

Project title:

Distraction aid for tinnitus patients

Lab project:

For Tinnitus Management

Overview:

Propose a mobile app featuring 2-back test that can act as distraction aid for tinnitus patients

Duration:

Aug 2016 – Sep 2016

Techniques used:

Android Studio

Potential Management methods:

- Sound Therapy (*Currently the most popular management method*)
- Training listening abilities with Phonemes
- Distraction aided by Auditory Discriminative games
- Non-Auditory Management Techniques

The app proposed here belong to the category of Auditory and Non-auditory management techniques.

Landscape analysis:

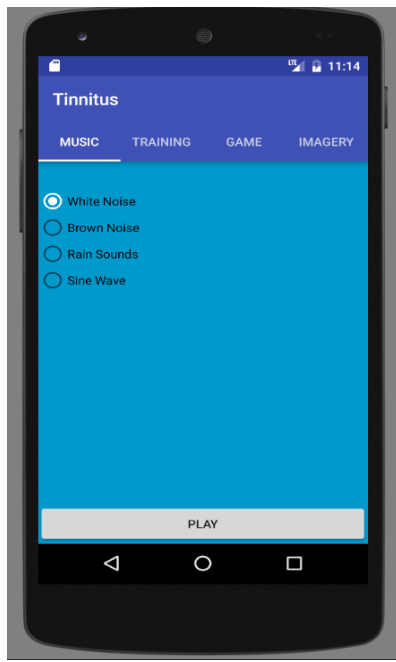
Features/Apps	Relax	Resound	Phonak	Tinnitracks	iTinnitus	Proposed App
White Noise	✓	✓	✓	✓	✗	✓
Sound Therapy	✓	✓	✓	✓	✓	✓
Distraction Games	✗	✓	✗	✗	✗	✓
Hearing Aid	✓	✓	✗	✗	✗	✓
Training auditory function	✗	✗	✗	✗	✓	✓
Personalized sound	✗	✓	✗	✓	✗	✓
Visual Methods	✗	✗	✗	✗	✓	✓

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Visual Methods	✗	✗	✗	✗	✓	✓

App Prototype:

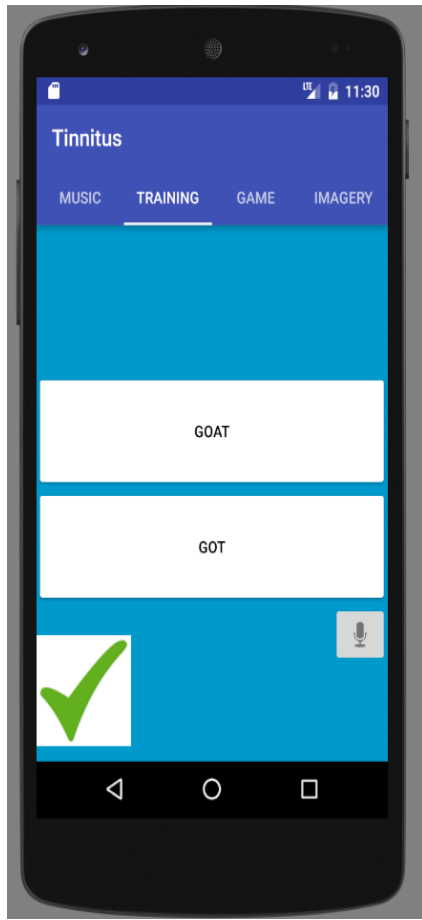
Sound Therapy:

Generates real-time audio to reduce the Tinnitus effect.



Training listening abilities with Phonemes:

Interactive auditory training and test in the form of simple game.

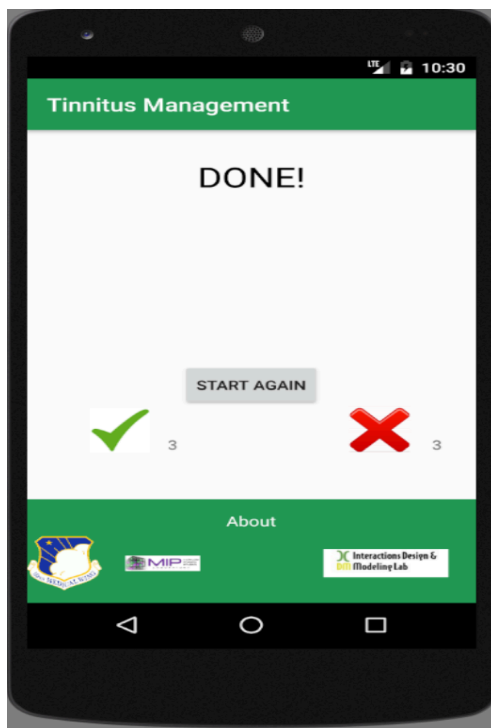
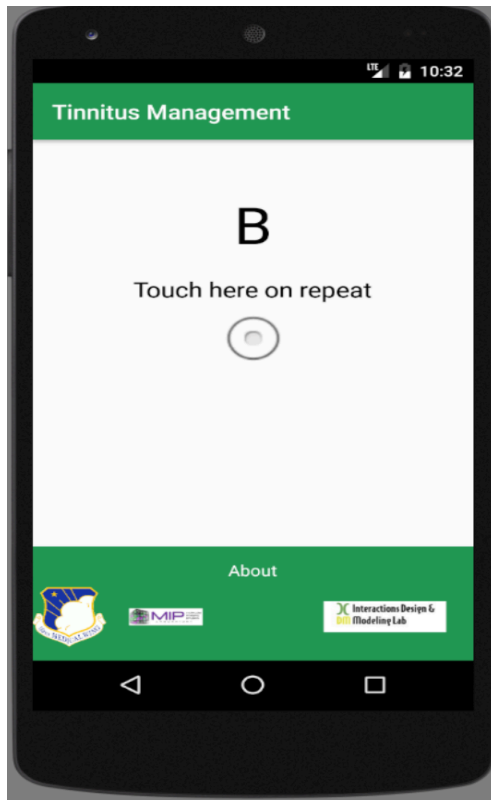


Android App:

2-Back Test:

The patient is presented with a sequence of alphabets and the task of user is to touch the radio button if any alphabet is repeated twice

At the end of the test, the number of right and wrong answers will be displayed



Results Expected:

Distraction games and visual methods could help the tinnitus patients as a distraction aid.