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CSE 403

Project proposal

VocabChase – an android mobile app

<u>Vision</u>:

Problem: Many people waste a lot of time while waiting for buses or food in restaurants. Usually they just browse news on the internet or refresh their Social Medias again and again. However, people can take better usage of these times to learn and have fun!

Competitors: Other mobile vocab flashcard app. Also some gaming apps like Temple Run, Flappy birds, etc. We think our advantage is that we combine learning vocabularies and playing game, it is a unique product.

Solution: Our solution is to combine learning vocabularies and entertainment. People play a timed VocabChase. In this app, each word represents a barrier, the synonym of that word represents the correct path and the other choices represent the wrong paths. Users are supposed to choose the synonym of a given word by either clicking on or tilt the phone to the correct word. In this example, the synonym for "splendid" is "glorious". The user could simply click the word glorious or tilt the phone left to choose the word. If the user picked the correct synonym before the time (green bar) runs out, then he move forward to next word. The user will cumulate some kind of score in the end.
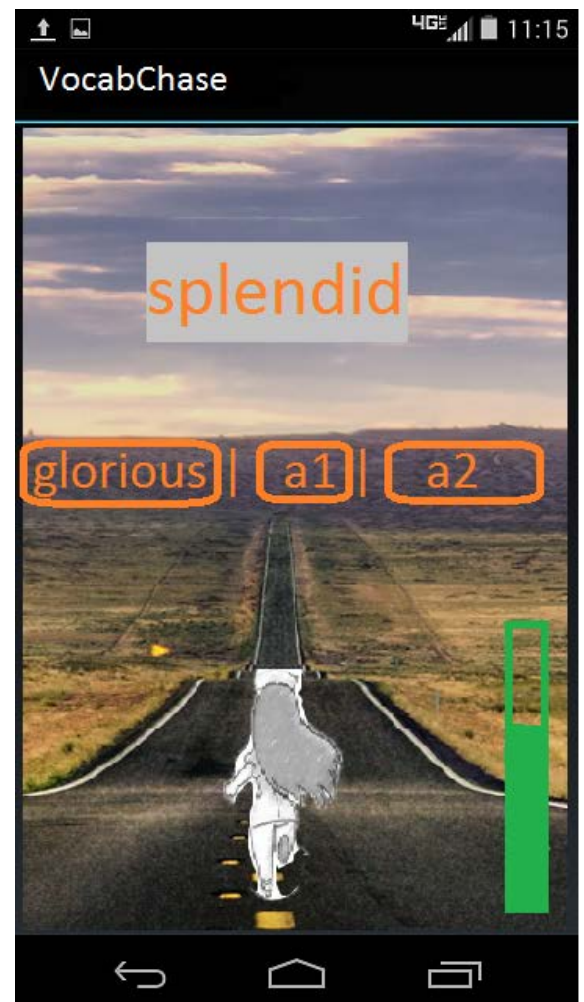
Software Architecture:

Backend: Storage of all the vocabularies, SQL

Implementation: Java

Android: Game + Study App

Challenge and Risks

- The response time this app needs after users make their choices
- Graphical details that represent the movement of the character
- Randomize algorithm for picking words
- Extra features:
    - Add a main menu which allow users to choose the degree of hardness
    - Allow users to choose different kinds of languages
    - Increase the hardness automatically after players make several correct choices
    - Instead of synonyms, user can also pick run against antonym.