SecurePass Mobile

1. Introduction

SecurePass Mobile is a Android application that provides users with ability yo quickly generate a strong password according to their requirements and manage all their passwords within the app.

1. Overall Description
   1. Product Perspective

SecurePass Mobile offers such features:

* **Generate a unique password with the ability to select the generation parameters**. This feature allows the user to easily generate a password using the following parameters: length, digits, symbols, uppercase and lowercase letters.
* **Ability to check password security.** The user can check their passwords for the following properties: Old password (the password has not been changed within 90 days), weak password (short, common, a system default, or something that could be quickly guessed by performing a brute force attack using a subset of all possible passwords), reused password (a password used for 2 or more services).
* **Keeping passwords in different folders**. The application allows you to create folders for different passwords, which allows the user to easily organize their passwords.
  1. Product features
* Unregistered user can sign up in the system. During this process user have to choose email and password.
* When user chooses an existing email he will be notified about it and will be asked to choose another one.
* Registered user can log in. To do this, user have to enter username and password.
* In case of entering wrong username or password user will be notified about it and will be asked to try to enter correct username/password.
* In case of entering correct username and password user is logged in
* Registered users can add new passwords.
  + User needs to enter a password title and generate a password, or enter it manually.
* Registered users can search their passwords by title.
* Registered users can view and change their passwords.
* Registered users can delete their passwords.
* Registered users can create folders and add passwords to them.
  1. User class and characteristics

User classes and characteristics can be demonstrated by use case UML diagram:

Зображення, що містить знімок екрана, схема, текст, Червоногарячий

Автоматично згенерований опис

1. Nonfunctional Requirements

|  |  |
| --- | --- |
| Software used | Description |
| Operating system | Android |
| Database | PostgreSQL |
| Programming language | Java |
| UI Language | Ukrainian/English |
| Safety Requirement | User data and their added passwords are stored in a secure database in a hashed form |

1. Functional Requirements

|  |  |  |  |
| --- | --- | --- | --- |
| № | Name | Functionality | Description |
| 1 | Log in | Sign in to existing  account | The user takes to his personal account via email and password. |
| 2 | Sign up | Create new account | The user creates new personal account and fill it with relevant information. |
| 3 | Password list | List of passwords | The user can view the list of added passwords. |
| 4 | Password Page | View info about password | The user can view information (email, username, password, folder name) about selected password. |
| 5 | Adding new password | Сreate new password | The user enters a password title, generates or types in a password, enters a username or email, and can also choose a folder to add the password to. |
| 6 | Generating password | Generete new password | The user selects the generation parameters: password length, symbols, numbers, uppercase and lowercase letters. |
| 7 | Сhanging password | Edit the password | The user can change password data: password title, username or email, folder and the password itself. |
| 8 | Trash | List of previously deleted passwords | The user can see previously deleted passwords and choose whether to delete them permanently or recover them. |
| 9 | Folders | List of folders | The user can see the created folders or create a new one. |
| 10 | Profile settings | Change general settings of account/profile | The user can change language/theme of application. |

1. External Interface Requirements
   1. User Interfaces

Зображення, що містить текст, знімок екрана, число, Шрифт

Автоматично згенерований описLog In Sign up

Зображення, що містить текст, знімок екрана, число

Автоматично згенерований опис

All passwords page Folders page Trash page

Зображення, що містить текст, знімок екрана, число

Автоматично згенерований описЗображення, що містить текст, знімок екрана, число

Автоматично згенерований описЗображення, що містить текст, знімок екрана, число, Шрифт

Автоматично згенерований опис

Tools Page Profile Settings Page Password Page

Зображення, що містить текст, знімок екрана, Мобільний телефон, смартфон

Автоматично згенерований описЗображення, що містить текст, знімок екрана, Мобільний телефон, смартфон

Автоматично згенерований описЗображення, що містить текст, знімок екрана, Шрифт, число

Автоматично згенерований опис

Зображення, що містить текст, знімок екрана, число, Шрифт

Автоматично згенерований описЗображення, що містить текст, знімок екрана, число, Шрифт

Автоматично згенерований описЗображення, що містить текст, знімок екрана, число

Автоматично згенерований опис Folder Page Edit password page Add password Page

Зображення, що містить текст, знімок екрана

Автоматично згенерований описPassword generator Page