

SpeakEasy

Context-sensitive language learning

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Problem and Solution

Problem

Current language learning solutions are outside of regular activity and unhelpful when actually communicating in a contextually relevant environment.

Solution

A mobile application that integrates with the users activities to provide on the go and contextually sensitive instruction.

Overview

1. Heuristic evaluation results
2. Revised design
3. Prototype implementation status
4. Prototype demonstration

Heuristic Evaluation Results: Consistency

- Consistency was most frequent violation.
- Mobile and glass applications not clearly integrated.
- Colors were used in a confusing manner to indicate how well words were pronounced.

Heuristic Evaluation Results: User control and freedom

- It was difficult to get to navigate the google glass application.
- The glass application required too many steps to see all of the suggested phrases.
- The glass application provided no way to cancel pronunciations.

Heuristic Evaluation Results: Recognition and Real World Match

- The glass application required too much recall. In particular the available gestures (tapping for phrases, etc.) at any given time were not obvious.
- Didn't use dictionary conventions for translations.
- Was not clear what buttons were "clickable."

Revised Design: Consistency

- Created style guide of colors and fonts to have consistent look across both applications.
- Removed colors as indicator of correct pronunciation and added other visual cues.

Revised Design

- Used real world conventions for icons and translations.
- Added tabs to the top of mobile application to ease navigation issues.
- Planning to add home button for glass application and easy access to introductory tutorial.

Prototype: Tools

- Developing native Android application.
- Developing google glass application.
- Using Android Studio for both applications.

Prototype: Implemented Features

- Viewing progress graphs.
- Viewing list of missed words.
- Viewing transcripts of previous conversations.

Prototype: Unimplemented Features

- Google glass application has not been implemented.
- We plan to develop a native glass application.
- The suggested phrases will be hard-coded.
- We plan to hard-code the interactions between glass and the mobile application.

Prototype: Wizard of Oz and Hard-coded Data

- No Wizard of Oz
- Hard-coded:
 - Graphs
 - Transcript data
 - Missed words

Prototype Demonstration

Questions?