Lesson 4: Mastery Project Installation 3

Submission

1. **Based on what you proposed, describe what will you be submitting for Installation 3.**
   In installation 3, we are submitting the server and client integration with the Graphical User Interface (GUI). It will be a desktop application developed using Python Tkinter and compatible with the windows OS. This GUI has mainly three options i.e.,
   a. Upload files – client can upload the files from his personal system to the server by setting some expiry date and is allowed to select a maximum of 6 files for uploading.
   b. View files – client can view the uploaded files by specifying the storage location path.
   c. Download files – client can download the files one by one or multiple files at a time into his system using this option.

   The file storage has an expiration policy i.e., when the user uploads a file, he also sets an expiration date. After the set expiration date, the files get deleted.

2. **What code files are you submitting for Installation 3?**
   The code files submitted for installation 3 are expiration_service.py, client_gui.py, data_mapping_service.py, data_mapping.json. The code will focus on GUI implementation of file transfer between client and server. The data_mapping.json holds the data of all the storage paths in the server, expiry date and status of each storage path.

3. **Provide a URL to your video demo. Remember, the contents will be evaluated against what you proposed for the demonstration in Lesson 1.**
   https://youtu.be/ss0mdZJI6UA

4. **Paste the Installation 3 Evaluation Rubric that you developed in your proposal below. This will be used to help evaluate your Installation.**

	Fail (0)	Pass (1)
[Item 1]	This installation fails to demonstrate mastery if desktop application homepage is not loaded.	This installation succeeds at demonstrating mastery by loading the homepage of the desktop application.
[Item 2]	This installation fails to demonstrate mastery if server	This installation succeeds at demonstrating mastery by showing the active status that

	status connection is not shown on the application GUI.	server is connected to the application GUI.
[Item 3]	This installation fails to demonstrate mastery if application GUI doesn't display the storage link and the list of files uploaded to the server.	This installation succeeds at demonstrating mastery by displaying the uploaded files and the storage link in the GUI once the files are uploaded to the server.
[Item 4]	This installation fails to demonstrate mastery if application GUI fails to handle the upload/download requests.	This installation succeeds at demonstrating mastery by fulfilling the upload/download requests raised from the application GUI.
[Item 5]	This installation fails to demonstrate mastery if server doesn't clean the files whose expiration time is reached.	This installation succeeds at demonstrating mastery by cleaning the files whose expiration time is reached.

5. **What were some challenges that you encountered during the implementation of this installation and what are some specific ways you can work to overcome these challenges?**

   As we are new to Tkinter we initially faced some challenges while developing the GUI. Some of them were:

   - The widgets alignment issue – alignment issues while developing the homepage and view files pages of our application and this was resolved by using the grid concept in Tkinter.
   - We have also faced issues with the scroll bar while listing the items vertically and this was resolved by using the tile view approach where the items were places horizontally.