

Nonfunctional Issues

- **Graphical User Interface**

The graphical user interface will be oriented to be very simple, incorporating a focused set of essential elements.

The very first element a user will be confronted with is the login or create an account page. They will be prompted to select if they are an existing user or if they want to create an account.

Following the conclusion of their login, they are directed to the main application.

The two navigation elements are the sidebar and search bar. The sidebar will be used to navigate word definitions alphabetically, as well as logout. The sidebar will occupy the left side of the screen.

The search bar will be used to look up words. It will be placed at the top of the screen.

Both navigation elements will be descriptively labeled. By incorporating the two navigation elements on one screen, the user is able to quickly understand the two primary ways to leverage the application, (i.e usability).

Content will be displayed in the center of the screen. When browsing words, the number of upvotes a particular definition has will be clearly displayed.

Color will not be utilized in order to define any groupings or functionalities, thus allowing the colorblind to use the service with no difficulty. Additionally, because all elements will be labeled textually, the blind will be able to navigate using audio description software.

Design principles incorporated will include the Gestalt principle (by grouping the navigation options), Hick's law (by limiting the number of choices presented to the user at one time).

- **Performance Requirements**

Performance: All user performed actions (clicking a hyperlink and clicking a button) the system will receive a system response within 5 seconds.

Storage: The database must be of a sufficient size to hold up to 5000 word definitions.

This is approximately 25% of an average person's vocabulary, and therefore a more than adequate size to accommodate all the words in a tradespeak or lingo.

- **Security Requirements**

Security: User accounts will be isolated and password protected. A user account can not be accessed by another user. User passwords will be required to be secure character strings (I.E of not less than 8 characters in length and using a combination of alphabetical and numeric characters).

- **Software Quality Attributes**

Availability: The system will have a high index of availability. The application should be available 99.9% of the time when operational (i.e, in one week's time, the application should be down for a maximum of ten minutes).

Usability: A naive (literate) user will be able to understand how to use the primary features of the system (search, add, edit and delete words) by examining the GUI and accompanying text.