| Sign-See-Sound |
|----------------------------------|
| Sign See Souria |
| |
| |
| Prepared By: |
| |
| |
| The Best like srsly ok we ll see |
| |
| Nicholas Gattuso 40007087 |
| |
| Yousef Abo El Foul 27199120 |
| Cameron Hall 40004827 |
| Yazan Odeth 26556191 |

| Product Backlog |
|-----------------|
|-----------------|

| | | | Story | | | | | Stor |
|----------|---------------------|--|------------------|----------|-----------|--|---|------|
| Story ID | Story Title | Card | Points (1-10) | Sprint | Status | Conversation | Confirmation | Tag |
| | | As a user, I want to have two buttons so that when | | | | | | |
| | | clicked one will get you to the sound translation | | | | | | 1 |
| | | section and the other will get you to the textable | | | | This will allow users to understand what the app | 1.Can the user go back if clicked on the wrong | 1 |
| l-1 | User Buttons | translation section of the sign language | 3 | Sprint 1 | Sprint 1 | does where it is directed to | button. | |
| | | As a user, I want to have the ability to see the text | | | | | | |
| | | so that I can understand what the sign that i just did | | | | This will allow the user to see a text format of | | ı |
| -2 | Text variation | mean | 1 | Sprint 1 | Sprint 1 | what the sign means | 1.Can the user change the size of font or is it fixed | |
| | | | | | | | | — |
| | | As a user, I want to have the ability to hear the sign | | | | | | ı |
| I-3 | Sound variation | done so that I can have the accessibility of learning | ١ , | Corint 1 | Corint 1 | This will allow the user to hear what sign they | | ı |
| -3 | Souria variation | while listening | <u> </u> | Sprint 1 | Sprint 1 | have done | | |
| | | As a user, I want to be able to use a glove that can | | | | This hardware will allow any user to perform sign | 1.Can the user use any language or is it based on | |
| -1 | Glove Functionality | read sign language gestures | 7 | Sprint 1 | Sprint 1 | language and get the translation on the app | one language | ı |
| | · | | | | | | | |
| | | As a developer, I want to have an immediate | | | | | | ı |
| | | connection between ardunio and android so that i | | | | This functionality will allow proccessed | | |
| | | can get information from the arduino to be placed | | | | infromation from arduino to the andriod | | |
| A-1 | Arduino to android | in android | 9 | Sprint 1 | Sprint 1 | application which is very important | | |
| | | As a user, I want to be able to go back from a | | | | | | |
| | | specific page setup to the homepage of thee | | | | This will allow users to have an easy accessible | | |
| | Internal | application so that i can switch variation(sound or | | | | application where they can go from section to | 1.Can the user change the variation without | |
| L | functionality | text) | 3 | Sprint 1 | Sprint 1 | another freely and of course vis-versa | heading into the main page | |
| | | As a user, I want to have the letters saved in the | | | | This will allow storing letters so that when called | | |
| | | database so that we can fetch for the letter called | | | | from motion of the glove with the sensors it can | 1.Will database be overflooded with infromation | |
| 1 | Database | from the database | ٩ | Sprint 1 | Sprint 1 | get it from the database | or will it delete repeated information | |
| _ | Database | The state database | 1 - | op.me 1 | Sp.iiic 2 | Secret moniture ductabase | or will k delete repeated illionidation | _ |
| | | | | | | | 1.Will the user be able to get back to the | |
| | | As a user, I want to have the letters shown so that | | | | This will allow users to have the ability to learn the | | |
| | User learning | when clicked on one will be directed to a video | | | | | 2.Will the user be able to go to another video and | ı |
| -3 | Functionality | explaining how to do the letter clicked | 6 | Sprint 2 | Sprint 2 | they have | then get back to the application | _ |
| | | As a user, I want the action bar to contain a setting | | | | This will give the user a freedom of accessbility | | _ |
| | | that switches between voice and text so that it will | | | | between the options of sound and text withoujt | | |
| -4 | User Format Control | | 5 | Sprint 2 | Sprint 2 | having to go back to the main page. | | ı |
| | | As developer, I want to calibrate the flex sensors, so | - | | | 5 5 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | |
| | | that i can achieve the minimum and maximum | | | | This will allow the user to have well defined values | | |
| | Sensors Calibration | values of when the flex sensors are in motion or not | 7 | , | | for the sensors when doing the signs | | |

