



SPEAKEZ

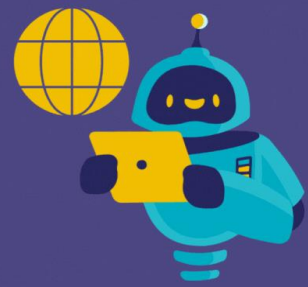
AI Language Translator



Kaali Lovell | Pavan Polireddy | Rakesh Tirumala
Steve St Fleur | Tanvi Prakash Gavali | Venkat Sai Pallapu



AGENDA



1- Recap

- Team Roles & Responsibilities
- Improvements
- Project Description
- Team Working Agreement
- Personas

2- Project Overview

- MVP
- Languages & Tools
- Algorithms
- Diagrams
- Sprint 1 Recap

3- Backlogs

- Product Backlog
- Sprint 2 & 3 Summary
- Sprint 3 Backlog
- Test Cases
- Story Completion

4- Team Metrics

- Team Velocity
- Burndown Charts
- Retrospective

5- Product

- Application Screenshots
- API
- Live Application Demo



TEAM ROLE & RESPONSIBILITIES



Rakesh Tirumala
Team Lead/ Developer



Tanvi Prakash Gavali
Scrum Master/ Developer



Kaali Lovell
Tester/ Product Designer





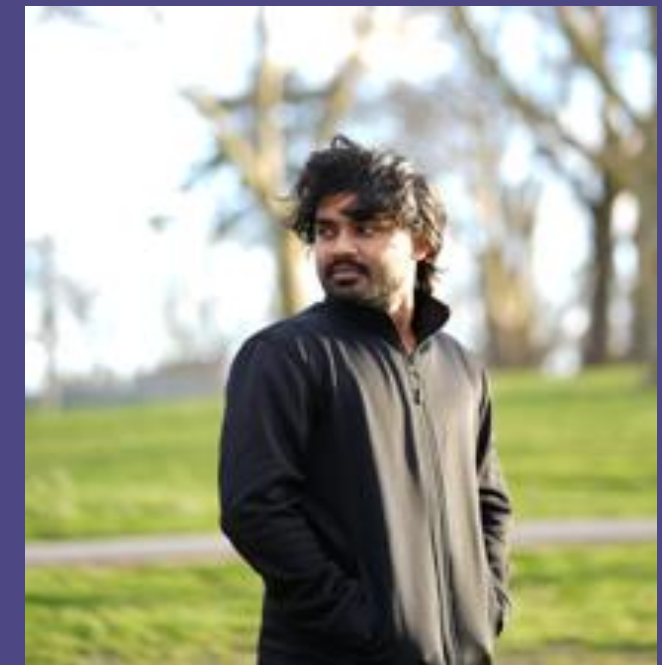
TEAM ROLE & RESPONSIBILITIES



Steve St Fleur
Developer



Venkat Sai Pallapu
Developer



Pavan Polireddy
Developer





IMPROVEMENTS

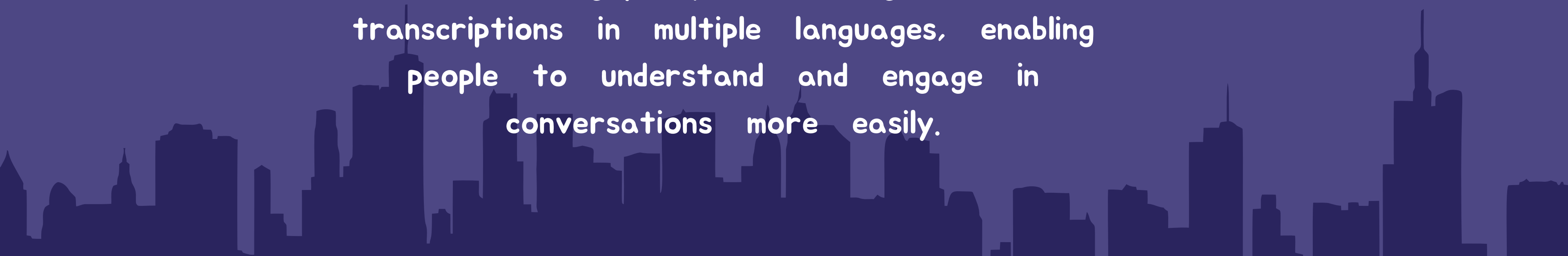
- User Stories:
 - For the acceptance criteria, use the "Given, When, Then" syntax.
 - No need to include "Feature" section if it does not relate to the application.
- Velocity:
 - No need to include the historical completed-to-committed graph data, nor the completed-to-committed ratio. The velocity is the team's completed points.
- Cumulative Flow Diagram and Burndown chart:
 - Describe charts more accurately when presenting.





PROBLEM STATEMENT

Understanding foreign languages is often a challenge, as each language has its own unique structure, nuances, and meanings. Effective communication with native speakers becomes difficult without proper understanding, yet mastering every language is nearly impossible. To address this issue, we aim to create an application that helps bridge the communication gap by converting audio into transcriptions in multiple languages, enabling people to understand and engage in conversations more easily.





PROJECT DESCRIPTION

Project Name:	SpeakEZ
Team:	Bytes
Project Description:	<p>For users who need to communicate across different languages, the AI-powered transcription and translation web application is a seamless solution that converts audio into multilingual text that enables users to understand conversations effortlessly, regardless of language barriers.</p> <p>Unlike current tools that may require manual translation or lack real-time accuracy, our application integrates advanced AI model to provide precise and real-time transcription and translation, improving cross-language communication efficiency across cultures and regions.</p>
Benefit Outcomes:	Better Communication, Easy Accessibility
Github Link:	https://github.com/htmw/2024F-Bytes/wiki





TEAM WORKING AGREEMENT

Communication:

- The team will communicate with each other through Zoom and WhatsApp.
- Google Docs will be utilized for collaborative document editing, sharing resources, and taking notes during team discussions.
- Team members should alert the team in advance if they are unable to join a Zoom meeting.
- Team members are expected to provide regular updates on task progress and promptly communicate any obstacles or delays to the group.
- Team members are encouraged to actively participate in discussions, providing feedback and support as needed.
- During all discussions, team members should listen carefully, speak clearly, and stay on topic to avoid confusion.
- Each team member should complete all assigned work before the deadline. If they are struggling with a task, they should contact the team as soon as possible to resolve the issue. Failure to complete work before the deadline can negatively affect the team's project timeline.



TEAM WORKING AGREEMENT

Work Division & Participation:

- Jira, and GitHub will be used to track and divide all tasks.
- The entire project should be divided into equal parts, and all team members should be given equal responsibility.
- If a team member is not participating to the level the other members are, the team leader is permitted to assign necessary tasks to that member.
- Each team member is responsible for their assigned tasks and their contribution to the overall success of the project.



TEAM WORKING AGREEMENT

Meetings:

- Regular team meetings will be scheduled twice a week on Sundays at 2:00 pm and Thursdays at 5:30 pm via zoom to review individual and collective progress. Failing to join these meetings will negatively affect the group.
- If unable to attend a scheduled meeting, team members should inform the group in advance.
- In urgent situations, additional meetings may be arranged with at least 24 hours' notice.
- Meeting agendas will be sent at least 24 hours prior to the meeting.
- Meetings will commence and conclude on time, with members expected to join 2 minutes prior to the start.
- All team members are required to have their Zoom cameras open during the meetings. They are required to show respect, actively listen, and participate by sharing feedback or suggestions.
- Team agrees to follow these agile practices throughout the project:
 - Meet at the beginning of each sprint to discuss tasks for the upcoming sprint.
 - Meet at the end of each sprint to present the completed work and gather feedback.



TEAM WORKING AGREEMENT

Respect and Professionalism:

- All communication and interaction within the team will be conducted with respect; diverse viewpoints and inputs should be appreciated.
- Feedback should be constructive and centered on the project and not on personal traits.
- If a member disagrees with a decision, they can request a review at the next team meeting.
- The team aims to create a welcoming space where everyone feels comfortable sharing their ideas
- Any disagreements should be addressed openly and respectfully within the team. If an internal resolution is not possible, the team will seek advice from the professor.



TEAM WORKING AGREEMENT

Definition of Done (MVP DoD) for the Language Translator App:

- The application can transcribe the given audio into text without error.
- The application can successfully translate the transcribed audio to the specified language without errors.
- A user is able to upload or delete an audio file to the application without errors.
- Codes have been reviewed and approved by all team members.
- The app has been manually tested for usability and performance.
- Codes are documented with comments where necessary.



TEAM WORKING AGREEMENT

Definition of Done (Sprint DoD) for the Language

Translator App:

- All required presentation slides are complete
- The Wiki Page documents are posted and all links are responsive
- The retrospective, sprint planning, presentation, and demo videos are recorded and posted
- The Technical Paper and User Manual are complete (later Sprints)

Definition of Done (User Story DoD) for the Language

Translator App:

- Code has been reviewed by all team members
- Code has been tested by a team member



TEAM WORKING AGREEMENT

Team Member	Email
Kaali Lovell	kl18422n@pace.edu
Tanvi Prakash Gavali	tg17504n@pace.edu
Steve St Fleur	ss79968n@pace.edu
Pavan Polireddy	jp04368n@pace.edu
Rakesh Tirumala	rt33583n@pace.edu
Venkat Sai Pallapu	vp36147n@pace.edu



PERSONAS





JOSÉ RODRIGUEZ, DOCKS WORKER

Demographics:

- Age: 53
- Gender: Male
- Location: Louisiana, USA
- Education: High school diploma
- Experience: 15+ years

Skills and Qualifications:

- Forklift License
- Management in handling and securing cargo using forklifts
- Excellent team worker, organized, and physically capable

Goals and Needs:

- José is originally from Mexico but has relocated to USA for better working opportunities for his children. He can understand very little English as most of his coworkers speak Spanish as well. During his old age, he started having frequent visits to the doctors where they speak in English with him, which he has difficulty understanding. He does not want to burden his children with the task of translating, and wants to retain confidentiality between himself and his doctor. It is also expensive to hire professional translators - beyond his budget. Jose is looking for an application where he can converse with the doctors without any communication hindrances, and keep transcripts as part of his medical record - both before and after translation.





ANJALI CHITRE, LAWYER

Demographics:

- Age: 27
- Gender: Female
- Location: Edinburgh, UK
- Education: LLM in International Law
- Experience: 4+ years

Skills and Qualifications:

- Skilled in conducting in-depth research regarding international legal issues
- Proficient in explaining legal concepts and mediating in legal cases
- Professional, showcasing confidence and problem solving skills.

