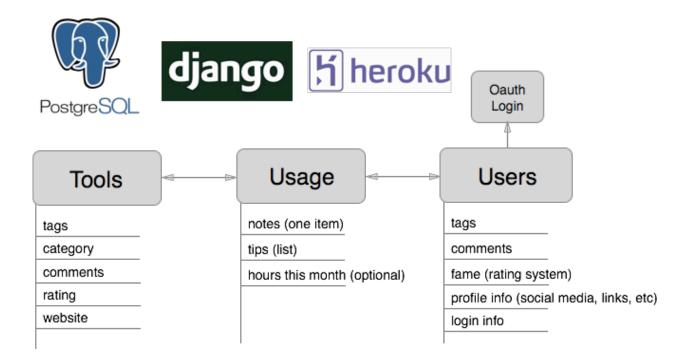
## Vision

The Problem: It can be hard to find the right environments and tools to stay up to date in the ever growing tech world.

Competitors: Usesthis.com, however it is used more for interviewing than as a library for users to locate tools to fit needs. Another avenue for locating new tools is with web engine searches however users waste time searching for reliable resources to determine which tools to look at rather than looking at the tools themselves.

Our Solution: Creating an environment where users can find software or hardware tools to fit their needs. With "Tools We Use" users share editors, software, and other various applications they have experience using in their software career. This will be geared toward the ambitious techy looking to expand their tool belt as well as for the engineer looking for the right tool for a particular project. Users would have their own page that monitors user prominence as well as lists the tools they use in their career. Each tool/object would have a usage tab in which users could mention how they have used the specific tool. Tools would themselves, have their own pages that allow users to rate the tool and post comments on the page about the tool. Users can also locate tools which have special tags such as editor, Mac, Linux etc. This gives users the ease of finding the proper development tools in a much more timely fashion.

## **Software Architecture**



Users of "Tools We Use" will login to their profile, either through using Google's OAuth or through our own developed login using a web framework, like Django. From there users can populate their profile page with the tools they use, which would be stored on a database using PostgreSQL. After users have developed their profile page they can use the web application to its fullest extent (make comments, add, edit tool pages, etc.). Any user can use search functionality to locate users and development tools which can be filtered using categories and tags.

We plan on using Heroku to host the server and database because of its ease to build, deploy and scale. The server will host the application using Django or NodeJS with a PostgreSQL database.

## **Challenge and Risks**

The biggest challenge for this project is going to be security from user generated content. As with any project that depends upon user generated content filtering malicious content will be a challenge. We plan on implementing a user hierarchy based upon the user's prominence or "fame", limiting access to certain features similar to Stack Overflow. Another potential problem is that multiple users editing a tool page at the same time could generate editing conflicts.

Risks of developing the project involve everyone using the same tools for development and cohesive interaction of the multiple parts. Requires experience in database management. Determining a user hierarchy i.e. what can a user without a profile have access to, who can add tools to the database, who can rate a tool, who if any can remove a tool from the database etc.