VLOG 2

TEAM VisuSpeak

Team Members:

- Archisha Bhattacharya
- Brooklyn Coulson
- Jasmeet Singh

PROJECT OVERVIEW

Team VisuSpeak aims to create an ASL-English bidirectional translation application. Our application will aim to bridge the communication gap between ASL users and English speakers. This application will enable real-time translation from ASL to English, allowing people with special accessibility needs to communicate effectively with others and gain access to essential services and information.

PROJECT ACTIVITY DATES

From Vlog 1 to Now

- **Sprint Cycle 1:** October 2nd - October 22, 2023
- **Scrum 1:** October 23, 2023
- **Sprint Cycle 2:** October 24, 2023 - November 12, 2023
- **Scrum 2:** November 13, 2023
- **Bazaar Day:** November 20, 2023
- Weekly meetings with mentors
- Monthly meetings with sponsor

PROJECT ACTIVITY

Archi

- Researched different datasets, benchmarks and AI models best suited for our project
- Developed AI model for recognizing ASL alphabets
- Set up LEMP server and hosted the front-end pages
- Collaborated with Brooklyn on the front-end pages
- Setup SQL database for user information
- Set up user authentication on the site
- Created the following documents:
    - Proposal for Sponsor,
    - Business Case,
    - Project Charter,
    - Project Requirements, and
    - Stakeholder Engagement

PROJECT ACTIVITY

Brooklyn

- Collaborated with Archi on the development of the front-end pages
- Maintained and updated Team Kanban Board
- Created the following Documents:
    - Class Diagram,
    - MVP Story Map,
    - Project Documentation Guidelines,
    - Project Roles and Responsibilities,
    - Project Scope Statement,
    - Use Case Diagram,
    - Activity Diagrams, and
    - Project Status Reports

PROJECT ACTIVITY

Jasmeet

- Researched different datasets, benchmarks and AI models best suited for our project
- Developed AI model for recognizing ASL alphabets
- Made the Hi-Fi prototypes and updated it to adhere with AAA accessibility
- Collaborated with Archi to implement user authentication on the site
- Created the following Documents:
    - Gantt Chart,
    - Proposal for Sponsor,
    - Business Case,
    - Project Charter,
    - Project Requirements, and
    - Stakeholder Engagement

STATUS DESCRIPTION

Status: Yellow

How we plan to get back to Green:

- Continue working on the AI model to increase its accuracy
- Develop rest of the front-end pages outlined in our prototypes
- Consult with our user base about our design choice and make any necessary changes /improvement

PROJECT ISSUES

- The trained AI model is not accurate
- Experimenting with different AI models

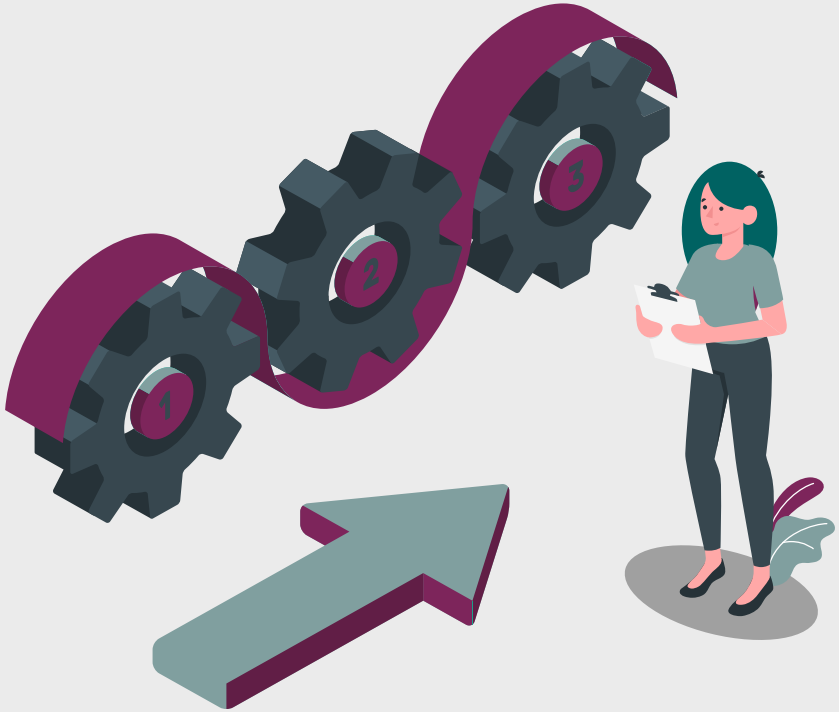
PROJECT CHANGES

- Potentially thinking about limiting the number of words that can translated from ASL to English