Goals and Needs:

- Anjali's job is to provide legal advice to multinational corporations who need to comply with different regulations for both their U.K and Swedish subsidiaries. To not disclose business information and legal strategies to a 3rd party, Anjali would like an application which can transcribe and translate discussion during meetings without breaching confidentiality or having to create further confidentiality agreements with translators.





NICOLE SCHULER, EXECUTIVE ADMINISTRATIVE ASSISTANT

Demographics:

- Age: 27
- Gender: Female
- Location: Toronto, CA
- Education: Bachelors of Business Administration (BBA)
- Experience: 1 years

Skills and Qualifications:

- Proficient in Excel, Microsoft Office, Outlook, Google Workspace
- Certified Administrative Professional (CAP)
- Excellent organizational, administrative, and interpersonal skills

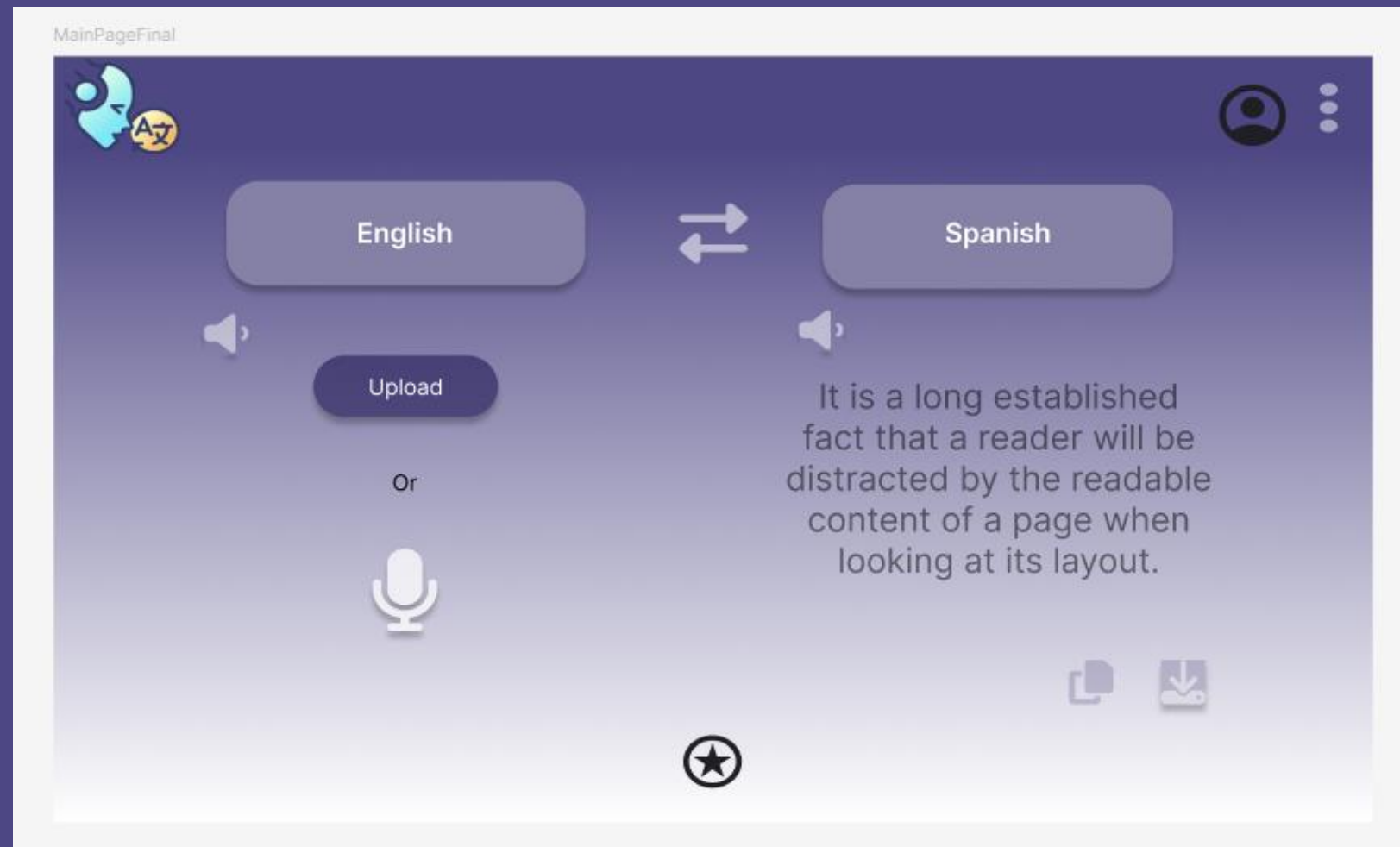
Goals and Needs:

- Nicole is originally from NYC but has relocated to Canada for work. Nicole has to attend daily meetings and transcribe the meetings for her higher-ups. Some of her co-workers switch between French and English in the meetings which frustrates Nicole since her native language is English and she has no experience with French. Nicole is looking for a tool that will help her efficiently transcribe the meetings and also assist with translating the French terms.





MVP DESIGN



■ Upload Audio

- User should be able to upload a .mp3 file from their computer.
- The application should not allow any other file type to be uploaded.
- User should be able to remove the audio file once it was uploaded.

■ Record Audio from Mic

- User should be able to use our application, SpeakEZ, to record audio.

■ Transcribe Audio

- The application should transcribe the audio that was uploaded by the user.

■ Language Selection:







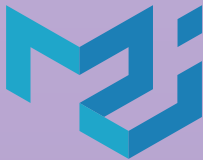

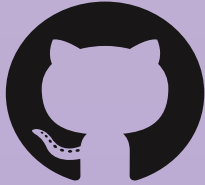




- User should be able to select the language they want to translate their transcription into.

■ Translate Transcription

- The application should translate the transcription in the language the user desires.



TECHNOLOGIES

Programming Languages and Frameworks	Libraries	Tools	Deployment
<div> HTML5</div> <div> CSS</div> <div> JavaScript</div> <div> React</div>	<div> Vite</div> <div> HuggingFace</div> <div> MaterialUI</div> <div> TailwindCSS</div>	<div> GitHub</div> <div> VSCode</div> <div> Figma</div> <div> Jira</div>	<div> Firebase</div>
<p>SpeakEZ uses these applications for the dynamic user interface.</p>	<ul style="list-style-type: none">• Vite- used to build and develop the front end for SpeakEZ• MaterialUI- React component for the user interface• TailwindCSS- CSS framework for creating responsive designs• HuggingFace- assists with building AI powered applications	<ul style="list-style-type: none">• GitHub- remote version control & collaborative development• VSCode- code editor• Figma- application brainstorming design• Jira- project management	<ul style="list-style-type: none">• Firebase database is used to store the user's translated and transcribed text.



ALGORITHMS

The application should be able to take audio as input and convert it into the desired language. To achieve this, we need an AI model for automatic speech recognition and speech translation. So, the most suitable neural network to use in order to perform this task is a Transformer.

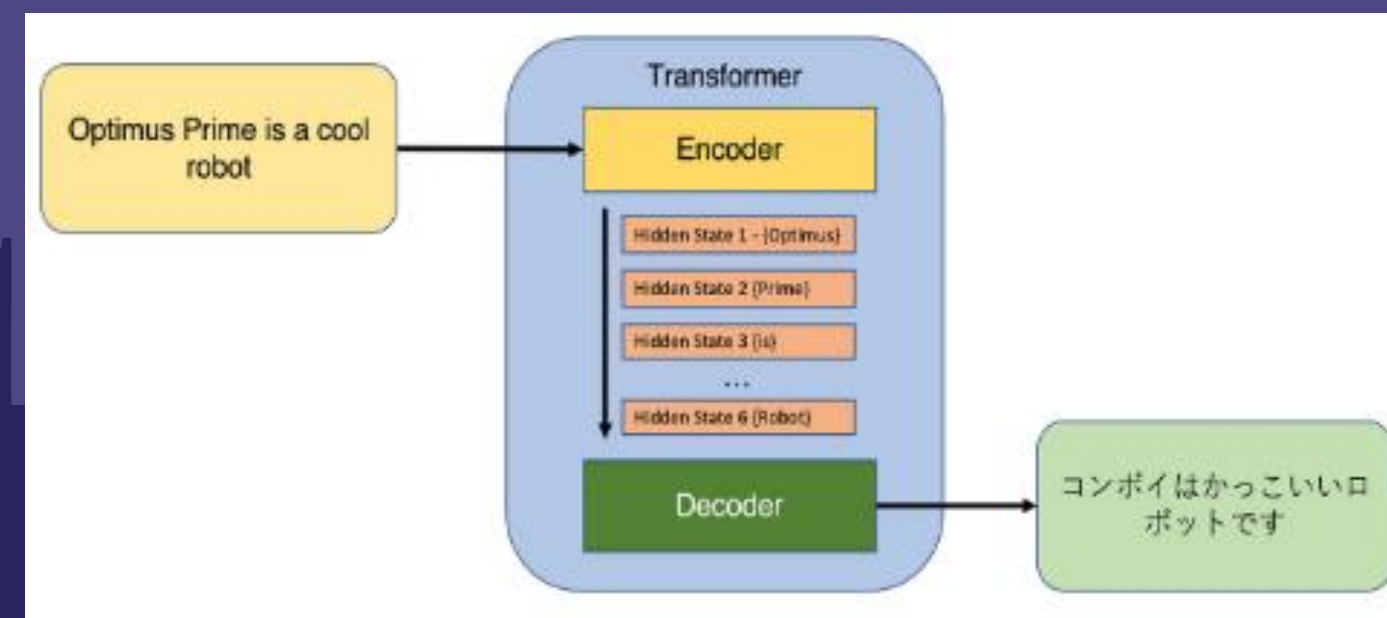




ALGORITHMS

A transformer is a neural network architecture especially designed for processing sequential data like natural language processing (NLP).

