# **Survival Resource Calculator (SRC)**

# Quickly calculate the raw resources for that mega-build you've been planning!

# **Project Description**

We will be building a web-based application that calculates the raw resources needed for a Minecraft project. Players will be able to run the application on their local computer, enter the final components needed for their project, and the application will break down each component into the raw resources required for it. After all components have been broken down into raw resources, the total raw resources required will be displayed to the player.

All items and blocks from vanilla Minecraft will be available by default, and we will likely add support for extension through JSON integration to allow users to define custom items, which will allow users to add support for data packs and mods as they like.

#### Team

We already have a team of two, but we may be open to having one additional person join us. Fair warning, though: we are looking to finish this project by the beginning of June, so we will be working at a slightly faster pace than the rest of the class.

Update: After some more in-depth discussion of the project, we have decided that the scope we will be implementing for this class will not provide enough work for three or more participants, so we will not be expanding our team beyond the two founders at this time.

# **Implementation**

We plan to implement the MVP using a SQL database, then migrate to NoSQL.

#### SQL

We haven't decided on a relational database yet, but we are likely to use MySQL or SQLite. Suggestions are welcome, though.

#### **NoSQL**

We're not sure which NoSQL database we will be using, but we will most likely be using a document database. Again, suggestions are welcome!

#### **BOLTS**

Here are our expectations.

#### **Business**

Initially, this will be a free application to download and run on a local computer while we work through the design and beta phases of the project. When the application is closer to being production-ready, we would like to transition it to an online application with operation and maintenance costs (including domain costs) covered by ads, though we will give users the option to pay a small monthly or yearly fee for an ad-free experience.

### Operation

The founders will maintain and support the application until it becomes difficult to do so alone, at which time, we will hire a staff to help in the maintenance and support of the application. Future staff hires may include such positions as Chief Operating Officer (COO), Chief Architect, Software Engineer, and QA Engineer.

#### Legal

The business will be a Utah LLC.

#### **Technical**

Our priorities will be:

- 1. Choose an initial relational database for the prototype and beta phases.
- 2. Choose both the client-side and server-side programming languages.
- 3. Implement the MVP.

#### **Social**

We will rely mostly on word-of-mouth advertising, especially in the earlier stages, though as we grow, we may establish a marketing department and make use of social media to increase our reach.