Sprint 2 Plan (10/25/2023 - 10/7/2023)

Heading: Sprint 2 Plan, Robot Ear, 11/7/2023

Overall goal: backend can receive data from frontend, pdf, set up flask, machine learning based classifier, better segmentation

TASK LISTING:

User story: { High } As a user, I want to be able to click on a button to upload a file of music in order to eventually get sheet music back { 3 }

- Make the button functional (1 hour)
- Research on file upload (1-2 hour)

Total Hours: 3

User story: {High} As a user, I want to be able to upload a file of music in order to get sheet music {4}

- Call + debug back-end endpoint for upload (2 hours)
- Learn about axios (1-2 hours)

Total Hours: 4 hours

User story: { Medium } As a user, I expect the web application to be able to classify notes even better by giving it an audio file so that it can find the notes { 4 }

- Implement Micro-segmentation; splitting the audio file into 10 millisecond bits and using note-consistency to identify quarter/half/full notes (3-5 hours)

Total Hours: 4

User story: { Medium } As a user, I want the web application to have advanced technology such as ML technologies so that I can have the most precise sheet music { 5 }

- Researching and implementing basic machine learning model (5 hours)

Total Hours: 5

User story: { High } As a user, I want to be able to receive a pdf of generated sheet music so that I can reference it { 3 }

- Convert to a pdf with abjad (research python library that does this), create a simple pdf of 4/4 time with a list of notes as the input (3-4 hours)

Total Hours: 3

User story: { Low } As a user, I want the web application to be able to segment the audio files with other techniques so that it can classify more precise notes { 4 }

- Research more complex segmentation: Either segmentation based on energy, spectral peaks or onset detection (3-5 hours)

Total Hours: 4

User story: {Medium} As a user, I want the web application to be well connected so that it is functioning { 4 }

- Connect frontend and backend for APIs (3-4 hours)

Total Hours: 4 hours

TEAM ROLES

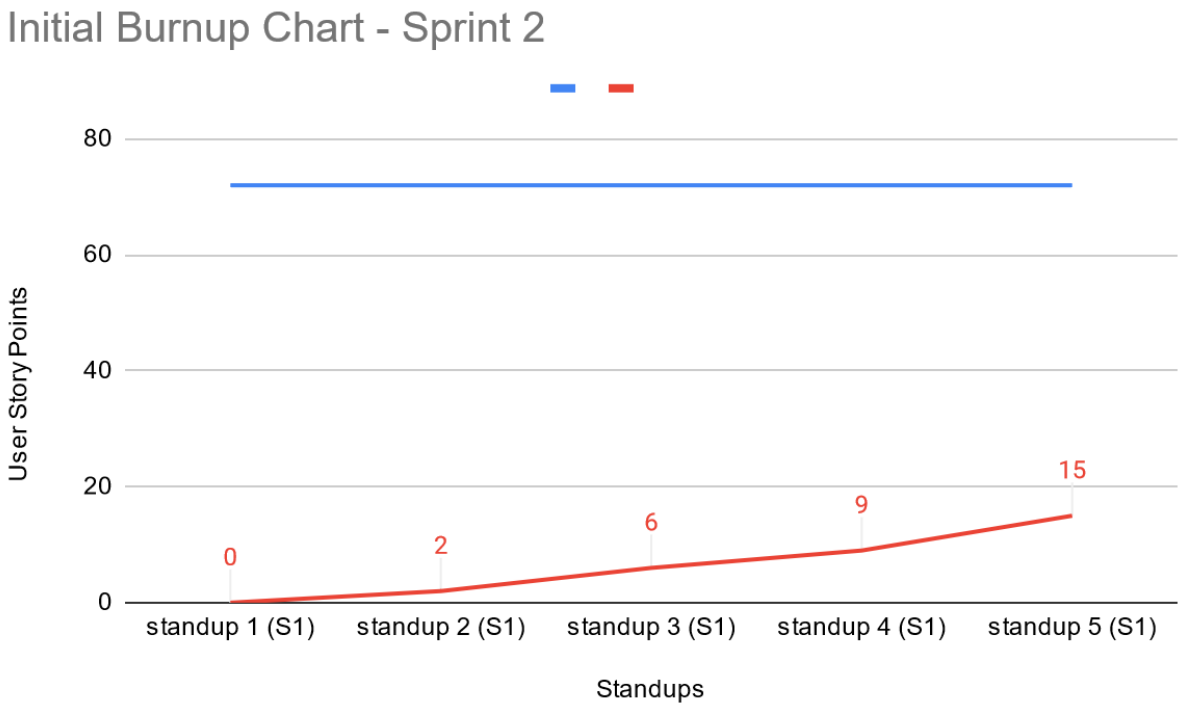
Elliott Jensen: Product Owner
Rishita Wairagade : Developer
Melany Del Cid Chavez : Developer
Tanya Gyanmote : Developer
Ana Melissa: Scrum master
Lily Faris: Developer

