Milestone 2: Build Module Architectures

The goal of this milestone is to build the module architectures for both the Frontend and Backend APIs of the application. One must perform the following in the documentation:

- 1) Update the Use Case Diagram with Visual Templates for Each Page
- 2) Separate Data Structures from Entities
- 3) Articulate Frontend Module Architecture
- 4) Articulate Backend Module Architecture

Section Specifications

Specifications for each relevant documentation section are as follows.

Use Cases

For each use case provide an image depicting the basic layout of each page the user will go through within the use case. Each page image should be created on a photo editing software, contain a caption of the user's interaction, and must be presented in order of iteration.

Data Structures & Entities

Separate Data Structures that will be observable in the application's frontend.

Frontend Module Architecture

Make a textual tree-style list of frontend module packages, their modules, and components.

Backend Module Architecture

Make a textual tree-style list of backend router folders, their routers, and their APIs.

Placement of New Sections

The placement of new sections must be between the Non-Functional Requirements and the Technological Stack.

Note

The sections in this milestone are meant to be planned projections of development code. It is very likely implementations may be deemed more suitable if they deviate from the early-stage planning. Therefore, the required sections are not required to be perfectly consistent, complete, or sustained for the final implementation. However, they must be consistent and complete to a significant degree.

Revision Log

Prior Revision (8/30/23)

Previously this milestone was assigned with the goal of building the module architectures in the documentation but required extra sections which were (1) Frontend Prime Components, (2) Frontend Component Structure, and (3) Backend API Router Structure. It was deemed that when developing the application, there would be inevitable changes in the implemented structures versus the planned structures. Therefore, the aforementioned sections would amount to unnecessary tedium that would very likely be changed later anyway. From this, it was deemed best to remove the aforementioned requirements.

Prior Revision (8/25/23)

Previously this milestone was assigned with the goal of deploying a vertical prototype of the application. However, this was revised due to the fact that creating a smaller application without an organized structure for the modules would amount to an unnecessary waste of time. Time would still be spent articulating the module structure later, thus it was deemed appropriate to accomplish this task first.