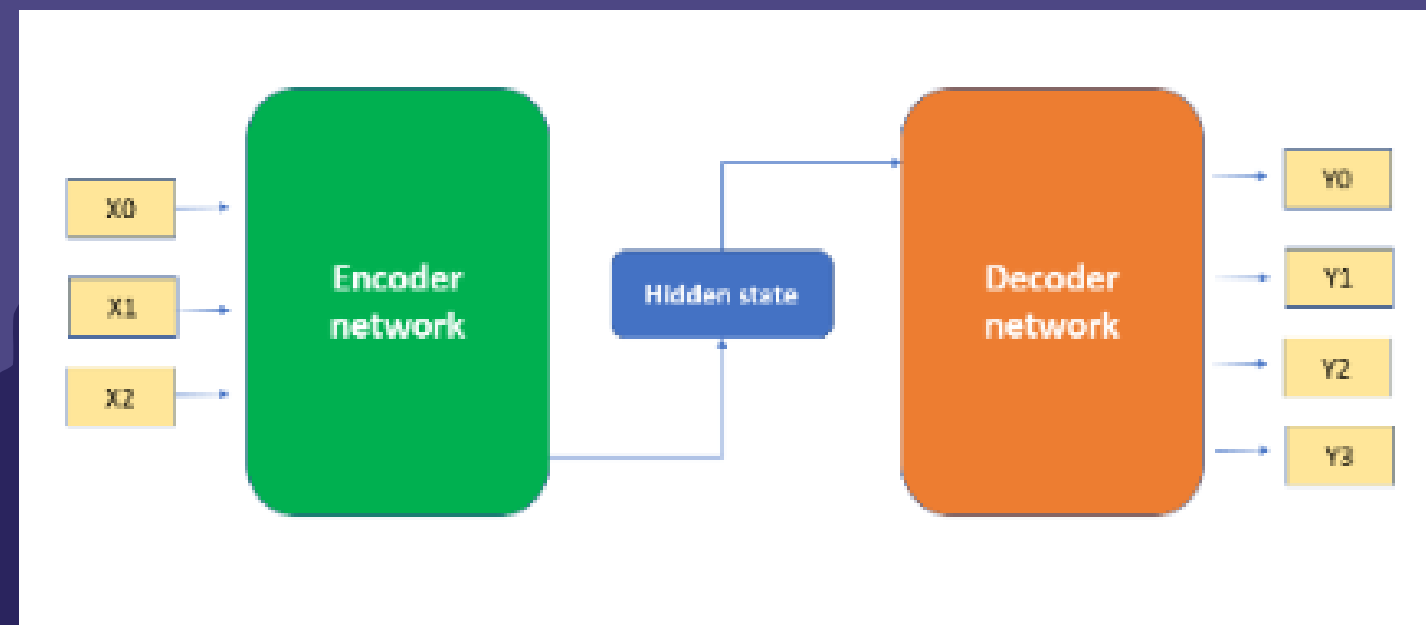
They usually use an encoder-decoder structure but make use of attention mechanism in order to capture relationships between elements in a sequence. Unlike RNNs, transformers process data in parallel which makes them faster and more scalable.





ALGORITHMS

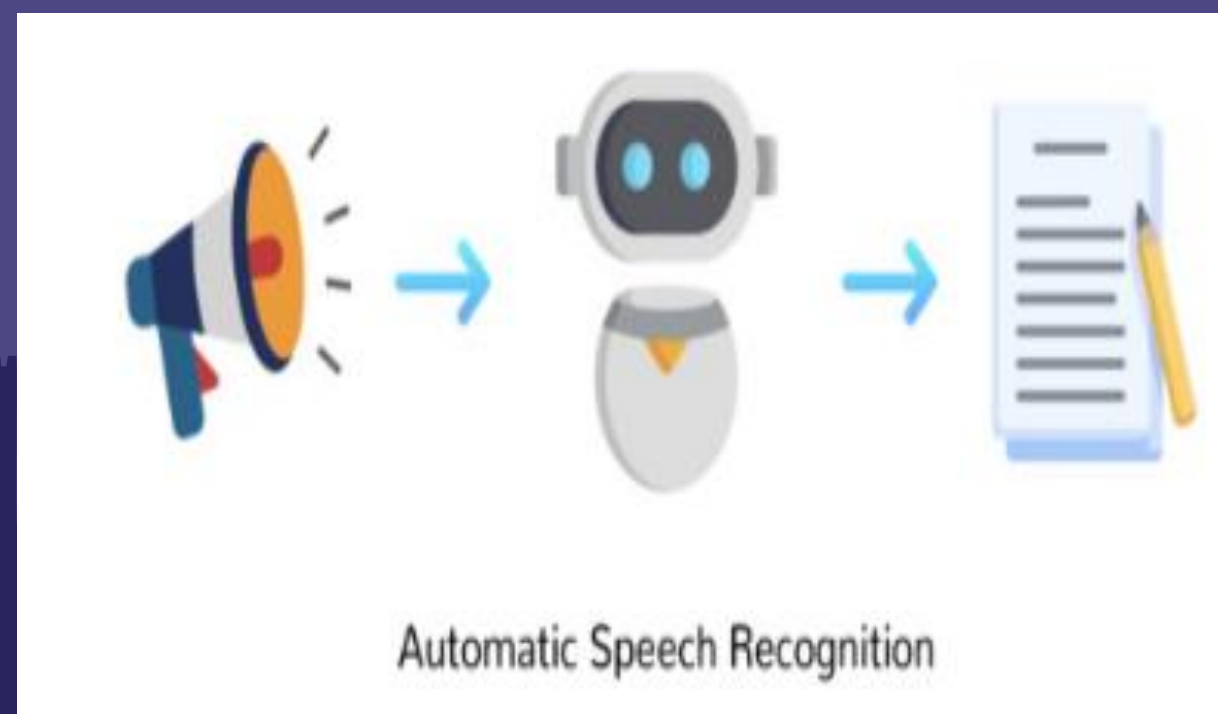
In the encoder-decoder structure, the encoder processes the input data, which can be text, audio, etc., and generates encodings. The decoder takes these encodings, uses the derived context, and generates the output sequence.





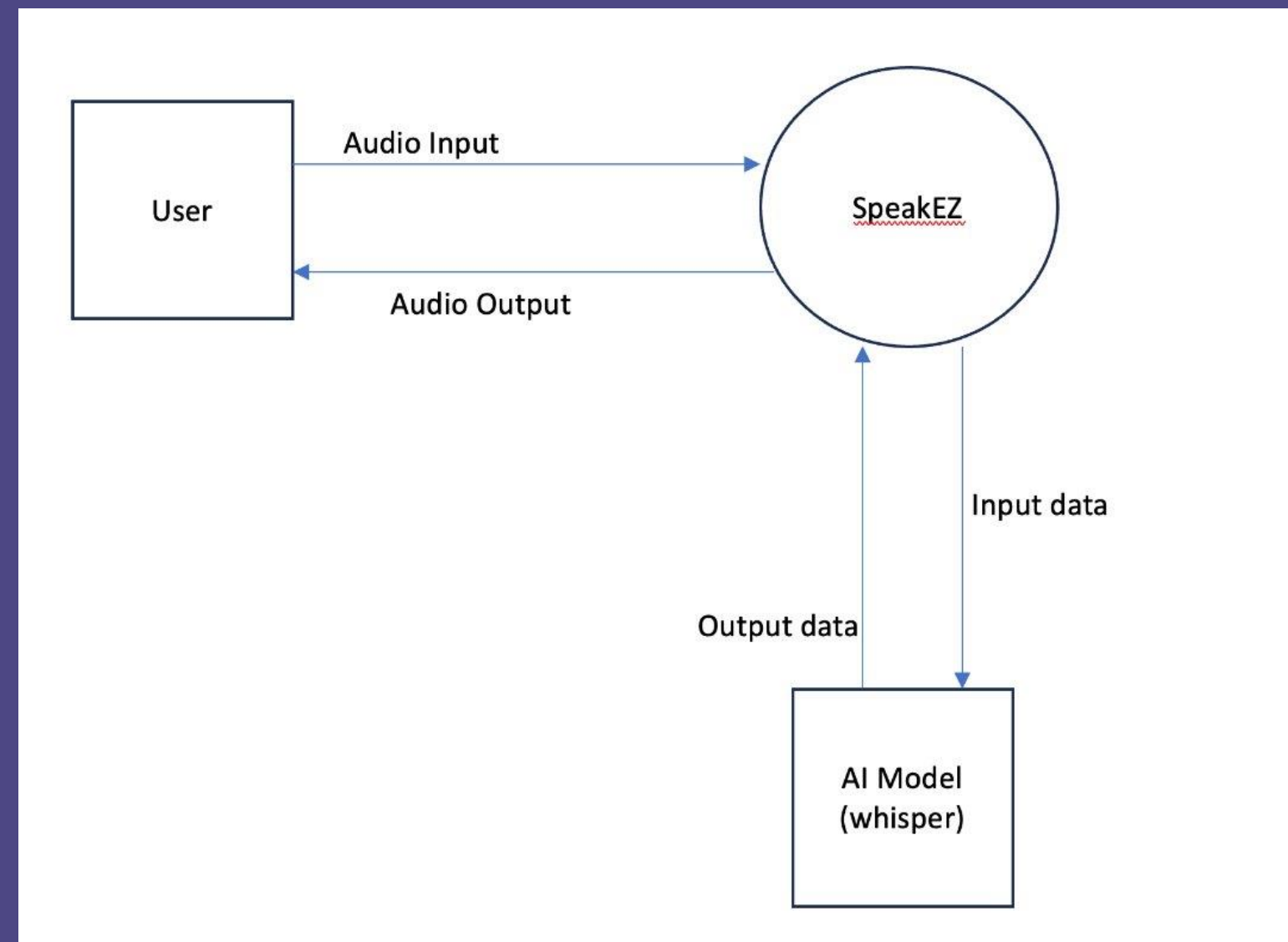
ALGORITHMS

Whisper is a transformer based on the encoder-decoder structure. It was trained on 680,000 hours of labelled speech data. The model can perform both speech recognition and speech translation.



