

Proof of Concept

Cody Jackson



User Persona

Marcus Winn - CEO

DBL Deaf Basketball League
Single

He is afraid that the lack of communication could keep hearing women from being interested.

Needs:

Be able to carry on a natural feeling conversation with a hearing person who does not know ASL.



User Story / Scenario

- Marcus heads to work
- Meets Veronica from his gym
- Asks her out
- Hopes she won't find his deafness an issue
- Feels better because of Caption
- Meets her for coffee
- Easily communicates via Caption
- Gets a second date

Conversation Participants

**Deaf
Participant**



**Primary Hearing
Participant**



**Secondary Hearing
Participant**



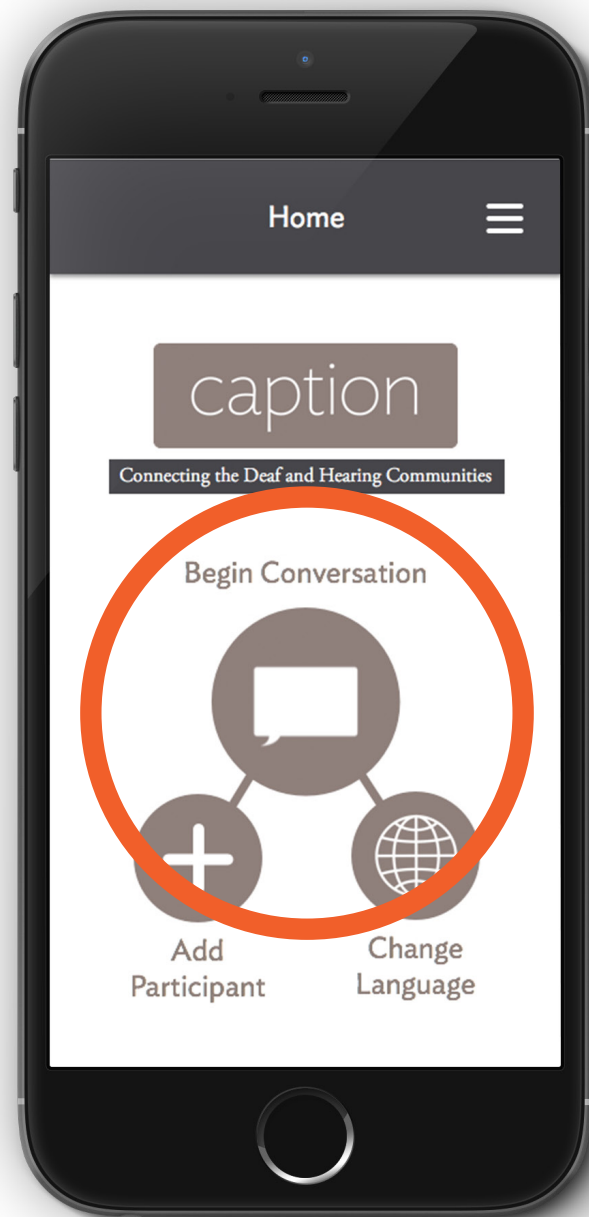
Task Flow 1 - One Person

Start a new conversation with a single person using
Caption to translate what they are saying

Result: User begins conversation with a single participant and
confirms their thoughts with OK button

Task Flow 1 - One Person - Step 1/5

Begin Translation with
Begin Conversation button on app



Ready to Translate...



Task Flow 1 - One Person - Step 2/5
Caption translates spoken words into text which user can see in front of speaker

