Sprint 1 Plan (10/11/2023 - 10/24/2023)

Heading: Sprint 1 Plan, Robot Ear, 10/24, Revision 1

Overall Goal: The goal for this sprint is to finish researching the technology stack, begin front-end implementation, and finish the code for the segmenter + classifier on the back end.

TASK LISTING:

User story: { High } As a user, I expect a well-thought-out design using a designing tool such as Figma for the web application so that it is intuitive { 2 }
- Designing Fima page (2-3 hours)

Total Hours: 3

User story: { High } As a user, I want to the web application to be visually appealing so that I have a good experience { 2 }
- Create .jss files that follow the design created (3-6 hours)

Total Hours: 6

User story: { Medium } As a user, I expect the web application to have a functioning front-end so that I can have a good experience { 4 }
- Set up React web app (1-2 hours)
- Creating React Components (4 hours)

Total Hours: 5

User story: { High } As a user, I expect the web application to be able to segment the audio file precisely so that it can identify notes { 3 }
- Research libraries (3 hours)
- implementing fixed window segmenter (2)

Total Hours: 5

User story: { High } As a user, I expect the web application to be able to classify notes by giving it an audio file so that it can find the notes { 4 }
- Implement frequency-based classifier (5 hours)
- Test frequency-based classifier (1 hour)

Total Hours: 6

TEAM ROLES
Elliott Jensen: Product Owner
Rishita Wairagade : Scrum Master, Developer
Melany Del Cid Chavez : Developer
Tanya Gyanmote : Developer

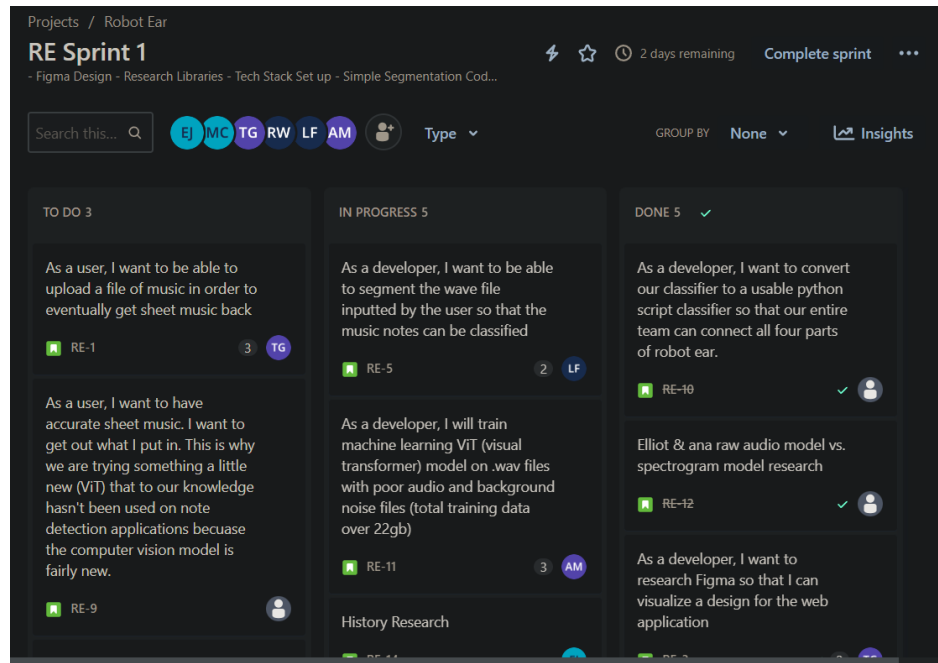Ana Melissa: Developer
Lily Faris: Developer

TASK ASSIGNMENT

Elliott Jensen: Frequency-based classifier
Ana Melissa: Frequency-based classifier
Rishita Wairgrade: Fixed window segmenter
Lily Faris: Fixed window segmenter
Melany Del Cid Chavez: Figma and React Components
Tanya Gyanmote: Figma and React Components

INITIAL BURNUP CHART:

BurnUp Chart

SCRUM BOARD:

Projects / Robot Ear

RE Sprint 1

- Figma Design - Research Libraries - Tech Stack Set up - Simple Segmentation Cod...

⚡ ☆ 🕐 2 days remaining   **Complete sprint**   •••

Search this... 🔍   EJ MC TG RW LF AM ➕   Type ⌄   GROUP BY None ⌄   📈 Insights

TO DO 3

As a user, I want to be able to upload a file of music in order to eventually get sheet music back

🔖 RE-1   3 TG

As a user, I want to have accurate sheet music. I want to get out what I put in. This is why we are trying something a little new (ViT) that to our knowledge hasn't been used on note detection applications becuase the computer vision model is fairly new.

🔖 RE-9   👤

IN PROGRESS 5

As a developer, I want to be able to segment the wave file inputted by the user so that the music notes can be classified

🔖 RE-5   2 LF

As a developer, I will train machine learning ViT (visual transformer) model on .wav files with poor audio and background noise files (total training data over 22gb)

🔖 RE-11   3 AM

History Research

🔖 RE-14

DONE 5 ✓

As a developer, I want to convert our classifier to a usable python script classifier so that our entire team can connect all four parts of robot ear.

🔖 RE-10   ✓ 👤

Elliot & ana raw audio model vs. spectrogram model research

🔖 RE-12   ✓ 👤

As a developer, I want to research Figma so that I can visualize a design for the web application

🔖 RE-3

Standup Meeting times:

Monday : 12:00-12:15
Wednesday: 12:30-12:45
Friday: 12:00-12:15