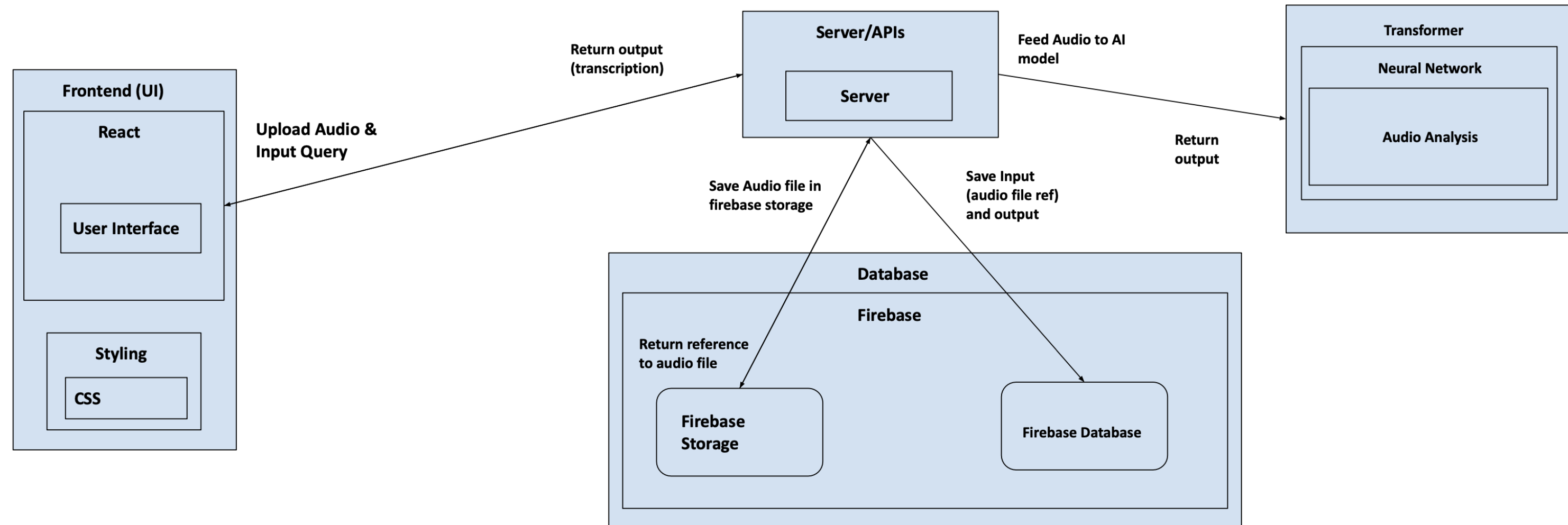


CONTEXT DIAGRAM



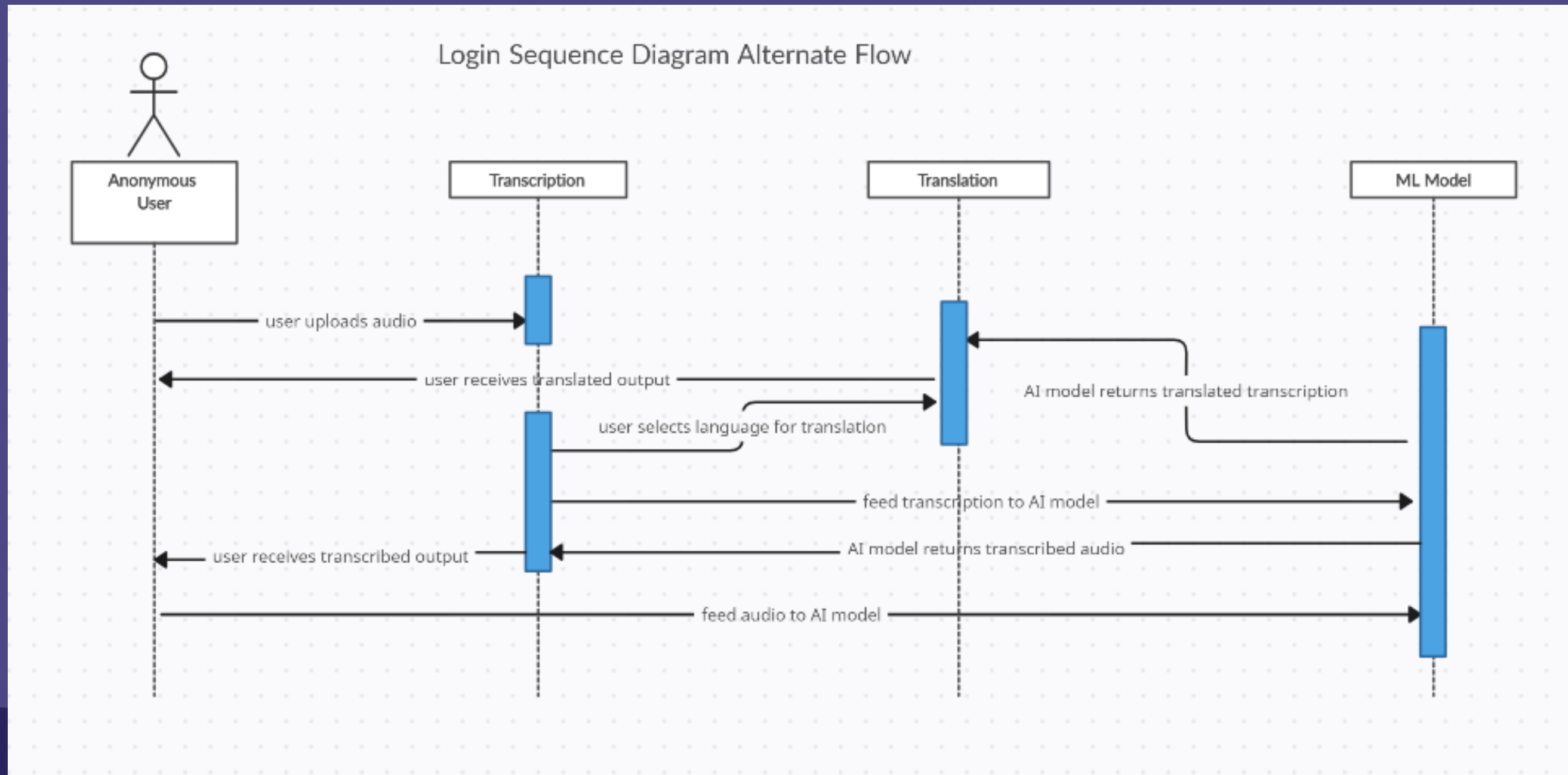


ARCHITECTURE DIAGRAM



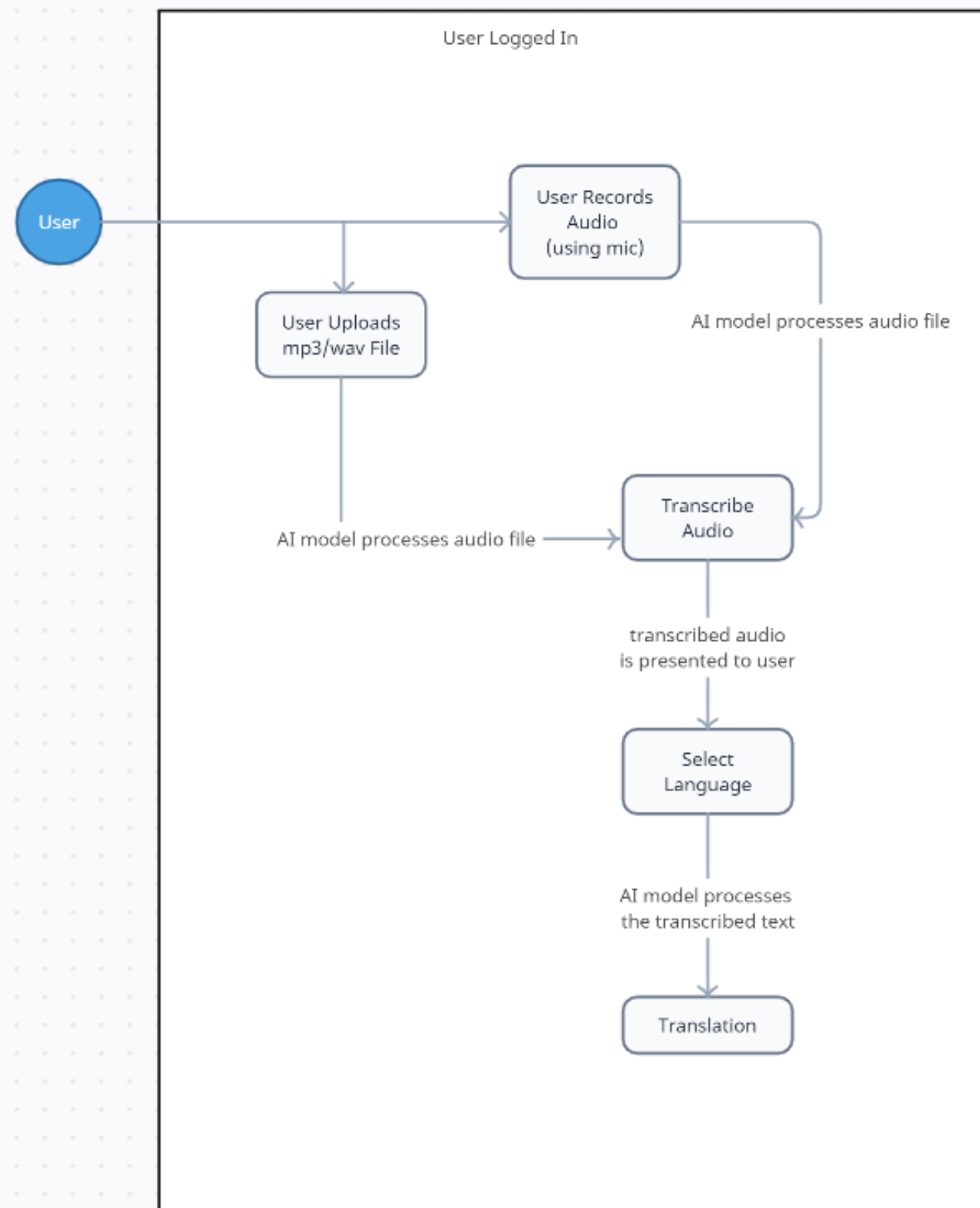


SEQUENCE DIAGRAM



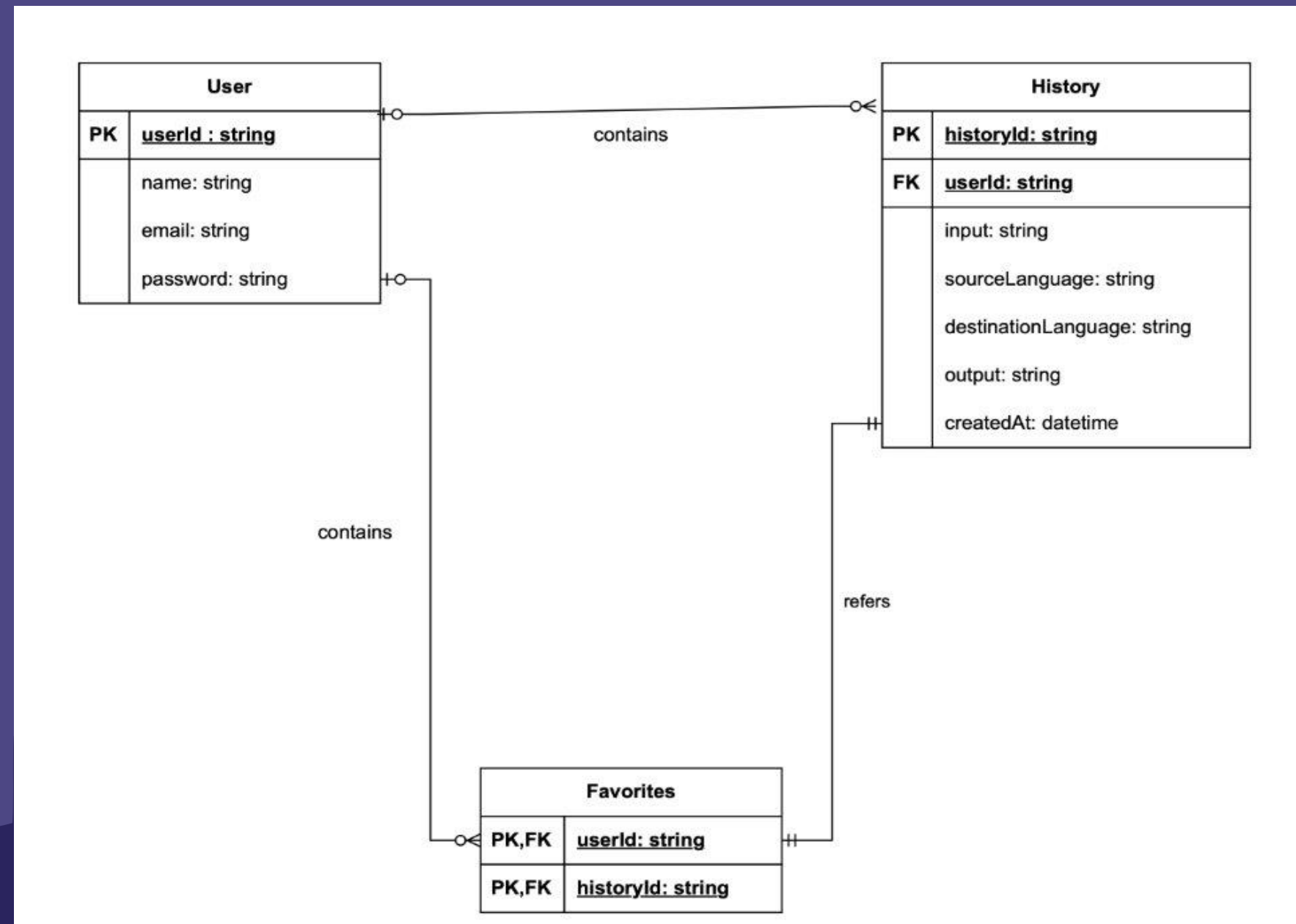


STATE DIAGRAM



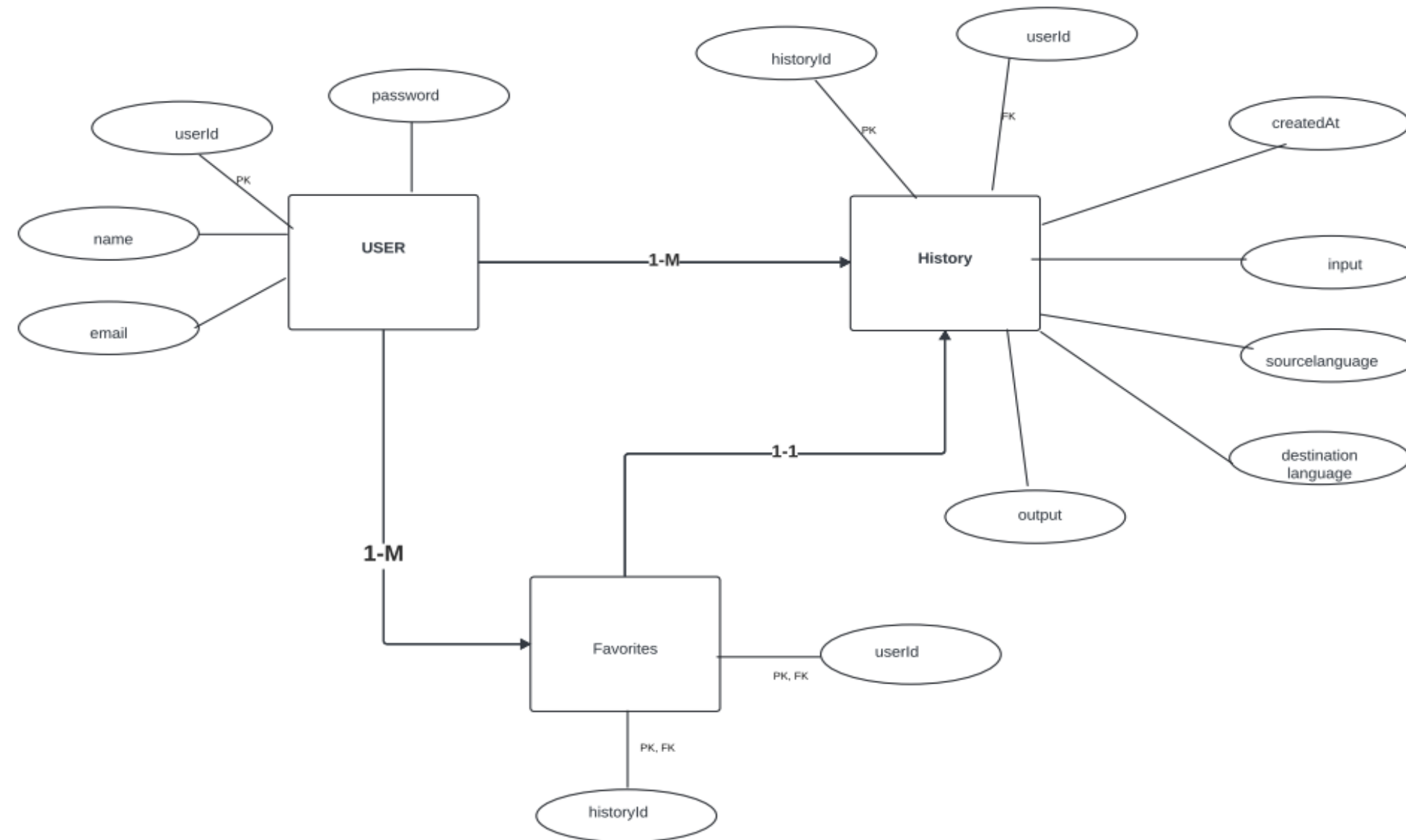


CLASS DIAGRAM





ER DIAGRAM





SPRINT 2 RECAP

- Updated the UI for the SpeakEZ application
- Upload audio file with maximum file size of 20MB
- Transcribe uploaded audio file in user's input language
- Translate user's transcription into English.
- Update user sign-in drop down as well as "Create Account" page
- 30 Story Points
- Completed 66% of the Story Points





SPRINT 3 RECAP

The following features were implemented into our application for Sprint 3:

- Audio input time limitation
- Dropdown for language selection
- Translation of text into other languages besides English
- Integrated a firebase database to allow users to create an account and login with SpeakEZ
- History page so users can see all past transcription and translation results
- Favorite button for saving the user's results they determine are of highest priority
- My Team Page and Help & Support Access Page
- Toggle button for Light/Dark mode for the UI

Completed 100% of the Story Points



PRODUCT BACKLOG

User Story ID	Point estimated	As a(n)	I want	So that	Feature
LTA-115	2	Admin	to have an "Upload" button.	I can easily select and upload a file for translation.	Upload Button
LTA-117	3	Admin	to see the progress of a file upload for translation .	I know when the upload is completed and the file is ready for translation.	Progress Indicator
LTA-146	3	Admin	to be notified about the progress of the audio file transcription.	I know the transcription is complete and ready for use.	Progress Indicator
LTA-145	2	Admin	to copy the transcribed text from the text box,.	I can use the transcription in other applications.	Copy Button
LTA-144	5	Admin	the transcribed text to be displayed in a text box after I upload an audio file.	I can view the transcription easily.	Text box
LTA-143	3	Developer	to ensure the Worker handles and processes messages from the Whisper model in correct order.	the transcription tasks are processed accurately and sequentially.	Worker Queue System
LTA-142	3	Developer	to send the audio data to the Whisper model for transcription.	I can obtain the transcribed text from the audio.	Whisper Model
LTA-141	3	Developer	to be able convert audio files into audio data.	the data can be processed for transcription by the Whisper model.	Whisper Model

The User Story ID Number is our Jira Ticket ID



