GTASS- Design Documentation

# Overall Design Pattern

For this project, we decided to implement the Model-View-Controller design pattern that is commonly used in web development. This pattern encourages code modularity and maximizes the potential for the website to be expanded with further functionality. Modification to the baselines are also simplified because of the clean and intuitive organization of source files. The diagram below serves as a visual for this model:



Figure 1: Standard MVC Pattern Implementation ([Source](https://developer.chrome.com/apps/app_frameworks))

# The Database

The database schema was architected based closely on the set of requirements laid out by the project description. The primary influence on its design arose from the goal to minimize data redundancy and the number of functional dependencies within tables. For example, there are two forms on the website that share several attributes: the Nomination form and the Nominee Information form. Originally, we were storing the shared attributes independently in both tables. However, we later realized that we could exclude those attributes from the Nominee Information table and create foreign key that references the Nomination form table. As a result of decisions like this, we believe our relational schema is well-defined and minimal. The Entity-Relationship diagram for our schema can be found on the next page.



# Use Cases



Explanation: {Julian to fill in}

# Activity Diagrams

The following diagrams illustrate the possible actions that can be taken by users of the system.

## Admin and Session Activity



The System Administrator manages the creation and closing of the session. This includes creating user accounts for the session. GC accounts are created during session creation because all GC accounts are associated with a single session. This is done to prevent GC members in previous sessions from participating in later sessions (unless new accounts are created for them).

When

## Nominator Activity



The Nominator nominates potential GTA’s and reviews their information forms.

## Nominee Activity



Explanation:

## GC Member Activity



Explanation: