Backend

The Backend was written in Golang as this would allow direct communication with the engine. Golang is also a very quick concurrent language which will allow many API requests to be handled gracefully.

The part of the platform allows the front end to retrieve information from the more persistent information in the database such as games and users. This is achieved by serving an API in which the front end accesses via the use of HTTP request. This is then handled by the Backend and processed, where the data is fetched and altered dealt with accordingly.

Some security measures to stop anyone using the Api are as follows. To make a successful request you must first log in where you will then be given a key which you must then use on all subsequent requests. This key will last for 2 days of inactive use at which point you must then get a new key. To delete any users you must provide a password this ensures that the user being deleted is indeed upon there request.

Some data security measures have been take. The first is for user passwords to never be sent back over to the front end. User passwords are then encrypted with the md5 hashing algorithm along with a random generated salt which the Backend stores. The password sent to the Backend from the front end is also md5 encrypted as we requested and uses a simple salt to make an attack difficult to obtain the information.

To allow access to the API from anywhere it has been hosted on a service called Openshift. Which is a free service that allows us to deploy our Golang server on the internet for public access. The service requires us to use a gear in which we edit with our Golang code and then deploy via a private Git. This is a separate repository from the one that the rest of the project was used for. As well as the Backend the Engine is also added and run from this repository.