PRODUCT BACKLOG

User Story ID	Point estimated	As a(n)	I want	So that	Feature
LTA-140	5	Developer	to implement worker functionality to handle incoming messages from the Whisper model.	the system can process audio transcription requests efficiently in the background.	Worker Functionality
LTA-139	5	Developer	to configure the integration with the AI model to process user audio or file input and display the translated output.	users can submit non-text inputs and receive an accurate translation.	AI Model
LTA-136	1	Admin	to see a header at the top of the page with a logo on the left.	I can easily identify the tool's branding.	Header with Logo
LTA-125	3	Admin	a dropdown menu for selecting the input language.	I can choose any available language for translation.	Dropdown Menu
LTA-123	3	Admin	to select the languages for translation before recording audio.	I can ensure the translation is done between my preferred languages.	Dropdown Menu
LTA-121	2	Admin	to be able to confirm or cancel my voice input after recording.	I can ensure the correct input is used for translation.	Confirm / Cancel buttons

The User Story ID Number is our Jira Ticket ID



PRODUCT BACKLOG

User Story ID	Point estimated	As a(n)	I want	So that	Feature
LTA-138	5	Admin	to configure the Firebase database by following the provided UML diagram	the database structure aligns with the system's requirements and functions efficiently.	Configure Firebase Database Based on UML Diagram
LTA-118	2	Customer	to be informed if the file I upload exceeds the size limit	I can upload a smaller file or take appropriate action.	File Size Limitation
LTA-116	1	Student	to see an error message when I upload an unsupported file type	I am informed about the file type restrictions and can take corrective action.	Error Message for Unsupported File Types
LTA-127	3	Teacher	to quickly copy the translated text	I can paste it into other applications.	Copy Translated Text
LTA-119	3	Diplomat	to have a "Microphone" button	I can record my voice input for translation without typing.	Microphone Button for Voice Input
LTA-124	2	Lawyer	to be informed if my audio recording exceeds a certain time limit	I can manage the length of my input and avoid losing the recording.	Audio Input Time Limitation
LTA-120	5	Doctor	the system to accurately translate my recorded audio into another language	I can understand the content in a different language.	Accurate Translation of Audio Input
LTA-122	2	Elderly user	to see visual indicator during the audio recording	I know when my voice is being recorded.	Audio Recording Indicator