TASK ASSIGNMENT

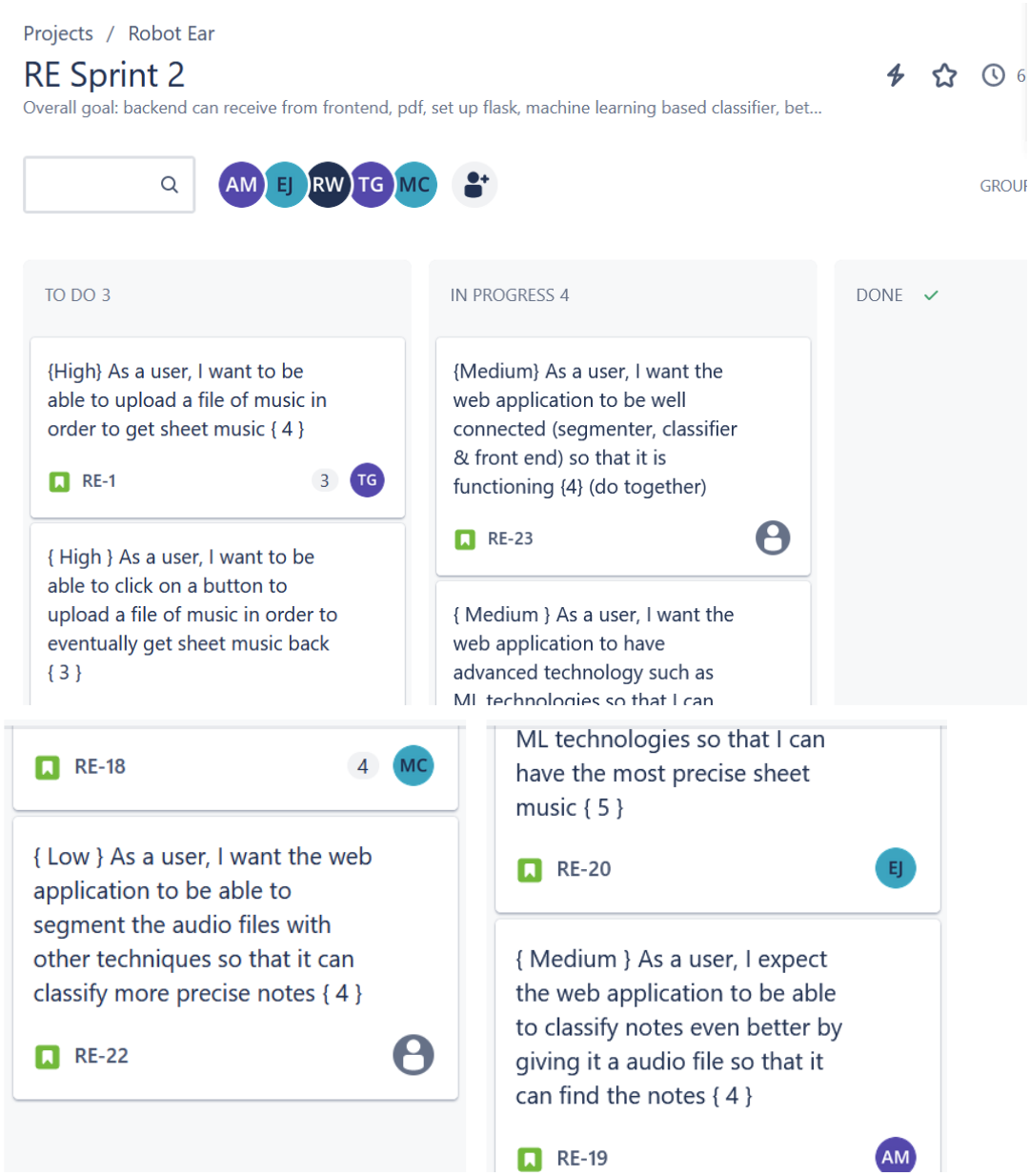
Elliott Jensen: Frequency based classifier
Ana Melissa: Frequency based classifier
Rishita Wairgrade: Fixed window segmenter
Lily Faris: Fixed window segmenter
Melany Del Cid Chavez: Figma and React Components
Tanya Gyanmote: Figma and React Components

BURNUP CHART

> The burnup chart below represents what we have completed in Sprint 1. The sprint 2 report will include a burnup chart of what we finished in Sprint 2.


Initial Burnup Chart - Sprint 2
80
60
40
20
0
User Story Points
0
2
6
9
15
standup 1 (S1)
standup 2 (S1)
standup 3 (S1)
standup 4 (S1)
standup 5 (S1)
Standups

SCRUM BOARD



Standup Meeting times:

Monday : 9:30-10:30
TA Meeting: 10:45-11:15
Wednesday: 12:30-12:45
Friday: 12:00-12:15