SecurePass

1. Introduction

SecurePass is a desktop 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 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, Барвистість, червоний, коло

Автоматично згенерований опис

1. Nonfunctional Requirements

|  |  |
| --- | --- |
| Software used | Description |
| Operating system | Windows |
| Database | PostgreSQL |
| Programming language | C# .NET |
| 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 | User takes to his personal account via email and password. |
| 2 | Sign up | Creates new account | 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 and check the security of each of them. |
| 4 | Adding new password | Сreates new password | 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. |
| 5 | Generating password | Generetes new password | The user selects the generation parameters: password length, symbols, numbers, uppercase and lowercase letters. |
| 6 | Сhanging password | Edit the password | The user can change password data: password title, username or email and the password itself. |
| 7 | Trash | List of previously deleted passwords | Users can see previously deleted passwords and choose whether to delete them permanently or recover them. |
| 8 | Folders | List of folders | The user can see the created folders or create a new one. |

1. External Interface Requirements
   1. User Interfaces

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

Автоматично згенерований описLog In Sign In

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

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All passwords page

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

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Folders page

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

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Add new folder popup

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

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Trash page

Зображення, що містить знімок екрана, текст, Паралель, Прямокутник

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Account popup window

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

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Settings popup window

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

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Create password page

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

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Generate password popup window

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

Автоматично згенерований опис