The User Story ID Number is our Jira Ticket ID



PRODUCT BACKLOG

User Story ID	Point estimated	As a(n)	I want	So that	Feature
LTA-126	2	Student	a dropdown menu for selecting the output language	I can receive translations in any language of my choice.	Dropdown for Output Language Selection
LTA-131	3	Multilinguistic	the system to save all my past translations	I can access my full translation history at any time.	Ability to Save All Past Translations
LTA-129	2	Patient	to download the translated text in different file formats (e.g., .txt, .docx)	I can choose the format that best suits my needs.	Supported Formats for Downloaded File
LTA-128	2	Working Professional	a "Download" button next to the translated text	I can download and save the translated content for future use.	Download Button for Translated Text
LTA-151	1	Team	make necessary modifications in our project as per professor's feedback	we deliver better presentation next sprint	Improvement Feedback from Sprint 1
LTA-149	2	Team Member	update the wiki page with our current deliverable	customers can checkout our current progress for this sprint	Wiki Page for Sprint 2
LTA-148	5	Client	like to know more about the product through a detailed technical paper	I can have documented understanding of the product.	Technical Report
LTA-130	3	Accountant	to be able to reuse my past translations	I can revisit previous translations without re-entering the same text.	Ability to Reuse Past Translations
LTA-137	2	Frequent user	to access my profile and settings through dropdown menus on the right side of the header	I can manage my account and customize my	Dropdown Menus for Profile and Settings

The User Story ID Number is our Jira Ticket ID



PRODUCT BACKLOG

User Story ID	Point estimated	As a(n)	I want	So that	Feature
LTA-132	5	Student	a toggle button to switch between light and dark modes	I can change the interface based on my preference.	Toggle Button for Light/Dark Mode
LTA-133	3	Elder person	my theme preference (light or dark mode) to be saved	I can continue using my preferred mode across different sessions without resetting it.	Persisting Theme Preference Across Sessions
LTA-134	3	Editor	to mark a translation as a favorite by clicking a star icon	I can easily identify and access important translations later.	Marking and Unmarking a Translation as a Favorite
LTA-135	5	Artist	to access my saved favorite translations in a dedicated "Favorites" section	I can easily find and reuse my important translations.	Accessing Favorite Translations

The User Story ID Number is our Jira Ticket ID



SPRINT 3 BACKLOG

User Story ID	Point estimated	As a(n)	I want	So that	Feature
LTA-132	5	Admin	a toggle button to switch between light and dark modes	I can change the interface based on my preference.	Toggle Button for Light/Dark Mode
LTA-133	3	Admin	my theme preference (light or dark mode) to be saved	I can continue using my preferred mode across different sessions without resetting it.	Persisting Theme Preference Across Sessions
LTA-134	3	Admin	to mark a translation as a favorite by clicking a star icon	I can easily identify and access important translations later.	Marking and Unmarking a Translation as a Favorite
LTA-135	5	Admin	to access my saved favorite translations in a dedicated "Favorites" section	I can easily find and reuse my important translations.	Accessing Favorite Translations
LTA-124	2	Lawyer	to be informed if my audio recording exceeds a certain time limit	I can manage the length of my input and avoid losing the recording.	Audio Input Time Limitation
LTA-126	2	Student	a dropdown menu for selecting the output language	I can receive translations in any language of my choice.	Dropdown for Output Language Selection
LTA-138	5	Admin	to configure the Firebase database by following the provided UML diagram	the database structure aligns with the system's requirements and functions efficiently.	Configure Firebase Database Based on UML Diagram
LTA-131	3	Multilingualist	the system to save all my past translations	I can access my full translation history at any time.	Ability to Save All Past Translations

The User Story ID Number is our Jira Ticket ID



SPRINT 3 BACKLOG

User Story ID	Point estimated	As a(n)	I want	So that	Feature
LTA-130	3	Accountant	to be able to reuse my past translations	I can revisit previous translations without re-entering the same text.	Ability to Reuse Past Translations
LTA-181	5	Student	to log in with valid credentials or create an account if I am new	I can securely access my personalized data	Ability to Login/ Create Account
LTA-180	2	Admin	access to FAQ and customer support	I can resolve any issue I encounter with the app	FAQ Page
LTA-175	5	Developer	to install the application to a production environment	I can deploy it successfully	Installation Manual
LTA-176	5	Developer	to set up my development environment	I can extend functionalities in the future	Deployment Manual
LTA-177	3	Student	to have a detailed user manual for the application	I am aware of all the functionalities of this application	User Manual
LTA-178	2	Student	To delete the history from the history section	others may not be able to see my translations	Delete Button
LTA-179	5	Lawyer	to translate the output into the language selected from a dropdown	I can easily get translations in my preferred language	Translation Output

The User Story ID Number is our Jira Ticket ID



SPRINT 3 USER STORIES

Key	Summary	Criteria	Points
LTA-124	As a Lawyer, I want to be informed if my audio recording exceeds a certain time limit, so that I can manage the length of my input and avoid losing the recording		2
	Given a customer is using the record audio feature When they are recording audio Then they should be alerted if they are exceeding the recording time limit	The system enforces a maximum recording time (e.g., 2 minutes). An error message or notification is shown if the user exceeds the recording limit.	
LTA-126	As a Student, I want a dropdown menu for selecting the output language, so that I can receive translations in any language of my choice		2
	Given a student wants to translate their transcription When they click the dropdown menu Then they should see a list of output languages so they can translate their work	A dropdown menu is available next to the output field for selecting the output language. The dropdown displays a list of available languages for the user to choose from. The user can select any language from the list as the output language.	
LTA-138	As an Admin, I want to configure the Firebase database by following the provided UML diagram, so that the database structure aligns with the system's requirements and functions efficiently		5
	Given an Admin wants to configure a Firebase Database When following our provided UML diagram Then they can duplicate our production environment	Implement the database structure in Firebase as per the attached UML diagram Set up collections and documents to match the entities and relationships shown in the UML Verify the database supports the required operations (e.g. create, read, update, delete) Test the Firebase database setup to ensure it meets the system's performance and security standards	

The User Story ID Number is our Jira Ticket ID



SPRINT 3 USER STORIES

Key	Summary	Criteria	Points
LTA-134	As an Admin, I want to mark a translation as a favorite by clicking a star icon, so that I can easily identify and access important translations later		3
	Give an Admin wants to mark a translation as favorite When they click the favorite icon Then the icon turns a solid color and their translation is saved under favorite	A favorites(star)icon is displayed at the bottom of each translation Clicking the star icon marks the translation as a favorite A visual change(e.g. the star turns solid) occurs when a translation is marked as a favorite Clicking the star again unmark the translation as a favorite, and the visual indication reverts	
LTA-131	As a multilinguistic, I want the system to save all my past translations, so that I can access my full translation history at any time		3
	Given a Multilinguistic wants to review a past translation When they click on the "Show History" button Then all of their past translations appear for their review	The system automatically saves all translations made by the user. Users can access their full history of past translations from a dedicated section (e.g., "Translation History"). Past translations are stored persistently across sessions, allowing users	
LTA-135	As an Admin, I want to access my saved favorite translations in a dedicated "Favorites" section, so that I can easily find and reuse my important translations		3
	Given an Admin wants to access a past translation they marked as Favorite When they click the "Favorite" button Then they are shown their past translations that they marked as favorites	Marked favorite translations are saved in a "Favorites" section for easy access Users can open the "Favorites" section to view and reuse their saved translation Unmarked translations are removed from the "Favorites" section	

The User Story ID Number is our Jira Ticket ID



SPRINT 3 USER STORIES

Key	Summary	Criteria	Points
LTA-130	As an accountant, I want to be able to reuse my past translations, so that I can revisit previous translations without re-entering the same text		3
	Given an accountant wants to reuse their past translations When they click the "Show History" or "Favorite" button Then they will be able to view past translation and use them for their review	Users can view a list of their past translations. Users can select any past translation from the list to reuse it. The system automatically populates the input and output fields with the previously translated content when selected.	
LTA-178	As a Student, I want to delete the history from the history section so that others may not be able to see my past translations		2
	Given a Student wants to delete a past translation When they want to clear their history Then they can click the delete button in the history section of the application	Should include a delete button in the history section to delete specific translations The delete items should be permanently deleted	
LTA-181	As a Student, I want to log in with valid credentials or create an account if I'm new so that I can securely access my personalized data		5
	Given a student want to create an account with us When they click Login Then they can follow the instructions to create an account with us	Login: Users can log in using a valid email and password If credentials are incorrect, an appropriate error message is displayed Account Creation: Users can register for a new account by providing an email and password During registration, the system checks for existing accounts with the same email If an account already exists, an error message is displayed	

The User Story ID Number is our Jira Ticket ID



SPRINT 3 USER STORIES

Key	Summary	Criteria	Points
LTA-180	As an Admin, I want to access FAQs and customer support so that I can resolve any issues I encounter with the app		2
	Given I have a query When I click the FAQ section Then I can reach out to the customer support team to resolve any queries	The user can find the FAQ section in the app's main menu or settings	
LTA-132	As an Admin, I want a toggle button to switch between light and dark modes so that I can change the interface based on my preference		3
	Given an Admin wants to switch their screen to dark mode When they click "Dark Mode" Then the white part of their screen is transitioned into a darker shade	A toggle button is available to switch between light and dark modes Clicking the button immediately changes the interface colors according to the selected mode	
LTA-133	As an Admin, I want my theme preference (light or dark) to be saved, so that I can continue using my preferred mode across different sessions without resetting it		5
	Given I am an Admin When I switch my screen to dark mode and then redirect to another page in the application Then my screen should still be on dark mode	The system remembers the user's theme preference (light or dark mode) even after the session ends When the user returns, the interface loads in the previously selected mode.	

