**SMU VIRTUAL LABS: TO DO LIST**

1. Website:
2. Figure out what messages the website wants to deliver to reach it’s purpose, Features, Pages, … (v1 Done)
3. Architecture and structure (v1 Done)
4. Website design (v1 Done) (Subject to change later)
5. Front-End (Client side) (v1 Done)
6. Search, categories and filters functions for Labs and Library. (In Progress)
7. Page grids, design and functionalities for pages: Labs, FAQ, Publications, Papers. (In Progress)
8. Backend (Server side) + Database (v1 Done, *Missing pending sections*)
9. Website hosting (v1 Done) (Dev server)
10. Contents: *(Easy to get done once material available)*
11. Home Section:
12. FAQ Page
13. Library Page: Publications, Papers, … (By the way, I was thinking: SMU Virtual Labs can introduce a unique approach by encouraging users to experiment freely in a lab environment where they have all of the tools they need, perform experiments and come up with a discoveries or solutions {or just for fun}. Students may share their studies on the website. There should be open source libraries (packages) for students to download lab materials from based on categories. I just thought this would be an interesting other purpose for the project and might interest the judges)
14. Functionality:
15. What does the ‘Call For Action’ button say?
16. Where does it take?
17. Which email shall receive the messages coming from ‘contact us’ ?
18. Labs: (In Progress) (Other students can help in design and build of some labs)
19. Conceptualisation, define purpose.
20. Figure out the best way to help the student achieve the lab’s learning objectives.
21. The labs must solve the challenge to best recreate a physical lab environment in virtual environment. A user must be able to have a real feel of lab equipment, …
22. Any given lab will have 5 main sections: course material, lab purpose & instructions, lab questions, lab equipment, lab results.
23. Design:
24. Architecture:

Three pages:

1. Relevant Course Material & Lab instructions.
2. Experiment page: Divided into 3 parts: A screen where the student will place the equipment, perform the experiment and see the result. A lab equipment basket. Variables controllers section.
3. Questions and Results.

Lab Steps:

As discussed, The student will first read the lab material, get to know the lab equipment available in the equipment section of the page, read the instructions then answer the related questions and verify the results.

1. Build:
2. General Architecture .
3. lab steps, Page grid, Lab pages.
4. Specific Architecture (Specific to each lab).
5. Grading strategy.
6. Follow up strategy.
7. Parameters for each lab.
8. Testing, Performance, Security, UX, UI, NFR, …