will be able to transfer money to another user securely.

5. **Password Recovery:**

   User will be able to recover his password by email or phone.

6. **User Profile Update:**

   Profile update, password update etc. via OTP validation.

7. **Navigation:**

   Navigation using react-router-dom.

8. **Balance Check:**

   Users should be able to check their current account balance.

9. **Notifications:**

   Users will receive notifications for key actions such as successful login, transactions, and profile updates.

10. **Logout:**

    Users will be able to log out securely from their accounts.

Non-Functional Requirements:

1. **Performance:**

   Efficient in time manner.

2. **Responsiveness:**

   Ensuring accessibility in mobile and desktop.

3. **Security:**

   Password gets encrypted.

4. **Maintainability:**

   Codebase in good functional form.

5. **Usability:**

   Easy to navigate.

6. **Interoperability: Smoothly can be used in third-party-application.**

7. **Backup and Documentation:**

   Using Git and Github.

8. **Session Management:**

   Implement session expiration and invalidation after a certain period of inactivity to protect against unauthorized access.

9. **Load Balancing:**

Ensure load balancing to manage high traffic efficiently, especially during peak times.

10. **API Rate Limiting:**

Implement rate limiting to prevent abuse, especially during login, OTP generation, and money transfer actions.