The User Story ID Number is our Jira Ticket ID



SPRINT 3 USER STORIES

Key	Summary	Criteria	Points
LTA-176	As a Developer, I want to set up my development environment, so that I can extend functionalities in the future		5
	Given I am a Student When I want to duplicate this project Then I can use the Deployment Manual to guide me	Guidelines on naming conventions and coding standards used in the application. Instructions on tests and code quality to keep consistency. Documentation to help understand the structure of the codebase. Steps to create and manage branches in the version control system. Steps for merging new features into the main branch Instructions for deploying updates to the production environment	
LTA-177	As a Student, I want to have a detailed user manual for the application, so that I am aware of all the functionalities of this application		3
	Given I am a Student When I want to use the SpeakeEZ application Then I can use the User Manual to guide me	Should have detailed steps on how to use the application as per the customer's perspective. Should be easy and quick to read and must be well-written. Users should be able to provide feedback and suggest improvements or report issues, including giving a preferable contact method.	

The User Story ID Number is our Jira Ticket ID



SPRINT 3 USER STORIES

Key	Summary	Criteria	Points
LTA-175	As a Developer, I want to install the application to a production environment so that I can deploy it successfully		5
	Given I am a Student When I want to install the application Then I can use the Installation Manual to guide me	The manual should include system requirements and software dependencies. It should include instructions for installing tools and software (IDE, version control, dependencies) It should include steps install any missing dependencies. Steps to clone project repository from version control system Instructions on running application locally Steps on how to download, install and start the application Should have a detailed instructions on setting up environment variables and configuration files. It should also include any probably common installation issues and their solutions.	
LTA-179	As a Lawyer, I want to translate the output into the language selected from a dropdown so that I can easily get translations into my preferred language		5
	Given I am a Lawyer When I need to translate audio into different languages Then I can select the dropdown to do so	A language dropdown menu is available, displaying a list of supported languages. The user can select a preferred language from the dropdown. The system translates the output text into the selected language and displays it in the output field.	

The User Story ID Number is our Jira Ticket ID



TEST CASES

The User Story ID Number is our Jira Ticket ID

User Key	User Story	Test Key	Test	SubTest	Test Steps	Expected Result	Actual Result	Pass/Fail
LTA-118	As a customer, I want to be informed if the file I upload exceeds the size limit, so that I can upload a smaller file or take appropriate action.	LTA-160	Verify File Upload Size Limit and Error Handling	<p>Confirm that the system supports file uploads up to the specified size limit (e.g., 20 MB).</p> <p>Test uploading files larger than the size limit and verify that an error message is displayed.</p> <p>Ensure the error message is clear and instructs the user on the file size limit.</p>	Browse -> upload mp3 > 20MB	Should throw an error message when file is uploaded more than 20MB.	An error message is displayed if tried to upload a file greater than 20MB.	PASS
LTA-116	As a student, I want to see an error message when I upload an unsupported file type, so that I am informed about the file type restrictions and can take corrective action.	LTA-161	Verify Error Message for Unsupported File Types	<p>Test uploading an unsupported file type and verify that an error message appears.</p> <p>Ensure the error message clearly specifies the supported file types.</p> <p>Check the error message format and clarity to ensure users can easily understand the restrictions.</p>	Browse -> upload mp4, doc	Should throw an error message for unsupported file types.	An error message is displayed if mp3 or other unsupported file types are uploaded.	PASS
LTA-127	As a teacher, I want to quickly copy the translated text, so that I can paste it into other applications.	LTA-162	Verify Copy Functionality for Translated Text	<p>Ensure a copy button is available next to the translated text.</p> <p>Verify that clicking the copy button copies the translated text to the clipboard.</p> <p>Check that a confirmation message (e.g., "Text copied") appears when the button is clicked.</p>	Browse -> upload mp3 file > click Translate > click 'copy' icon	<p>Text should be copied to clipboard.</p> <p>Should be able to paste the copied text</p>	<p>Text is copied to clipboard notifying the user.</p> <p>Able to paste the copied text on a notepad.</p>	PASS



TEST CASES

The User Story ID Number is our Jira Ticket ID

User Key	User Story	Test Key	Test	SubTest	Test Steps	Expected Result	Actual Result	Pass/Fail
LTA-119	As a diplomat, I want to have a "Microphone" button, so that I can record my voice input for translation without typing.	LTA-166	Verify Microphone Button Functionality for Voice Input	<p>Ensure the "Microphone" button is available for starting voice recording.</p> <p>Verify that clicking the "Microphone" button starts recording the user's audio input.</p> <p>Confirm that clicking the button again or reaching a time limit stops the recording.</p>	Click on microphone icon	<p>The "Microphone" button should be visible and accessible to the user for starting voice recording.</p> <p>Clicking should initiate the recording process, capturing the user's audio input.</p> <p>Clicking again or reaching a predefined time limit should stop the recording process.</p>	<p>The "Microphone" button should be visible and accessible to the user for starting voice recording.</p> <p>Clicking should initiate the recording process, capturing the user's audio input.</p> <p>Clicking again or reaching a predefined time limit should stop the recording process.</p>	PASS
LTA-120	As a doctor, I want the system to accurately translate my recorded audio into another language, so that I can understand the content in a different language.	LTA-172	Verify "Audio Translation" Functionality	<p>Ensure the system processes the recorded audio and translates it into the selected target language.</p> <p>Verify that the translation is displayed after the processing is completed.</p> <p>Check that the translation accurately reflects the meaning of the original audio input.</p>	Browse -> upload mp3 -> click 'translate'	<p>The system should process the audio input, and display the translated text.</p>	<p>The system processes audio input and displays as translated text successfully.</p>	PASS



TEST CASES

The User Story ID Number is our Jira Ticket ID

User Key	User Story	Test Key	Test	SubTest	Test Steps	Expected Result	Actual Result	Pass/Fail
LTA-122	As a elderly user, I want to see visual indicator during the audio recording, so that I know when my voice is being recorded.	LTA-159	Verify Visual Indicator for Audio Recording	<p>Ensure a visual indicator (e.g., blinking icon or sound wave animation) is displayed during the audio recording process.</p> <p>Confirm that the indicator stops when the recording is finished or cancelled.</p> <p>Test the responsiveness of the indicator to start and stop with the recording process.</p>	Click on microphone icon	<p>Should be able to see a visual red indicator when clicked on the microphone icon.</p> <p>Verify that the microphone icon reappears when the recording is stopped or canceled, transitioning back from the red indicator.</p>	<p>A red indicator is displayed when clicked on the microphone icon.</p> <p>The microphone icon reappeared when the recording was stopped or cancelled, transitioning back as expected.</p>	PASS
LTA-129	As a patient, I want to download the translated text in different file formats (e.g., .txt, .docx), so that I can choose the format that best suits my needs.	LTA-169	Verify File Format Download for Translated Text	<p>Ensure the system provides download options for formats such as .txt and .docx.</p> <p>Verify that clicking the download button generates the translated content in the selected format.</p> <p>Confirm that the content in the downloaded file matches the translated text (correct format and no data loss).</p>	Browse -> upload mp3 file > click Translate > click 'download' icon	When download icon clicked, a .txt file should be generated.	When download icon is clicked, the .txt file is generated.	PASS



TEST CASES

The User Story ID Number is our Jira Ticket ID

User Key	User Story	Test Key	Test	SubTest	Test Steps	Expected Result	Actual Result	Pass/Fail
LTA-128	As a working professional, I want a "Download" button next to the translated text, so that I can download and save the translated content for future use.	LTA-170	Verify "Download" Button Functionality	<p>Ensure the "Download" button is displayed next to the translated text.</p> <p>Verify that clicking the "Download" button triggers the download of the translated content.</p> <p>Check that the downloaded content matches the translated text exactly.</p>	Browse -> upload mp3 file > click Translate > click 'download' icon > open the downloaded .txt file	The .txt file should contain both the transcribed and translated text.	The .txt contains both text as expected.	PASS
LTA-149	As a team member, I would update the wiki page with our current deliverable so that customers can checkout our current progress for this sprint	LTA-173	Check updated wiki page	Test all updated links and if able to download in the required formats such as .xlsx, .docs and .mp4	Wiki link -> click all updated links	All links should allow function as required.	All links are functioning as expected.	PASS



TEST CASES

The User Story ID Number is our Jira Ticket ID

User Key	User Story	Test Key	Test	SubTest	Test Steps	Expected Result	Actual Result	Pass/Fail
LTA-137	As a frequent user, I want to access my profile and settings through dropdown menus on the right side of the header, so that I can manage my account and customize my preferences easily.	LTA-168	Verify Profile and Settings Dropdown Menus	<p>Ensure the "My Profile" dropdown is available on the right side, providing access to user profile details.</p> <p>Verify the "Settings" dropdown is present on the right side, offering options such as language and theme settings.</p> <p>Confirm that dropdown menus expand when clicked and collapse when not in use.</p>	Browse > upload mp3 file > Translate > Control + Shift + I (developer's tool)	<p>Profile dropdown and settings dropdown should be visible for user to access his profile.</p> <p>It should display correctly across all dimensions when responsive</p>	Profile dropdown and settings dropdown are showing for user to access his profile	Pass
		LTA-174	Testing Task: Test the responsiveness of dropdown menus across different screen dimensions	<p>Ensure the menu dropdown is displayed correctly and functions as expected across all screen dimensions when in responsive mode.</p> <p>Verify that the dropdown content is fully accessible and that there are no visual or functional issues at various screen sizes, including desktop, tablet, and mobile views.</p>	<p>Browse > upload mp3 file > Translate > Control + Shift + I (developer's tool)</p> <p>Try different screen dimensions to check the dropdown functionality</p>	<p>The menu dropdown should display correctly and function seamlessly across all screen dimensions when in responsive mode.</p> <p>It should be fully accessible and free of visual or functional issues on desktop, tablet, and mobile views.</p>	The dropdown displays correctly and the feature is working, but it is not responsive to different screen dimensions.	Fail



TEST CASES

The User Story ID Number is our Jira Ticket ID

User Key	User Story	Test Key	Test	SubTest	Test Steps	Expected Result	Actual Result	Pass/Fail
LTA-134	As a student, I want to mark a translation as a favorite by clicking a star icon, so that I can easily identify and access important translations later.	LTA-185	Verify Star Icon Presence	<p>Verify icon is displayed for each translation</p> <p>Ensure clicking the icon marks the translation as favorite.</p> <p>Ensure clicking the icon again unmarks the translation as favorite.</p> <p>Ensure there is a clearly visible "Favorites" section accessible from the main page or menu.</p> <p>Verify Favorites Section Accessibility</p>	Translate text > Click the star icon ->Locate the "Favorites" section in the UI.	The star icon should visually change when click on it to indicate the translation is marked as a favorite and reverts when click a second time to unmark the translation.	Star icon is visible after translation. Translations marked as favorite appeared in the favorite section and are remove once unmarked.	Pass
LTA-177	A dedicated "Favorite" section should clearly visible and accessible and the translation marked as favorite appears in that section.	LTA-187	Verify Presence of User Manual	<p>Ensure that the user manual is prominently visible in the project's GitHub repository and can be easily downloaded.</p> <p>Verify that the user manual includes clear, concise, and step-by-step instructions for each feature of the application.</p>	Open the web browser- > Go to the project's GitHub repository-> User manual	A "User Manual" section or link should be clearly visible and accessible in the project GitHub repository.	User Manual is visible and provides instruction for each feature.	Pass



