

Prototype Software Architecture

For project 3 the software architecture that was used for the development of our program was 3-Tier Architecture. This means that the workflow of the program was divided into three tiers or stages. The three tiers of our program were the presentation tier, which consisted of the web interface of the application, the logic tier, which consisted of the JavaScript code that performed the search of the recipes, and the data tier, which consisted of the API used in order to get the data of the recipes. We decided to implement this software architecture because of the advantages that it has, specifically for our specific project. Since our application basically consists of a search via the use of an API, it was logical to implement 3-tier architecture, as the data needed would come from this external API, making it already a tier, therefore the 3-Tier division suited the design extremely well. Some advantages of using this architecture were that it allows any of the three tiers to be modified or upgraded independently, since each one of the tiers has its code on a separate file and they're independent from each other. This was convenient specifically for this project since it will need to be upgraded or improved for project 4, therefore, it will be possible to upgrade each of the components separately. Another advantage is that any changes in the API would not affect the structure of the program, so if anything were to happen to the data tier, the two other tiers wouldn't need to be modified. That's why 3-Tier architecture was the most convenient for our application.