Sprint 1 Backlog

Sprint 1 Goal(s): At the end of sprint 1, our goal is to have a working android app that can receive the signals from the sensors and arduino and output the correct alphabet relating to a sign

| Story ID | Task ID | Task Title | Task Description | Ideal Hours | Status | Comments |
|----------|---------|------------------------------|--|----------------|--------------|--|
| | | | | Hours | 1 | |
| UI-1 | UI-1.1 | Create 'Receiving Text' page | Create a page where the received signal from the hardware will output a the respective alphabet text | 0.2 | In Progress | |
| 01-1 | 01-1.1 | Create Receiving Text page | Create a page where the received signal from the | 0.2 | III Progress | |
| | | Create 'Receiving Voice' | hardware will output the respective alphabet | | | |
| | UI-1.2 | page | through a voice | 0.2 | In Progress | |
| | | Create Button to go to Text | Create a button in the main page called "Get | 1 | | |
| | UI-1.3 | Page | Reading in Text" | 0.2 | In Progress | |
| | | Create Button to go to Voice | Create a button in the main page called "Get | | | |
| | UI-1.4 | Page | Reading in Voice" | 0.2 | In Progress | |
| | | | Connect the buttons to their respective pages. | | | |
| | | Link the buttons to their | When the buttons are pressed, the program should | | | |
| | UI-1.5 | respective page | go to the respective page | 0.2 | In Progress | |
| | | Fetch the received signal | | | | |
| | | from the arduino in the app | Look up in the database for the value that's | | | |
| UI-2 | UI-2.1 | database | associated to the received value from the arduino | 1 | In Progress | |
| | | Output the return value | Output the value returned from the database in an | | | |
| | UI-1.2 | from the database | EditText | 0.5 | In Progress | |
| | | Fetch the received signal | | | | |
| | | from the arduino in the app | Look up in the database for the value that's | | | |
| UI-3 | UI-3.1 | database | associated to the received value from the arduino | 1 | In Progress | |
| | | Output the return value | Output the value returned from the database as a | | | |
| | UI-3.2 | from the database | Voice output | 1 | In Progress | |
| | | | Attach the sensors on a glove so that the user can | | | |
| H-1 | H-1.1 | Glove Creation | be able to perform sign language | 1 | Planned | |
| | | | Download the arduino program to the Bluetooth | | | Code for arduino program came from here: http: |
| | H-1.2 | Arduino Program | Arduino (BLUNO) | 0.5 | Completed | //romanakozak.com/sign-language-translator/ |
| | | | Attach the sensors to the accelerometer and the | | | |
| | | | accelerometer to the arduino in order to get the | | | |
| | H-1.3 | Connect Glove with Arduino | two components to function | 1 | In Progress | |

| | H-1.4 | Test the Glove Functionality | Test the program to make sure that the reading of the sensors is giving a value | 2 | In Progress | |
|------|--------|---|--|-----|-------------|--|
| AA-1 | AA-1.1 | Connection between Android and Arduino | Import the arduino library in the android application. Use the necessary functions to link the application and the arduino together through a bluetooth signal | 3 | In Progress | |
| I-1 | I-1.1 | Back Button | Add the Up Navigation in the application so that the users can go back to home page | 0.5 | In Progress | |
| D-1 | D-1.1 | Database Creation | Create a database with one field being the values that will be received from the arduino and another field being the associated alphabet text | 2 | In Progress | |
| | D-1.2 | Database Fetching | Create a function that will fetch the alphabet letter from the database according to a received input from the arduino | 3 | In Progress | |