



BRAIN RHYTHM



Team Sonic

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How do our brain waves help
us process sound?

Concept Framework



LED SCULPTURE

Introduce the concept of brain waves and illustrate the perceived “breathing” that brain waves demonstrate in the brain



INTERACTIVE GAME

Demonstrates how the natural rhythms that occur in language sync with our brain waves and help our brains understand speech



SOUND BOOTH

Visualizes how their brain waves sync with different kinds of music

Experiential Goals



IMMERSION

Create a visually-stimulating and immersive experience for visitors to see how their brain processes sound.

Provide a better understanding of how brain waves help us process sound and leave visitors with a newfound respect for how their brain works.



EDUCATION

Audience

Due to the location of our exhibit, we will tailor our experience to young adults, but a preexistent knowledge of the subject is not required.



Color studies



Typeface

Brain

What is a brain wave?

Lorem ipsum dolor sit amet, periculis gubergren disputando cu ius, vis cu perpetua oportere, autem primis graeco te eam. Modo tistique eu ius, ex mel malis laboramus.

Lorem ipsum dolor sit amet, periculis gubergren disputando cu ius, vis cu perpetua oportere, autem primis graeco te eam. Modo tistique eu ius, ex mel malis laboramus.

Main Title

Ubuntu

260pt / Bold

Subtitle

Ubuntu Mono

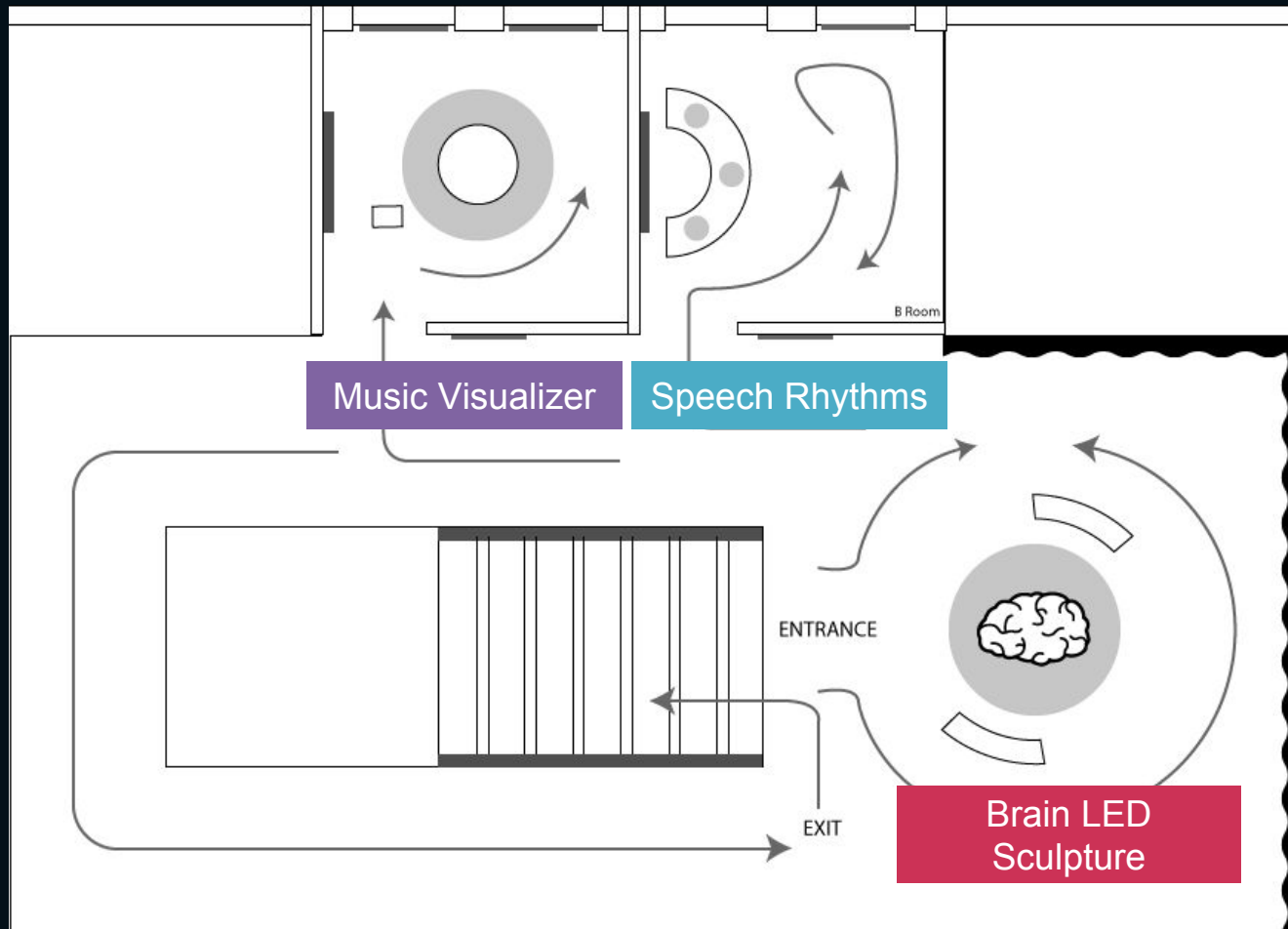
80pt

Body Text

Proxima Nova

48pt / Bold

Floor Plan



1. Brain LED
Sculpture



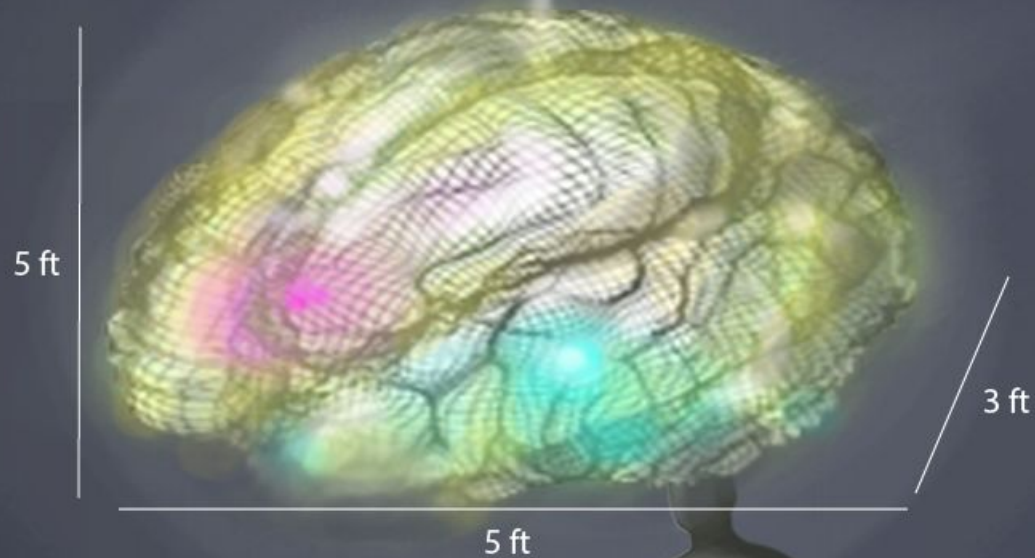
2. Speech
Rhythms



3. Music
Visualizer

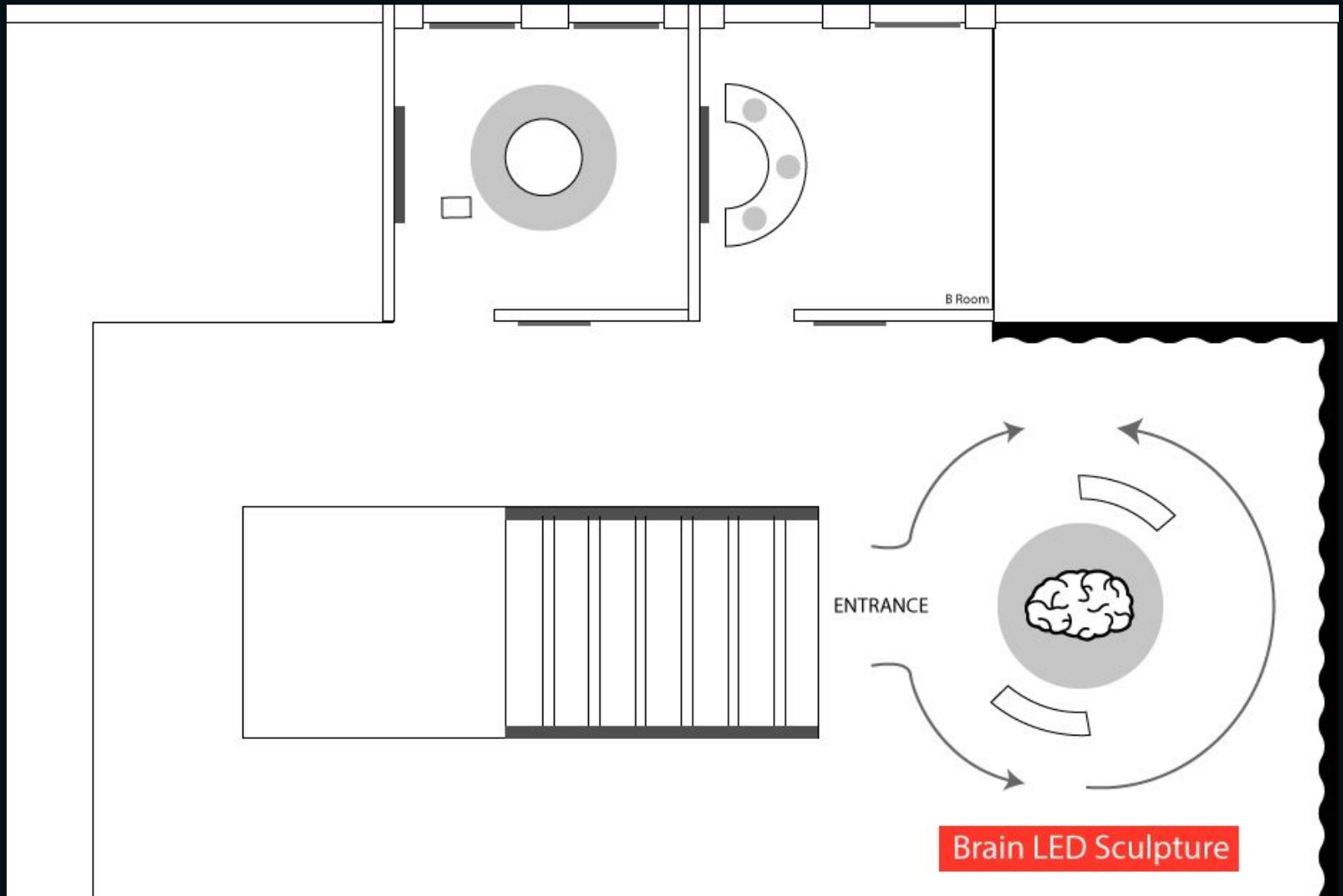
Activity 1

Brain LED Sculpture



Activity 1

Brain LED Sculpture



Activity 1

Brain LED Sculpture

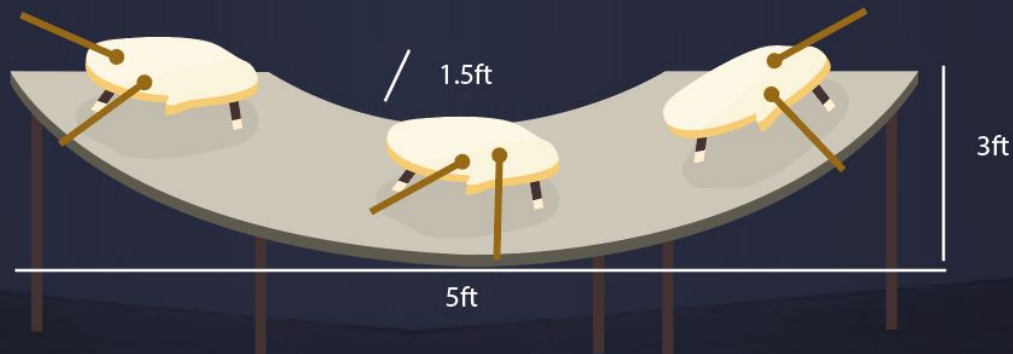
When visitors first descend the stairs into the exhibit they will be greeted by a large wire and light sculpture of a brain that hangs from the ceiling.

Inside of this structure are different colored light pairs, one pair to represent each kind of brain wave :
(Delta, Theta, Alpha, Beta, and Gamma).

These colored pairs will each “breathe” at their own rate in order to simulate the different speeds (hz) at which they operate. Viewers will be able to walk around and underneath the brain as they are introduced to what brain waves are.

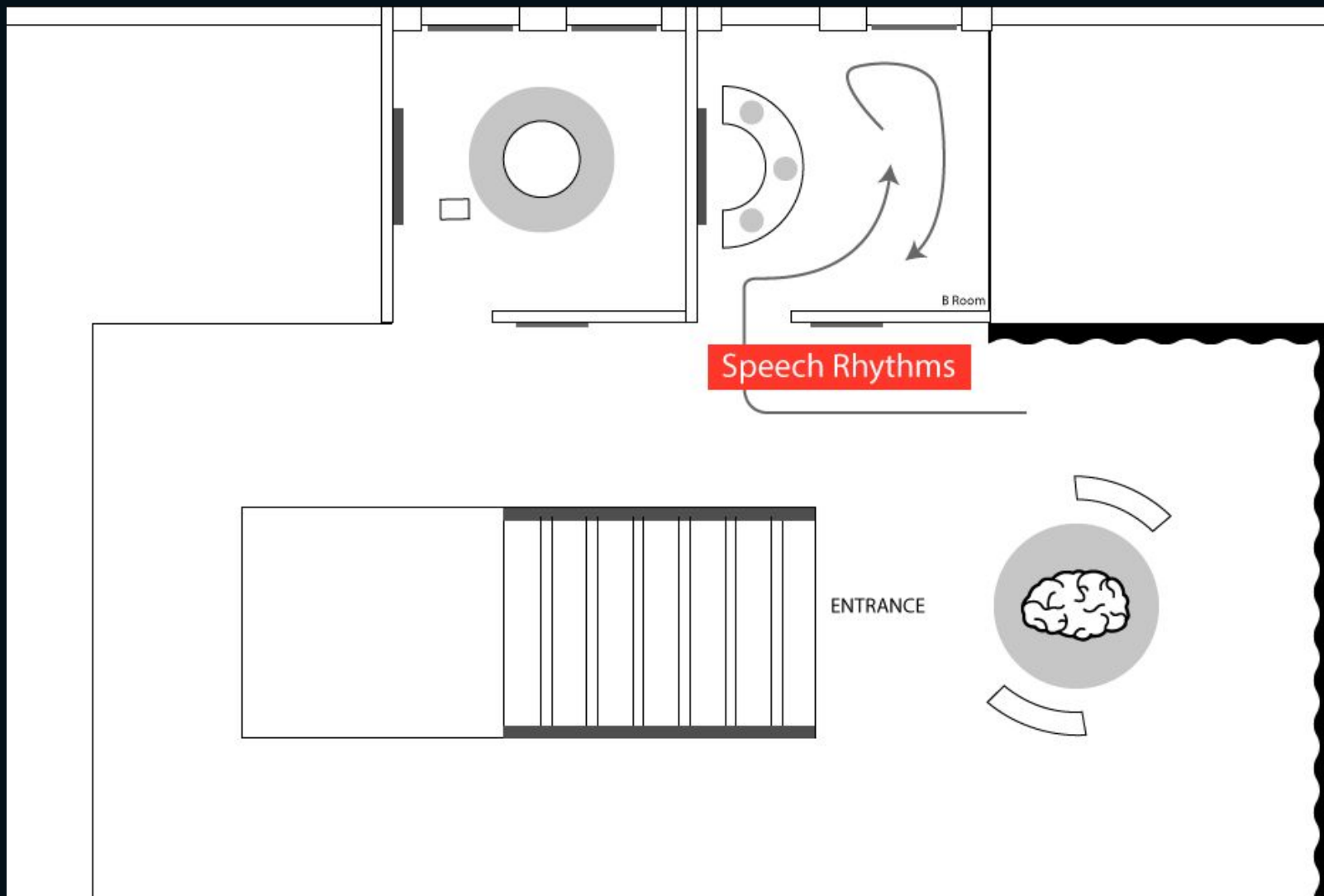
Activity 2

Speech Rhythms



Activity 2

Speech Rhythms



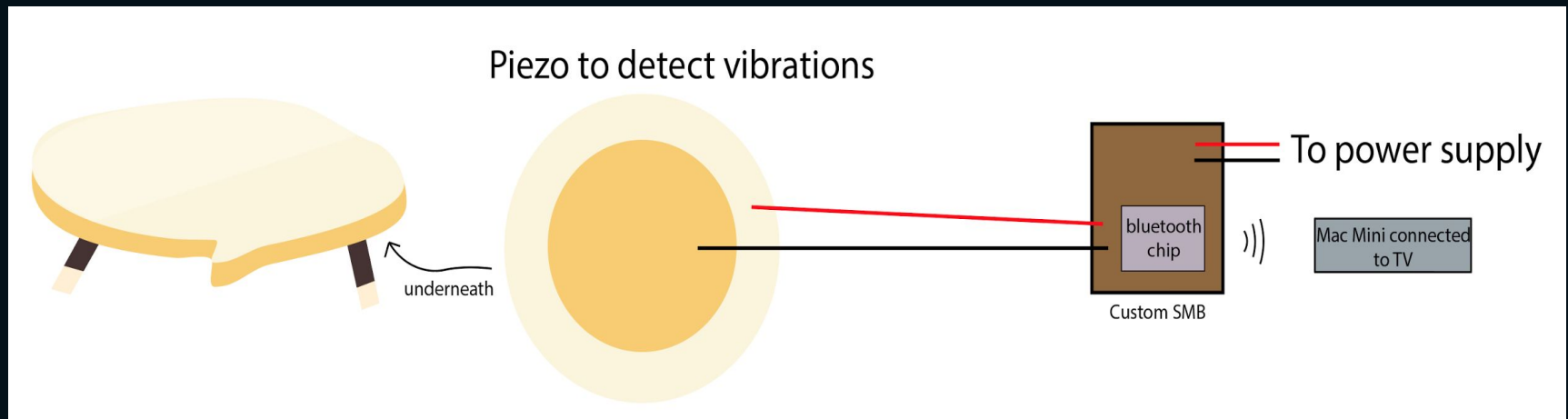
Activity 2



A speech file scrolls across the screen and participants, as a whole, have to drum the rhythm in order to properly hear the speech. If they drum off rhythm, the sound of the speech begins to distort. If the rhythm is terribly off-rhythm, participants will not be able to comprehend the speech at all.

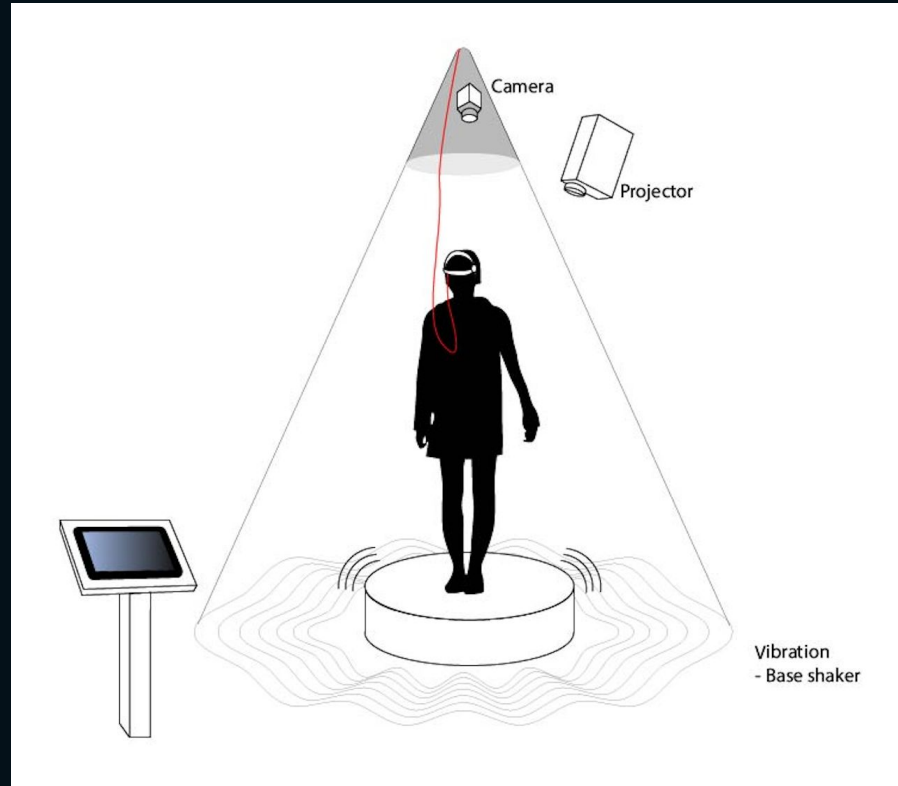
Activity 2

Speech Rhythms



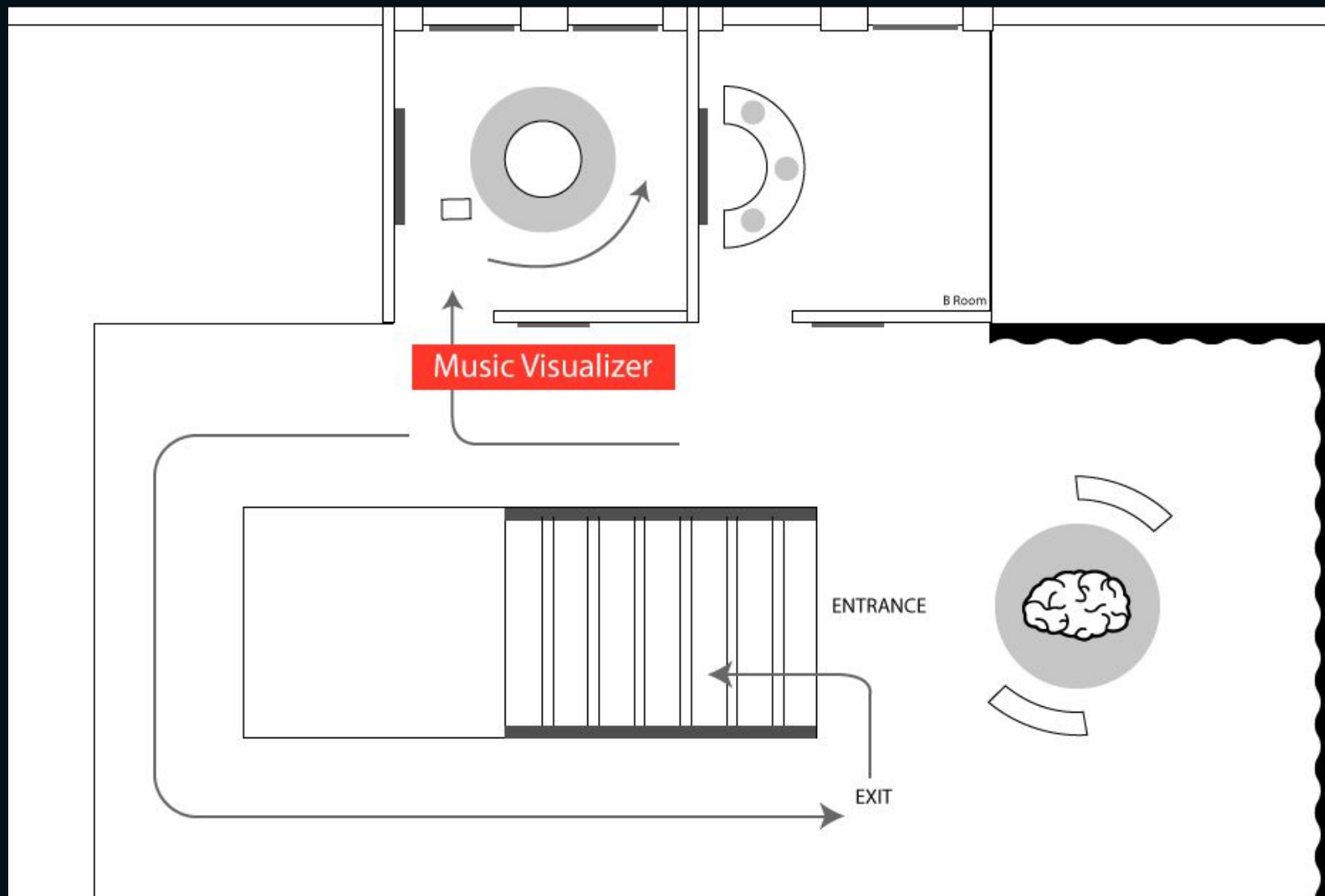
Activity 3

Music Cone



Activity 3

Music Cone



Activity 3

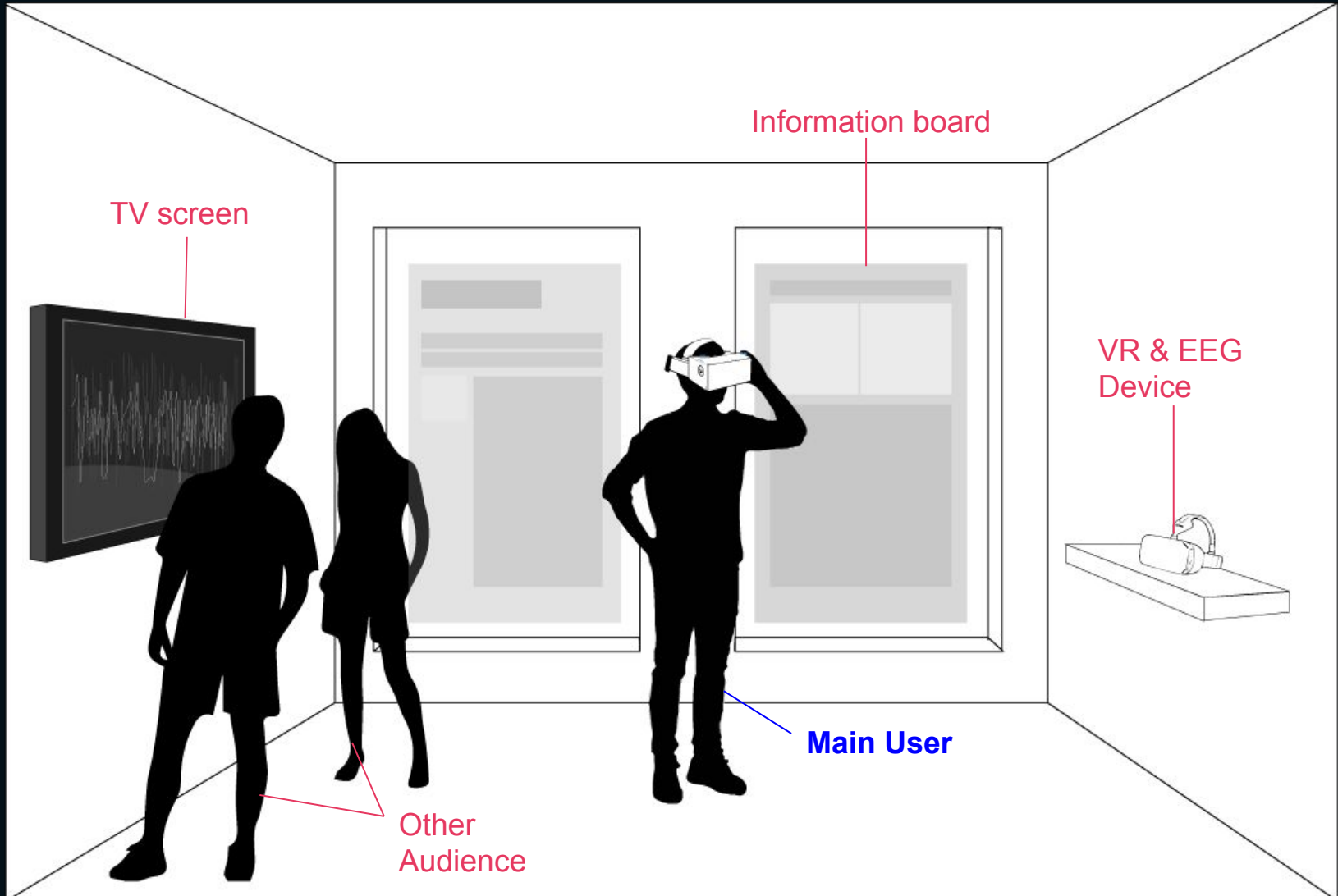
Music Cone

This activity helps our visitors understand how brain waves help us process music. An informational panel in front of the cone introduces visitors to this activity and lets visitors choose what music they wish to experience in the cone.

Visitors then stand on a haptic platform underneath a cone-shaped booth and put on an EEG headset that hangs from the cone. As speakers within the cone begin to play music, the platform vibrates along with the beat of the song.

Activity 3

Option 2 : Music Brain VR



Project Plan

Production

3/28 - 4/3

- Visitor Critique will be used to edit our overall plans.
- Develop a detailed work plan including team member assignments
- Make a list of things that need to be purchased and what needs to be borrowed at the ER for the exhibit.
- Have a place to store our materials. (prepare storage boxes to secure the fragile exhibit materials)
- Purchase and prepare materials necessary for exhibit
- Decide the order in which we will build our exhibits. Estimate time spent on each exhibit.

4/4 - 4/17

- Execute the build for the exhibit.
- Meeting 1 week into the build period: to share if we have any technical difficulties with the build.
- Consult these aspects with ITP resident.

User Testing

4/18- 4/22

- 1st play testing / Fix deficiencies found with 1st play testing.
- 2nd play testing/ Fix deficiencies found with 2nd play testing.

Set-up/ Final Show

4/23- 4/24

- Set up the most optimal lighting and installation for our exhibit.
- Dress rehearsal as if we have a visitor.
- Final show on April 24, 2017.

Thank You