Assignment Content

Top of Form

Please find attached the prompt & rubrics for the course assignment 1.

I want you to understand the intention behind this assignment. For now we have being implementing either individual components such as functions & classes or systems where i provided you some basic implementation such as the e-commerce application or the aeroport management system in exam where you had to fill in the missing pieces of implementation.

This is your first software design & implementation assignment where you will be developing the system end-to-end.

Please use following instructions as a guideline:

* 1. **Requirement Gathering:** Think of me as your client who has provided you the bare minimum requirement of a software she needs. Please understand that the client is someone who has no idea of technical limitations so it is you who has to think as a developer and ask more questions from the client if the requirements are not clear. If you are making assumptions, chances are your client might not like the end product so make sure to discuss with the client if any requirement is not clear.
  2. **Design the solution:** This is the phase where you will have to design your software jumping into coding implementation. Developers follow multiple design strategies such as Entity relationship diagrams or sequence diagrams or writing algorithms in simple plan English. This step carries no marks but this greatly influences your coding & overall software design so please do not skip it. You will see if you give due importance to design phase, your coding becomes so much easier & quicker. This is also the phase where you will decide which framework to use (Django or Flask). How would users be able to use your application? (CLI or Web UI). You are free to choose any framework or user interface. I will be expecting anything simple & working which can let your user use your application.
  3. **Implement MVP:**Following the design you got in step 2, start implementing the application with a target of making everything work. That is why it is called minimum viable product. It just has to work & achieve desired functionality. Do not try to improve anything in this phase. Your only target should be having no errors or fixing errors if there are any.
  4. **Improve & Document:**Now that your application is working as desired, you have to think of how to improve it. First think as a developer, is your code modular enough? Will your code be easy to add any new feature to, specially for someone who start afresh with your application? Do you have enough testing in place to make your application fail proof if things go wrong? As some point you will have to stop acting as a developer and start acting as a user of your own application and see how efficient and easy to use your application is for you. Lastly, documentation is important. Do you have docstrings in your code? Did you add necessary comments? Do you have a user manual that any user can use to make use of your application?

**Submission**

This is a group assignment and every group will need to follow two steps for submissions. You will submit your codebase and I will schedule a 10 mins online viva session with your group where you will have to walk me through your application and have to demo your application.

Bottom of Form