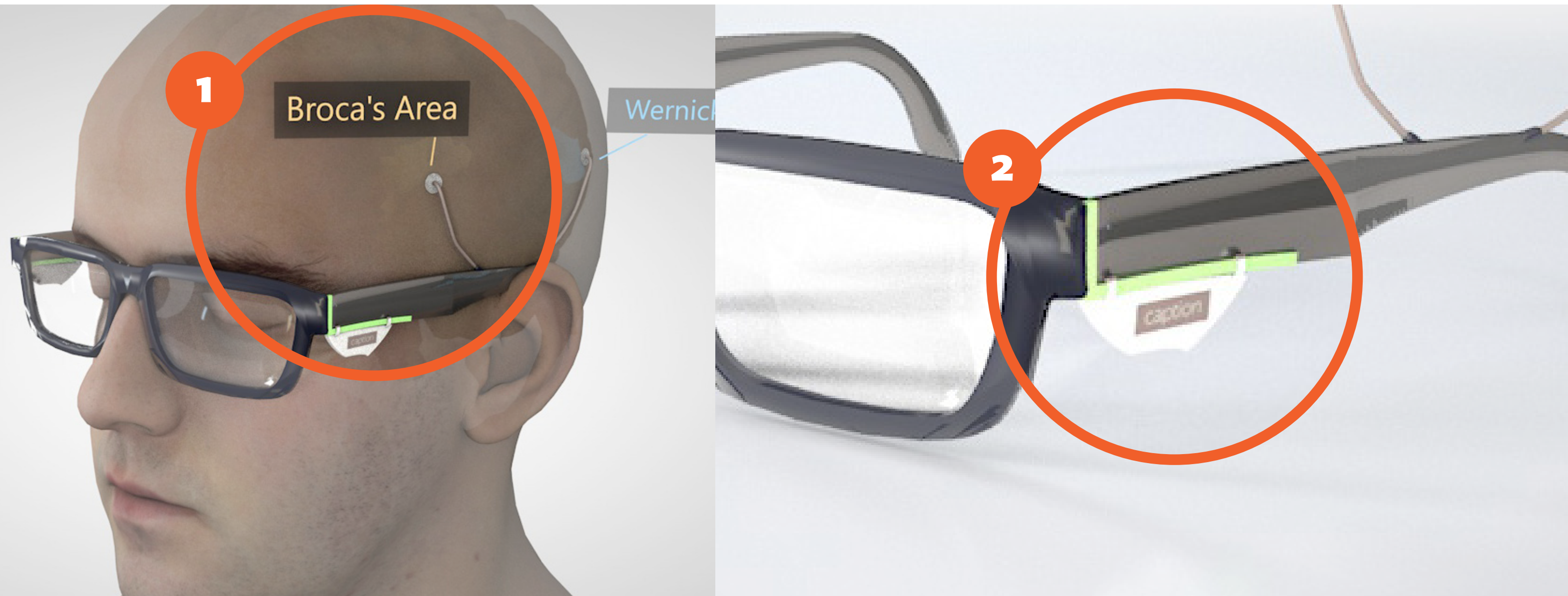
Task Flow 1 - One Person - Step 3/5

User presses and holds **Speak** button on app to start speaking their thoughts



Task Flow 1 - One Person - Step 4/5

Caption translates user's intentional thoughts from Broca's area sensor **(1)** and makes them audible to other person via speakers located in the clip **(2)** on the glasses





“Yeah, I can imagine! Work is definitely really rough right now.”
Press “OK” on app to confirm

(You are speaking...)

Task Flow 1 - One Person - Step 5/5

User's thoughts are shown in view and they press **OK** button to confirm and send thoughts through Caption speakers

Task Flow 2 - Multiple People

Switch Caption translation between two people

Result: Caption changes Caption Box from one participant to the other

Task Flow 2 - Multiple People - Step 1/3

Another person approaches



(You

A man in a purple shirt is talking to a woman in a plaid shirt in a library. The man is on the left, gesturing with his hands. The woman is on the right, looking at him. The background is a blurred library with bookshelves and tables.


Task Flow 2 - Multiple People - Step 2/3

User looks at approaching person

Hey! How's it going?

Task Flow 2 - Multiple People - Step 3/3

Caption switches translating to new person based on center of view

A man in a purple shirt is smiling and looking towards a woman on the right. He is holding a Sony camera. The scene is set in a brightly lit office or library with blurred desks and chairs in the background. A large white oval highlights the man and the woman. A black semi-transparent box with white text is overlaid on the bottom right of the oval.

I'm doing okay, just really busy with work.

Task Flow 3 - Conversation Setup

Setup a static conversation between multiple people

Result: User is able to set up a conversation with static Caption Boxes for participants



Yeah, me too!

Task Flow 3 - Conversation Setup - Step 1/5

User decides to setup a static conversation with the two participants

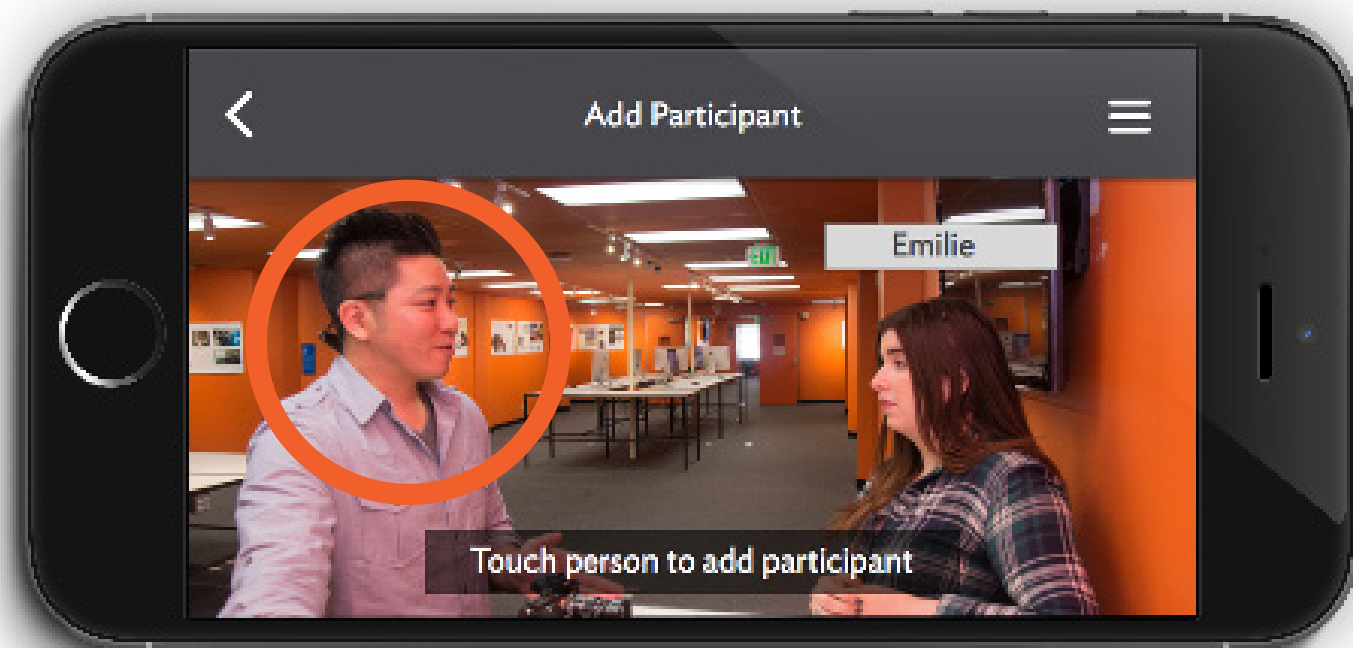
Task Flow 3 - Conversation Setup - Step 2/5

User presses **Add Participant** button from Conversation Screen



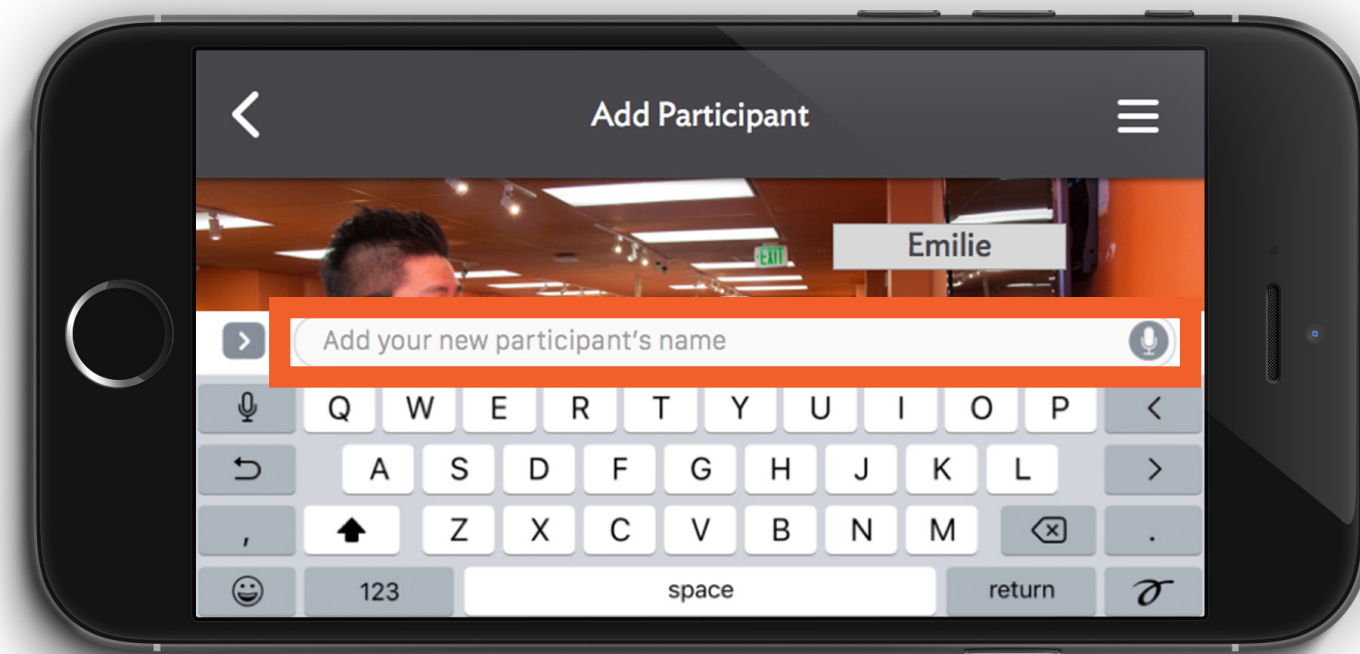
Task Flow 3 - Conversation Setup - Step 3/5

App goes to Add Participant Screen and user taps on the **person** they want to add to the conversation



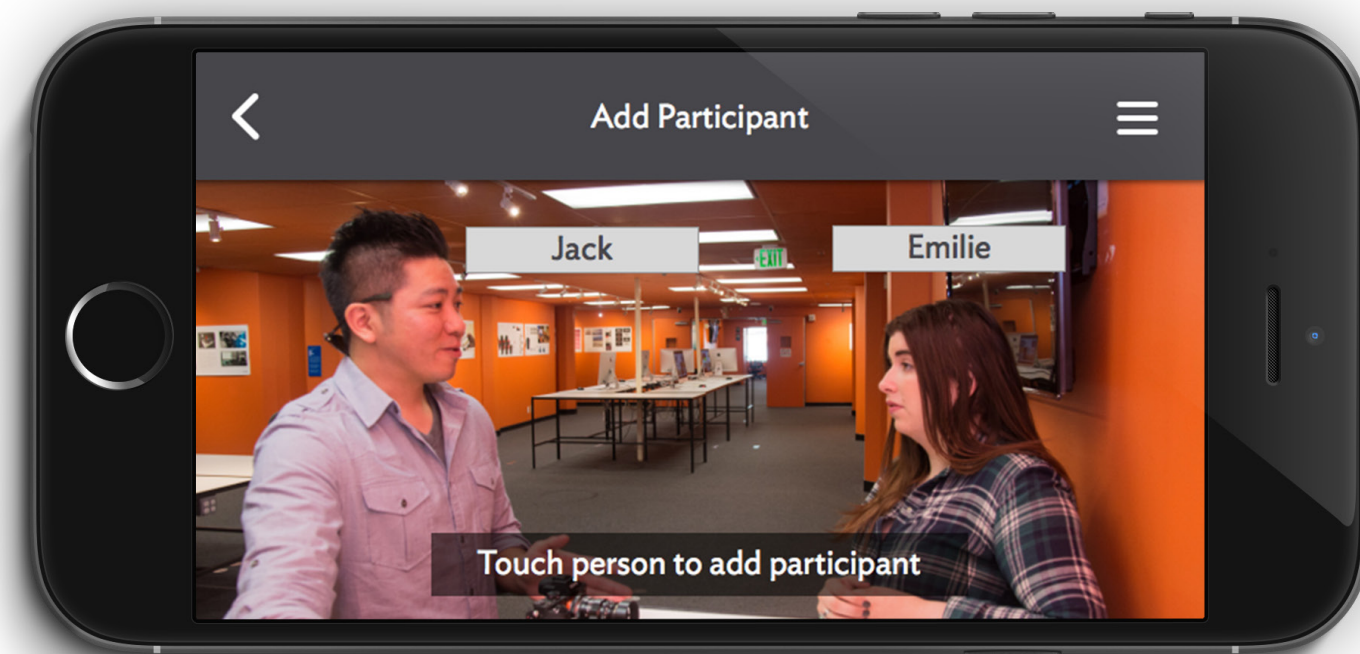
Task Flow 3 - Conversation Setup - Step 4/5

User types the **name** of the new participant



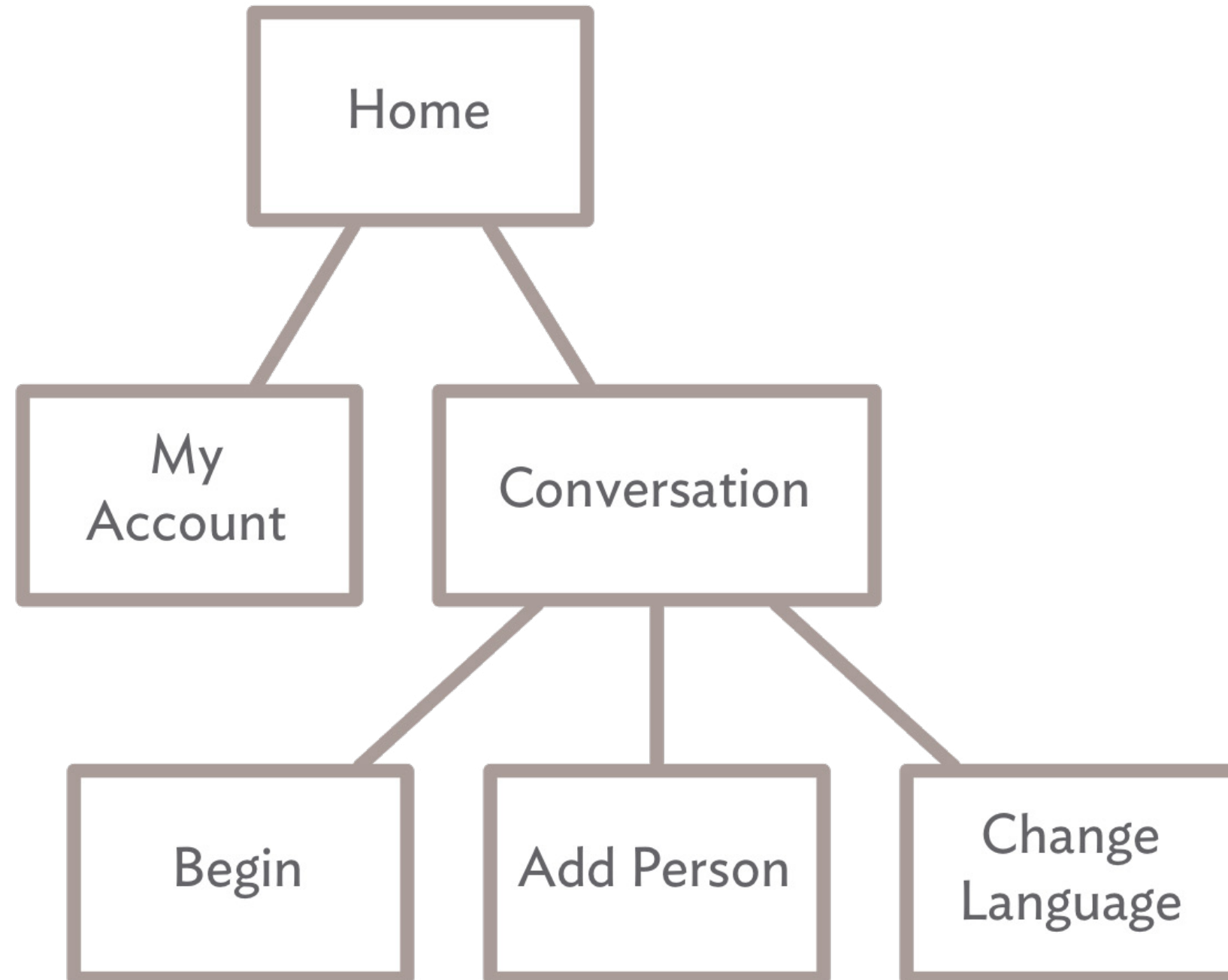
Task Flow 3 - Conversation Setup - Step 5/5

App applies label to new participant in app and places static Caption box in front of new participant

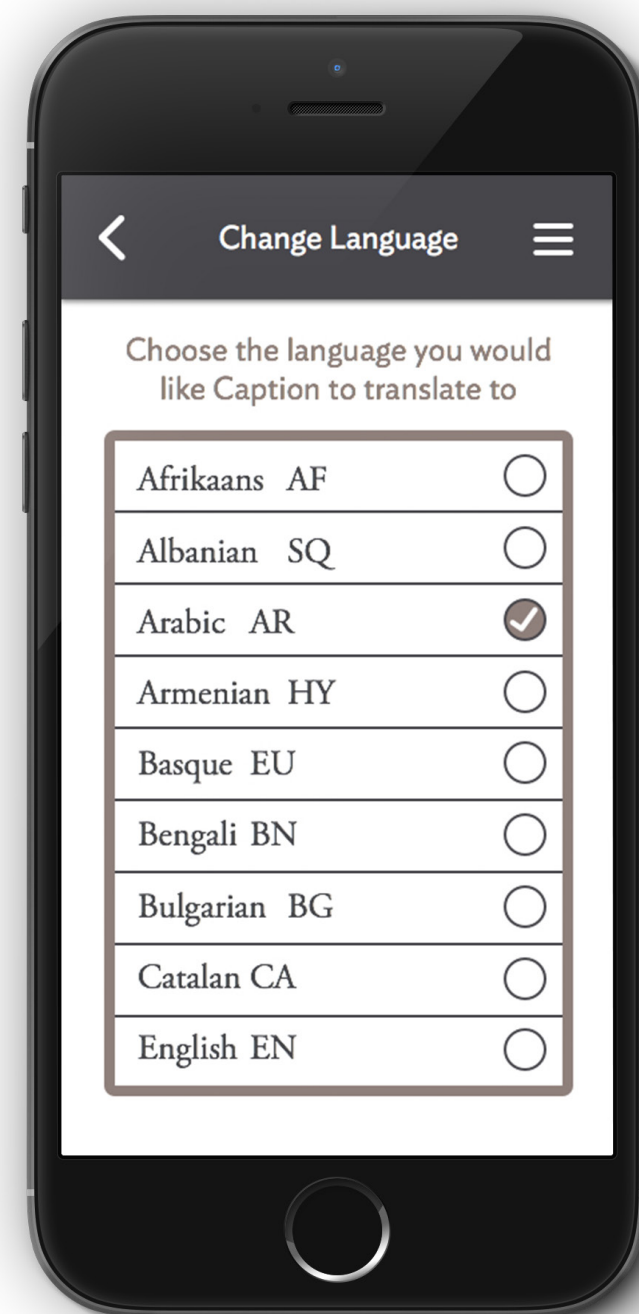
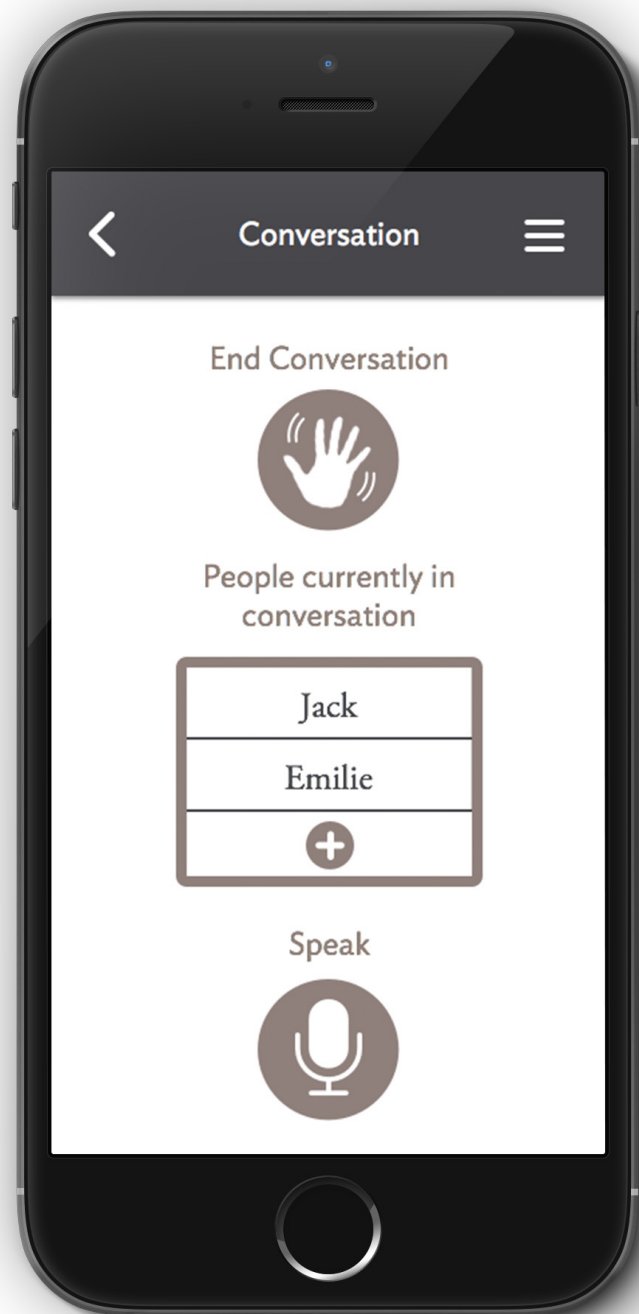


