

Architectural Design

Acies - The A Team

Architecture: Model View Controller

The architecture we chose was the Model View Controller (MVC) architecture. The MVC architecture separates the presentation of the application and the interaction between the user and the application from its data by dividing the application into three main components. First, the controller component takes user input and directs commands based on said input to their respective model class instances. The model component then takes information from the controller component and its own state and processes it to perform actions on its data. Finally, the view component formats and represents the data stored within the model component and displays it to the user.

We chose the MVC architecture because it allows the development of the application to be concretely defined. Although we do not plan on there being multiple ways for the data to be interacted with, the separation between the three components makes it easier for the entire group to write code and develop the project simultaneously. Additionally, adhering to the MVC architecture means that our code will be inherently more reusable and replaceable. If a component needs to be heavily refactored during the development process because we made a mistake while planning, it can be nuked and reworked without damaging the other two components in any significant capacity. The UML diagram of our planned implementation of the MVC architecture for Acies is pictured below.

UML package diagram - Acies:

