iManager

Text Management Tool

Student Details

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Language Used

Python 3.7

Libraries Used

tkinter, sqlite3, os, tkmessagebox

What is iManager?

To put it simply, iManager is a text-file management tool. Users can store files of format .txt and access them from anywhere without the risk of losing them. iManager provides a user with two options: to view and edit a pre-existing .txt file or write in a new one. In the latter case, iManager prompts the user for a file-name. If the name is pre-existing, the user continues to edit the file and if not, a new notepad file is generated with the given name and saved in the database.

Initially, I wanted iManager to be a multimedia file management system that stored all types of files in a database in a 'blob' field data

type. I couldn't follow my original plan due to a lack of time, but in the near future I plan to extend this project to work with uploading files, better GUI, stronger database and validation system, multimedia storage and others. I also plan to upload it on github.com.

Databases

- 1- User database Stores information about a user in fields user-id (primary key autogenerated/autoincremented), first name, last name, username (UNIQUE) and password.
- 2- File database Stores information about the text files of a user in fields file-id (primary key autoincremented), user-id (same as that in the user database), filename and date of last edit.

Screens

1- Splash Screen



When the iManager is opened, the user is welcomed with an introductory splash screen that displays my personal information and a photograph. When the user hovers his/her cursor over the image, the splash screen disappears and we enter into the login page.

2- Login Page

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Login					
Glad to have you back! Let's get sta	arted.				
Usernam Password					
Not a member?	Enter Sign up now →				

The login page is the first screen of iManager. Themed in blue, red, black and grey, it provides the user a glimpse of the iManager's GUI and is easy on a user's eyes. When the user enters his/her username and password, the tool matches them with the information stored in the user database and generates an error if they're incorrect. As soon as the information matches, the user enters into the main screen of the manager.

The login page also has an option for new users to sign up. When clicked, they're instead directed to the sign up page to fill their details.

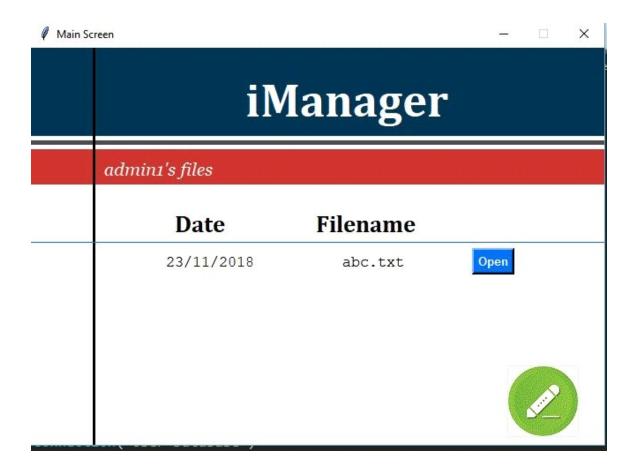
3- Sign Up Page

Ø Sign Up	– 🗆 X				
Sign Up					
Welcome aboard! Tell us a bit about yourself.					
Last Name Username Password Sign Up					

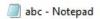
For fresh users to enter into the iManager database, the sign-up page stores their information and generates an error in case of NULL-value fields. It also checks if the username has been used before, in which case it prompts a message for the user to try another username.

Once the information has been stored into the database and the user clicks the 'Sign Up' button, a message is generated showing successful signup and he/she is redirected to the login page. Once at the login page, the user can now enter the manager with their own credentials.

4- Main Screen



The mainscreen of the manager consists of two columns: date and filename. All of the user's files are displayed in order on the main screen. On the right-hand-side, a small button named 'Open', when clicked, opens up the corresponding file in the notepad and allows the user to view or edit it.



File Edit Format View Help

Sample text: testing for Python Project iManager by Soumya Mukhija (171B135)

One the lower right corner of the screen, a circular, green button indicates an option of 'Write' to the user. When clicked, the user is prompted for a file name. The file name is then used as the file name of a new notepad file. If the name is pre-existing, the user continues to edit the pre-existing file.





This file is then stored into the database and displayed on the main screen.

Fun Facts

When you hover your cursor over text written 'iManager', your cursor would transform from an arrow to the shape of a heart. Also, hovering your cursor over the entry fields of the login page tranforms it into a pen!

With special thanks to Mr. Mahesh Kumar. Without your help, this project would have been impossible.