Caption Interface

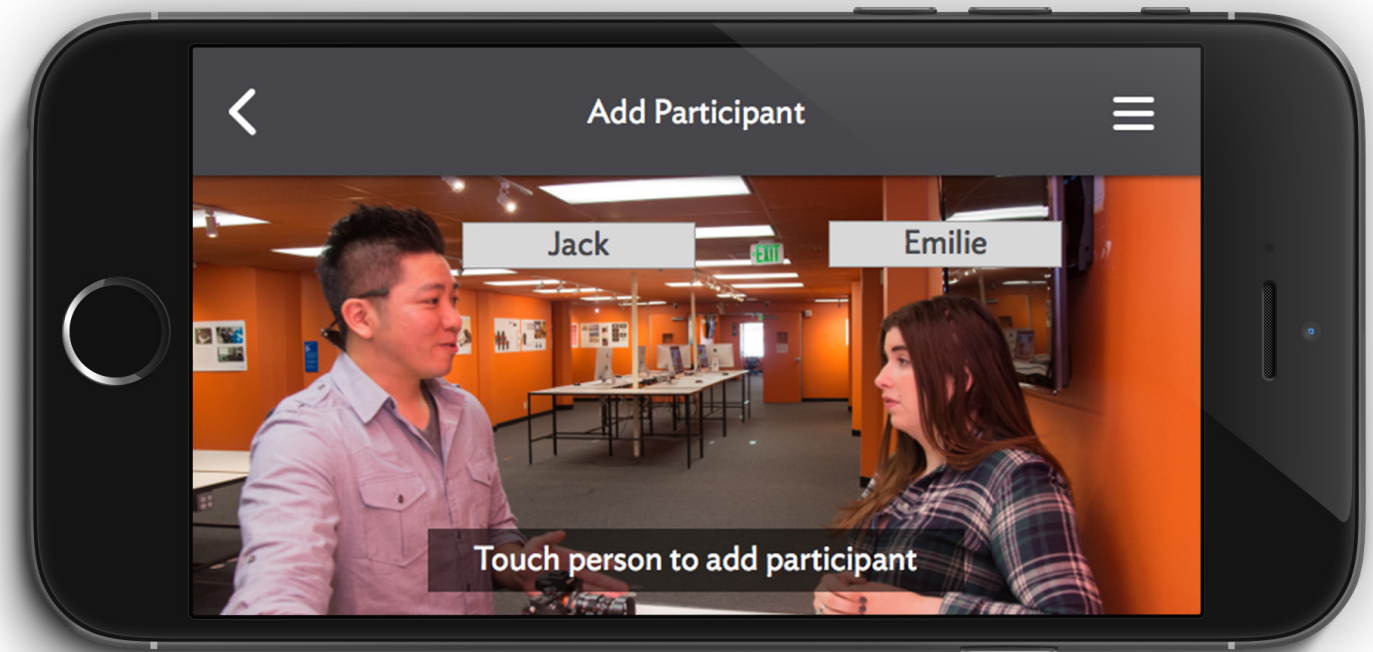
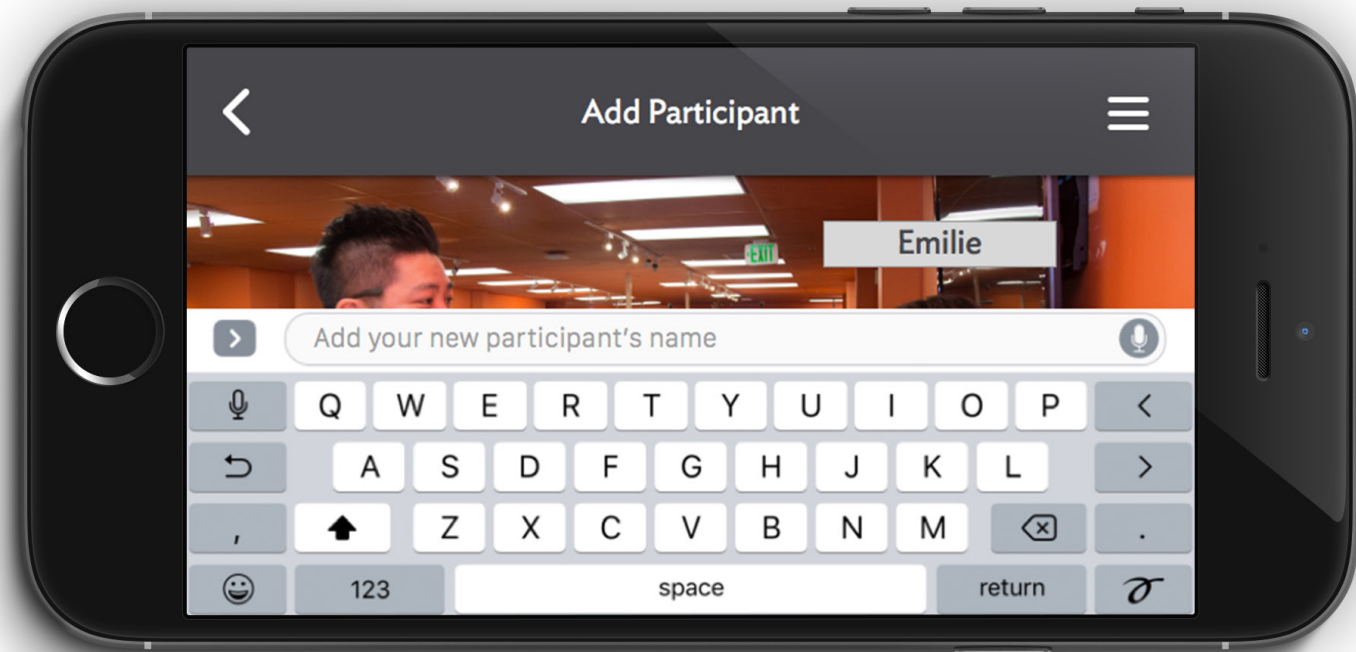
App Wireframe