NEXT UP

Archi

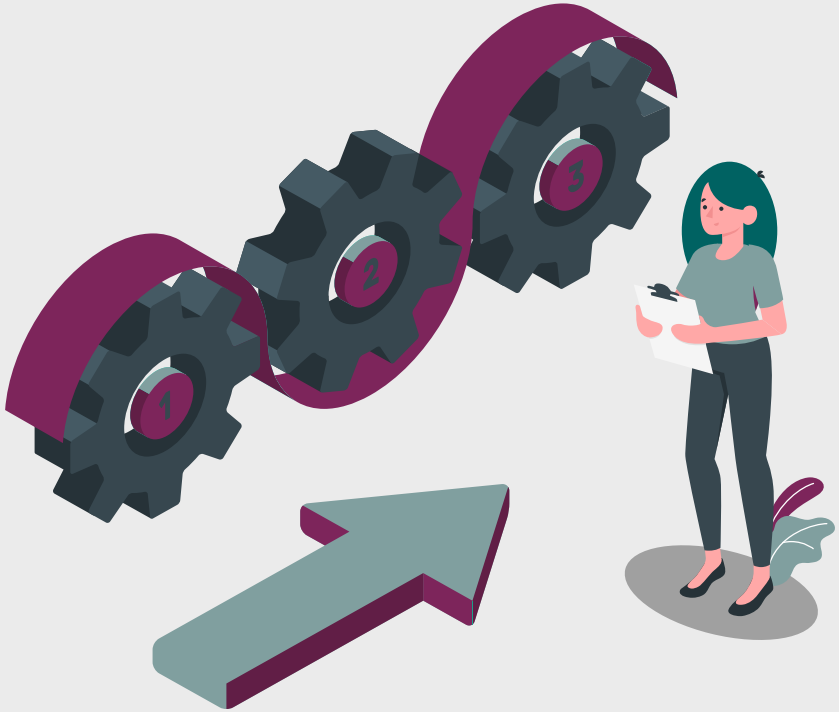
- Continue training AI model by creating our own dataset and using YOLOv5
- Implement chat functionality on the site
- Collaborate with Jasmeet to implement 3D modelling for English to ASL translations



NEXT UP

Brooklyn

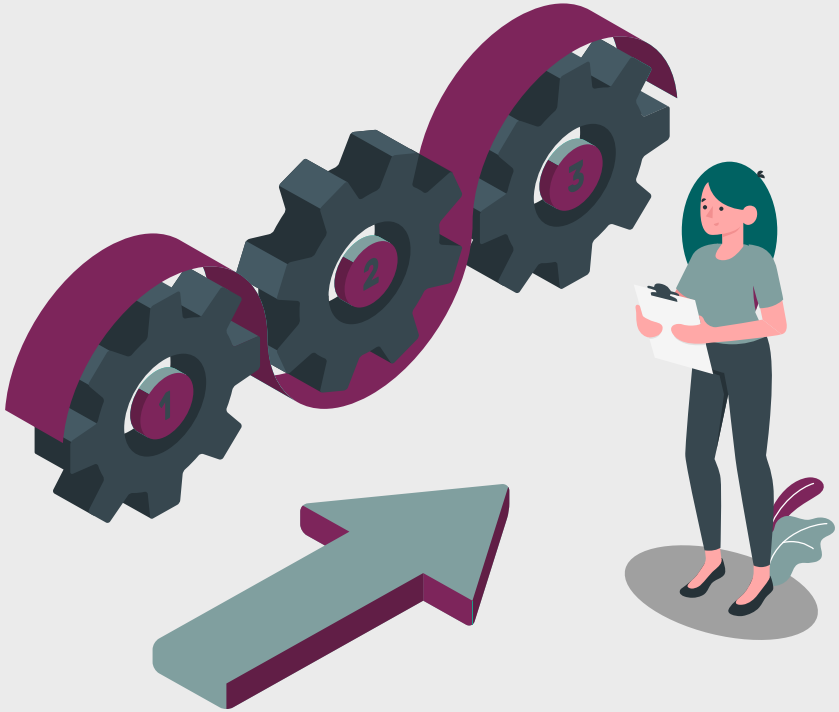
- Implement the chat functionality
- Refine and finalize the front-end by adding content, text and images
- Refining the documents as new changes, suggestions and information arise during the progression of our project



NEXT UP

Jasmeet

- Continue training AI model by creating our own dataset and using YOLOv5
- Collaborate with Archi to implement 3D modelling for English to ASL translations
- Implement the chat functionality



RETROSPECTIVE

- Front-end implementation went well
- AI -model accuracy needs to be increased
- Continue training other AI models as backups
- Pick up the pace in development of other MVP's
- Getting in touch with user-base

TEAM REFLECTIONS

Project status: **Yellow**

What progress does the team particularly feel good (great) about?

We have made progress on a working model, considering we faced significant connection issues when training earlier models. We have also secured a sponsor as well as connections with the U of R Accessibility Centre for user testing and expert opinion.

What barriers (if any) does the team feel are a current impediment to success?

The current model we have working is for letter lab only, we are wanting to have a model that recognizes words.

What help (if any) does the team require to move positively forward?

None

What questions or concerns does the team have (if any)?

None

THANKS!

ANY QUESTIONS?