

Practikana - "Fun Language Learning"

Authors: Binh Pham, Jason Dimaano, and Ross Rhone Advisor: Shameem Ahmed Course: CS497G

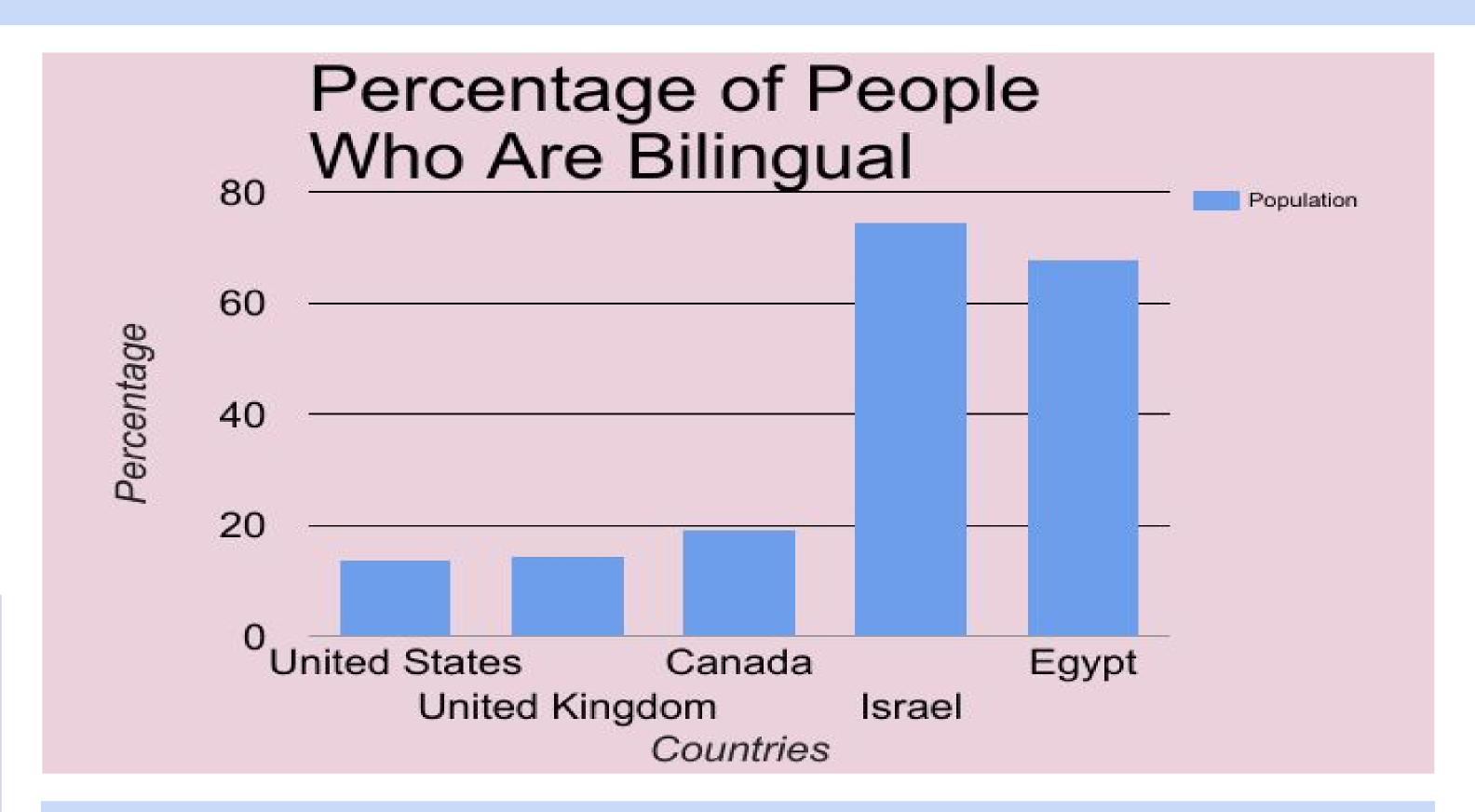


Motivation

- United states has some of the lowest bilingual populations in the world
- ~886,000 undergraduate/ graduate students enrolled in American universities between 2013 to 2014

Research Discovery

- Systematic Reviews
 - After reviewing articles on an online database we found that wait learning, games, voice recognition, and web applications are areas to focus on.
- System Analysis
 - Looking at successful existing systems we found that wait-learning capabilities, visuals, versatility, no cost, saving user progress, easy installation, large content, social interaction, and a simple quick interface to start learning/studying were all important features.
- User Interviews
 - Conducting interviews with college students we found that most don't use a study tool so creating a user friendly tool was important.
- Peer Reviews
 - Getting constructive reviews from our peers we learned that some key features were improtant in lanaguage learning such as voice reconigtion and custom flashcards.

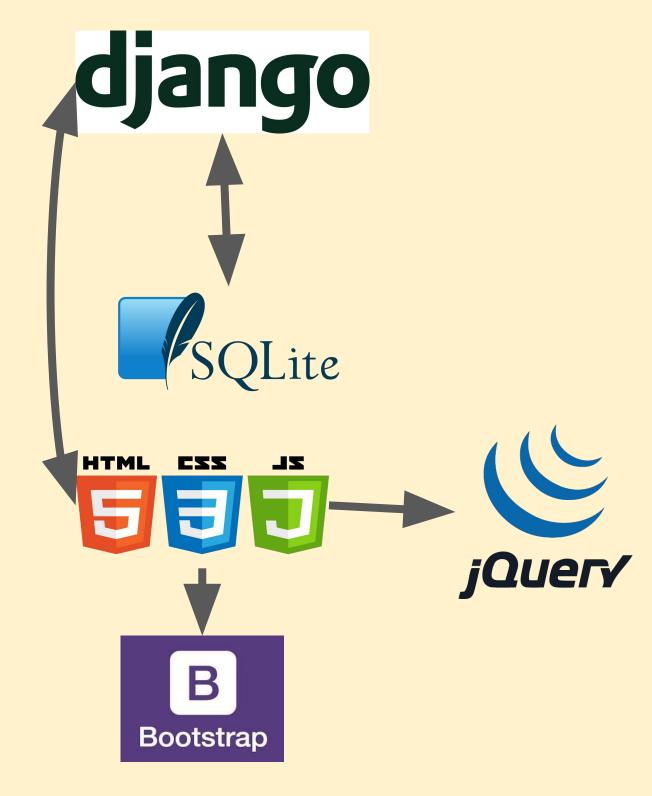


Implementation Prototype

For our implementation prototype, we set four goals that our project needs, which are: Free, Easy to Use, Wait Learning, and User Friendliness. Our study page shown below is a simple flashcard system where a word would pop on the screen and the user will have to type in the correct translation. This is expanded into different categories such as alphabet systems, grammar and sentence translations.



Technologies



- Django provides our framework and rendering of HTML pages
- Store Japanese to English translations in SQLite
- Front end achieved using Bootstrap
- jQuery helps us create an interactive study page

Future Work

- Implement games into the interface
- Social/buddy study system aspect
- Add the ability to hear the word when you click on it.
- Implement into a mobile application.
- Add more languages
- Add the functionality of vocabulary into grammatically correct sentences for users to practice with.
- Add the ability to list flash cards so users can re-practice them later.
- Allow the users to create an account.