High Fidelity App Screens



High Fidelity App Screens



Headset Breakdown

EEG Sensors

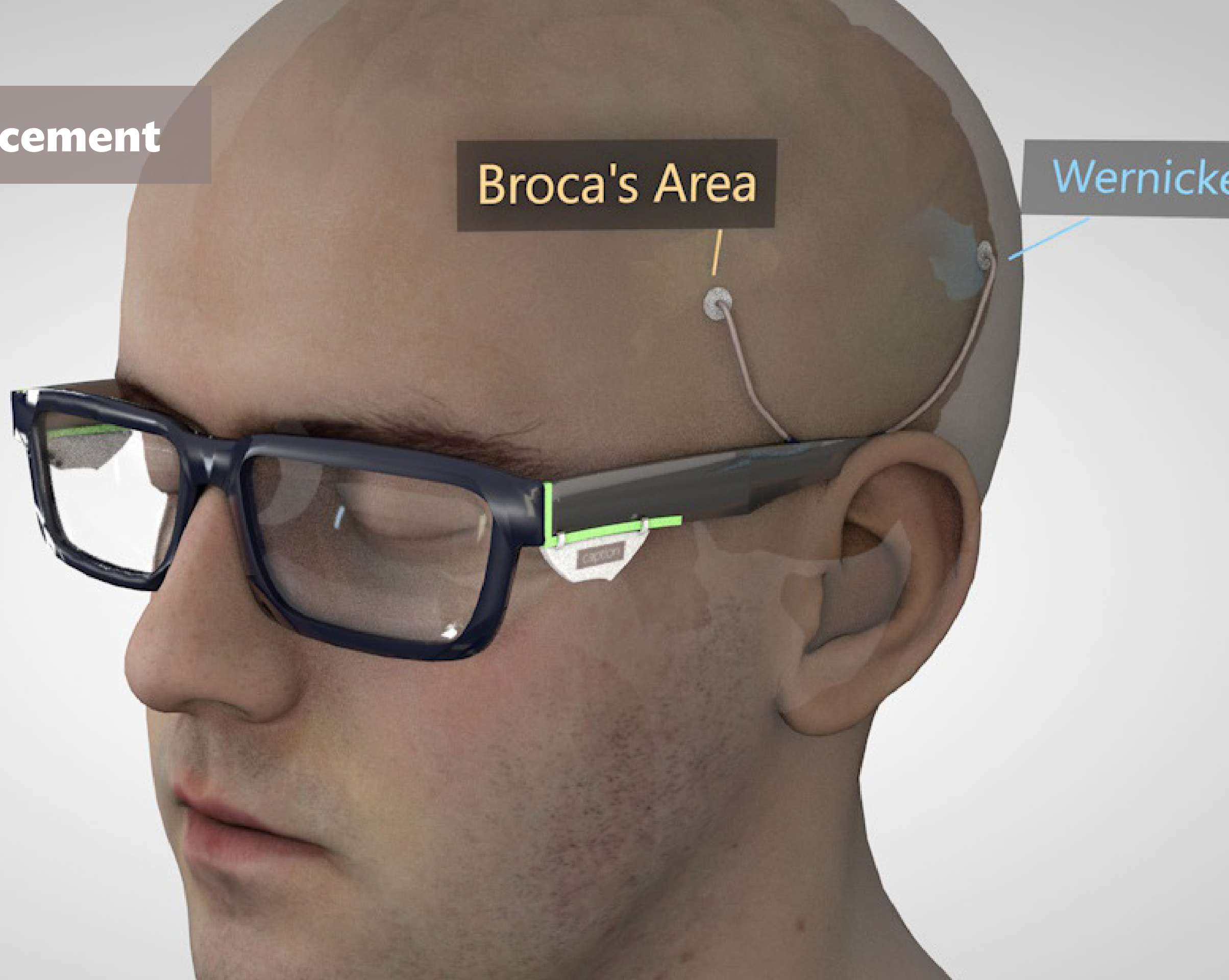


Caption System

EEG Sensor Placement

Broca's Area

Wernicke



Concept Video

Concept Video Link

Thank You