

## **What platform will you use?**

We will be using PostgreSQL and Node.js as our platform. We decided to go with Node.js as our back-end simply because we feel more familiar using JavaScript, and some of us have already had experience using Node.js with a database. We'll be using Heroku Postgres which is a free PostgreSQL database in the cloud, and since we are only building a demo app, even with the limitation of only being able to use 10,000 rows, we think it will be more than enough to suit our purposes.

## **What functionality will your app have?**

Our app is meant to be used by two groups of users - executives and members of the Wargamer club.

Executives will be able to add new games and events to the database through the app. They will also be able to update these games and events through the app (for example, if they'd like to take down a game that is no longer available, or cancel an event.) They'll also be able to view which games they are responsible for lending out, and which events they are responsible for hosting.

Members will be able to view all instances of games (i.e Which games are available? And how many copies?) using a search functionality. These games will also be categorized for them by default when they view the app, such as "Most Popular Strategy" or "Most Popular Co-Op". Members will also be able to set up a time to meet with an exec in-person to borrow a game by emailing them through the app, and RSVP for events. They will also be able to view which games they have currently borrowed, and what events they are currently attending.

Some interesting queries we plan on having will be implemented through a "Statistics" button, which both the executives and members can access. This includes queries for the "Most Popular Genre" (which will involve many joins), "Most Active Member", "Most Active Exec", "Most Borrowed Game", "Most Used Game in Events", etc.

### **What will the division of labour look like?**

We have met and figured out what the app will look like in the end, and have all been responsible for the design choices involved.

Trevin and Christine will work on the front-end separately using the Ionic framework - as each page of the app can be designed separately, including all the styling for the buttons, features, etc. all the coding and HTTP requests to the server.

Bryce and Crystal will work on the back-end, and write the API that the app will access. As the members responsible for the front-end continue to flesh it out, more and more specifications for what data is required will be passed onto the back-end team and we will work together to make sure all the data required is able to be sent to the app. We will also all figure out how to populate the database (likely manually, but possibly through a script).

### **Anything you'd like feedback on?**

We'd like to know if our app and currently planned queries are interesting and complex enough for the project. We plan on developing more features for the app later but as school is busy we have decided on only these features for now.

Furthermore, we would like to know if you think our choice of Heroku Postgres is a good one. Our aim in creating this mobile app is to have it actually be used by the Wargamers club, as such we would like to use a free database management application so that it can continue to be used even after we take this course or graduate. Thus we are concerned about using the CS Oracle installation as it is not normally free. However, we are open to any other suggestions that are freely available.

Finally, we would like to know if you are familiar with any of the frameworks or languages we will be using so we can know to seek help from you when we are stuck with it. Thanks!