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Project Proposal

Description

A safe and easy-to-use program called Personal Password Manager assists individual users in effectively managing, storing, and retrieving passwords. Also seeks to make password management easier by offering a centralized, secured database for saving personal information.

Features

- **Password Storage:** Keep passwords along with related information (website, username, category).
- **Password Retrieval:** Access saved passwords with ease and a quick search.
- **Password Deletion:** The ability to remove passwords that have been saved.
- **Password Generation:** Create secure passwords using password generation techniques.
- **Quick-Copy:** Instantly copy passwords with just one click.
- **One-Click Login:** Simplified Login: Automatically fill in login details on websites.
- **Security Alerts:** Simplified Login: Automatically fill in login details on websites.
- **Grouping:** Organize passwords by grouping them into categories.
- **App Locking:** The app automatically locks after a period of inactivity.
- **Password Strength Analysis:** Analyze and show the strength of passwords with Password Strength Analysis.
- **Password Expiry Reminder:** Password Expiry Reminder: Receive notifications for passwords about to expire.
- Keep track of password changes and access previous password records.
- Increase security by encrypting all stored passwords.
- Access your account by using biometric authentication, either through fingerprint or facial recognition.
- 2FA Integration: help with commonly used two-factor authentication techniques.

3. Strategic data management

- A database is a secure and encrypted storage system for passwords and user preferences.
- To guarantee data security, it is important to use strong encryption algorithms like AES-256 for data storage and communication.
- After 1: It is crucial to regularly back up the database, and users should have a secure method to export and import data for backup and recovery purposes.
- Safeguard Data Privacy: Ensure compliance with data protection regulations such as GDPR.

4. UI/UX Planned

- The interface is user-friendly with a streamlined and intuitive design.
- Incorporate responsive design to guarantee smooth functionality of the app on various devices and screen sizes.
- Users can customize themes and layout preferences.
- When designing for users with disabilities, it is important to consider accessibility standards.
- Provide a detailed guide to help new users with the onboarding process.

5. Intended platform(s)

- **Different platforms are available.**
 - Windows, macOS, and Linux are all examples of desktop operating systems.
 - Two popular mobile operating systems are iOS and Android.
- **Programming Languages for Development:**
 - You have the option to choose either Python or Node.js for the backend.
 - Frontend development incorporates the utilization of JavaScript, particularly React.js for web apps and React Native for mobile apps.
- **Frameworks are an important component.**
 - React.js is used for developing websites.
 - Creating mobile apps with React Native.
 - SQLite and PostgreSQL are two choices for databases.
 - OpenSSL is used to encrypt data to guarantee its security.

6. Estimated time

- It will take approximately 40 hours to gather requirements and create a plan.
- It will take around 60 hours to complete the design (UX/UI).
- I have committed 150 hours to learning and practicing Frontend development.
 - It will require about 80 hours to develop the web application.
 - I dedicated 70 hours to developing a mobile app.
- 120 hours dedicated to backend development.
- It will require around 40 hours to set up and handle databases.
- I have committed 50 hours to implementing security measures.
- It will take around 60 hours to complete the testing and quality assurance process.
- The deployment and launch will take approximately 30 hours.
- We have set aside 30 hours for documentation and training our users.
- The total estimated effort amounts to 580 hours.