Practice for final Project!

Hello everyone and welcome. In this document you will find some tips for designing a web app from scratch. This will be useful for when you create your own project and you are not sure how to start. ***Important note:*** *this is not a mandatory guide of how to design your web app. Everyone thinks different, so when you feel ready create your own step by step that adjust to your way of working*

Here are some general step by step to create a web app:

1. DON'T START CODING IMMEDIATELY. Think about the page you want to create. What features will it have, what you want to show to the consumer of your page. What the consumer will be able to do in your page. write everything down so you don't forget about it. For example: I want to make a web page in which people can register to events. Each person will have a user, search for the events in the page and register to them.

2. When you have a clear idea of what your page will do, then think about what is needed to accomplished what you want from your web app. Ask some of this questions to you about your application:

    a. What tools/libraries would I need? *For example: Express, Mongoose, React, React-router...*

    b. How many sections or pages? *For example: I need a section for home, about, registration, events...*

    c. What should be done in the server? *For example: It is needed to add the routes of all the pages, also add the connection to the database that we will use*

3. With the answers of the previous questions, now we can start thinking in more detail on how to accomplish the page you want to make. You can either start thinking first in Frontend or Backend. In this guide we start with the Frontend.

4. Take all of the pages you need to create. Separate each of them, and make a list of things needed to be done in each of them. Also some special notations as actions the consumer can do in each section or page. *For example:*

Home	About	Registration	Events
· Need to assign a background… · Links to other sections · A small introduction · Link to directly register · Contacts at the bottom · ……	· Explanation about the page · Goals of the page · Assign background with photo of the events · ……	· Registration form should contain: ○ Name ○ Age ○ Hobbies ○ Email ○ Address ○ … · The submit button should post the data to the server · After registration send user to events pages · ……	· Show all the events the page offers · Give the option to book events · When user book events post this data to the server · ……

5. The next step will do a fast sketch of each page so you have an idea of how it will look. By doing this you can start thinking immediately what designs or visual libraries like bootstrap would be needed or not in your page.

6. Next, the other half of our page, the Backend. Here we also make a list with tasks to do. First we will separate server from database. For the server is important to make a list with the features and needs that we have to do, like which routes we need, how the url for fetching the data will be, what will be in the controllers folder, in the model folder, which middleware we need...

7. Now for the database we need to design the structure of how to save the information. The name of the database, the name of the collections or tables depends on which type of database you will work on. *For example: In case of NoSQL like MongoDB, how the documents with the information of the users will be structured, which properties will it have, which ones will be obtained from the consumer during registration, and so on...*

8. After creating the lists, it is important also to decide where our application will be hosted. This step can be skipped while you are doing a local testing of your application, but it is a good practice to decide from the beginning which platform will be used for the hosting of your app.

9. Now that we defined the tasks and features of our webpage, you can start with the fun part, coding! You can start with either the Frontend or Backend, or if you work in groups you can divide this tasks. Both can be in separate folder while making the coding from each of them.