TEST CASES

The User Story ID Number is our Jira Ticket ID

User Key	User Story	Test Key	Test	SubTest	Test Steps	Expected Result	Actual Result	Pass/Fail
LTA-180	As a language learner, I want to be able to contact the developers so that I can resolve any issues I encounter with the app.	LTA-190	Verify that the help button is visible.	Ensure that help icon is visible in the header of the website. Ensure customer support contact options are available (e.g., email)	Open application> Locate the help button.	Help button should be visible from the header of the website, and customer support contact options should also be available.	Help button is visible, and customer support options are available.	Pass
LTA-138	As an admin, I want to configure the Firebase database by following the provided UML diagram, so that the database aligns with the system's requirements and functions efficiently.	LTA-171	Verify Database connection.	Ensure the Firebase database structure matches the provided UML diagram. Ensure that entities and relationships are set up as per the UML diagram. Test Create, Read, Update, and Delete operations.	Open project in the Firebase Console. Go to Database > Data. Add, edit, or delete entries and verify real-time updates in the application.	The Firebase database collections and documents should align exactly with the UML diagram.	Database is configured as per provided UML diagram.	Pass
LTA-131	As a multilinguistic, I want all my past translations to be saved so that I can access my full translation history at any time.	LTA-165	Verify Translation Auto-Save Functionality.	Confirm that translations are saved automatically after being generated. Ensure users can view their full translation history in the dedicated section. Ensure translations are displayed in chronological order.	Generate a translation > Navigate to the "Translation History" section	The system should automatically save all translations made by the user.	Translations are saved and displayed in chronological order, with the most recent at the top.	Pass



TEST CASES

The User Story ID Number is our Jira Ticket ID

User Key	User Story	Test Key	Test	SubTest	Test Steps	Expected Result	Actual Result	Pass/Fail
LTA-134	As a professional, I want to delete the translations from the history section so that others may not be able to see my translations.	LTA-183	Verify Delete Button Presence in "Translation History"	Ensure each translation has a delete button. Ensure deleted translations cannot be restored.	Navigate to the Translation History section > Click clear history.	Past translations should be deleted when clicking on clear history button. Translations should permanently remove from the history section.	Translations are deleted and cannot be restored.	Pass
LTA-135	As a accountant, I want to be able to reuse my past translations, so that I can revisit previous translations without re-entering the same text.	LTA-163	Verify Translation History Visibility	Ensure the list of past translations is visible. Ensure smooth reuse of translations.	Navigate to the Translation History section > Check for the presence of a list of past translations.	A list of past translations should be displayed in the Translation History section. The selected translation should remain available and can be reused after logging back in.	List of past translations is displayed, and translations can be reused.	Pass
LTA-126	As a Student, I want a dropdown menu for selecting the output language, so that I can receive translations in any language of my choice.	LTA-	Verify Dropdown Language List	Ensure the dropdown is visible. Check the available languages. Ensure the user can select any language from the list as the output language.	Open the dropdown menu > Verify that it displays a list of available languages.	The dropdown should display a list of languages available for selection.	A list of languages is displayed.	Pass



TEST CASES

The User Story ID Number is our Jira Ticket ID

User Key	User Story	Test Key	Test	SubTest	Test Steps	Expected Result	Actual Result	Pass/Fail
LTA-179	As a language learner I want to translate the output into the language selected from a dropdown, so that I can easily get translations in my preferred language.	LTA-189	Verify Output Translation	Ensure output translation matches selected language.	Select a language > Enter text in the input field > Perform a translation.	The output text should translate into the selected language and displayed in the output field.	The output text is translated into the selected language and displayed in the output field..	Pass
LTA-132	As a professor, I want a toggle button to switch between light and dark modes, so that I can change the interface based on my preference.	LTA-186	Verify Theme mode	Ensure a toggle button is available to switch between light and dark modes. Ensure that clicking the button immediately changes the interface colors according to the selected mode.	Open the application > Theme Mode	Interface colors should change according to the selected mode.	Interface can be changed between light and dark modes	Pass
LTA-124	As a Lawyer I want to be informed if my audio recording exceeds a certain time limit, so that I can manage the length of my input and avoid losing the recording.	LTA-167	Verify audio recording time limit.	Ensure that an error message or notification is shown if the user exceeds the recording limit.	Click on microphone icon -> Start recording	An error message should appear when recording time limit is exceeded.	Error message is not displayed when time limit is exceeded.	Pass



TEST CASES

The User Story ID Number is our Jira Ticket ID

User Key	User Story	Test Key	Test	SubTest	Test Steps	Expected Result	Actual Result	Pass/Fail
LTA-180	As a student want to log in with valid credentials or create an account if I'm new, so that I can securely access my personalized data.	LTA-184	Verify login button	<p>Ensure users can register for a new account by providing an email and password.</p> <p>Ensure that a new account cannot be created if user is trying to use an email that is already associated with an existed account.</p>	Click on login button -> Or click on sign up button	<p>New user should be able to create an account.</p> <p>Existing users should be able to log into their account using their email and password.</p> <p>.</p>	Users can create an account and then login to their account after. New account cannot be created with existing email address.	Pass
LTA-175	As a new developer, I want to set up my development environment, so that I can extend functionalities in future.	LTA-188	Verify the deployment and Installation manual	Ensure that installation manual is visible, includes system requirements and software dependencies, and has detailed instructions on setting up environment variables and configuration files.	Open a web browser-> Go to the project's GitHub->Deployment and installation manual.	The installation manual should be clearly visible in the project's GitHub repository and must include a comprehensive list of all necessary system requirements	Installation manual is visible and includes all necessary detailed.	Pass



SPRINT 3 STORIES COMPLETED

Key	Summary	Criteria	Points
LTA-124	As a Lawyer, I want to be informed if my audio recording exceeds a certain time limit, so that I can manage the length of my input and avoid losing the recording		2
	Given a customer is using the record audio feature When they are recording audio Then they should be alerted if they are exceeding the recording time limit	The system enforces a maximum recording time (e.g., 2 minutes). An error message or notification is shown if the user exceeds the recording limit.	
LTA-126	As a Student, I want a dropdown menu for selecting the output language, so that I can receive translations in any language of my choice		2
	Given a student wants to translate their transcription When they click the dropdown menu Then they should see a list of output languages so they can translate their work	A dropdown menu is available next to the output field for selecting the output language. The dropdown displays a list of available languages for the user to choose from. The user can select any language from the list as the output language.	
LTA-138	As an Admin, I want to configure the Firebase database by following the provided UML diagram, so that the database structure aligns with the system's requirements and functions efficiently		5
	Given an Admin wants to configure a Firebase Database When following our provided UML diagram Then they can duplicate our production environment	Implement the database structure in Firebase as per the attached UML diagram Set up collections and documents to match the entities and relationships shown in the UML Verify the database supports the required operations (e.g. create, read, update, delete) Test the Firebase database setup to ensure it meets the system's performance and security standards	



SPRINT 3 STORIES COMPLETED

Key	Summary	Criteria	Points
LTA-134	As an Admin, I want to mark a translation as a favorite by clicking a star icon, so that I can easily identify and access important translations later		3
	Give an Admin wants to mark a translation as favorite When they click the favorite icon Then the icon turns a solid color and their translation is saved under favorite	A favorites(star)icon is displayed at the bottom of each translation Clicking the star icon marks the translation as a favorite A visual change(e.g. the star turns solid) occurs when a translation is marked as a favorite Clicking the star again unmark the translation as a favorite, and the visual indication reverts	
LTA-131	As a multilinguistic, I want the system to save all my past translations, so that I can access my full translation history at any time		3
	Given a Multilinguistic wants to review a past translation When they click on the "Show History" button Then all of their past translations appear for their review	The system automatically saves all translations made by the user. Users can access their full history of past translations from a dedicated section (e.g., "Translation History"). Past translations are stored persistently across sessions, allowing users	
LTA-135	As an Admin, I want to access my saved favorite translations in a dedicated "Favorites" section, so that I can easily find and reuse my important translations		3
	Given an Admin wants to access a past translation they marked as Favorite When they click the "Favorite" button Then they are shown their past translations that they marked as favorites	Marked favorite translations are saved in a "Favorites" section for easy access Users can open the "Favorites" section to view and reuse their saved translation Unmarked translations are removed from the "Favorites" section	



SPRINT 3 STORIES COMPLETED

Key	Summary	Criteria	Points
LTA-130	As an accountant, I want to be able to reuse my past translations, so that I can revisit previous translations without re-entering the same text		3
	Given an accountant wants to reuse their past translations When they click the "Show History" or "Favorite" button Then they will be able to view past translation and use them for their review	Users can view a list of their past translations. Users can select any past translation from the list to reuse it. The system automatically populates the input and output fields with the previously translated content when selected.	
LTA-178	As a Student, I want to delete the history from the history section so that others may not be able to see my past translations		2
	Given a Student wants to delete a past translation When they want to clear their history Then they can click the delete button in the history section of the application	Should include a delete button in the history section to delete specific translations The delete items should be permanently deleted	
LTA-181	As a Student, I want to log in with valid credentials or create an account if I'm new so that I can securely access my personalized data		5
	Given a student want to create an account with us When they click Login Then they can follow the instructions to create an account with us	Login: Users can log in using a valid email and password If credentials are incorrect, an appropriate error message is displayed Account Creation: Users can register for a new account by providing an email and password During registration, the system checks for existing accounts with the same email If an account already exists, an error message is displayed	



SPRINT 3 STORIES COMPLETED

Key	Summary	Criteria	Points
LTA-180	As an Admin, I want to access FAQs and customer support so that I can resolve any issues I encounter with the app		2
	Given I have a query When I click the FAQ section Then I can reach out to the customer support team to resolve any queries	The user can find the FAQ section in the app's main menu or settings	
LTA-132	As an Admin, I want a toggle button to switch between light and dark modes so that I can change the interface based on my preference		3
	Given an Admin wants to switch their screen to dark mode When they click "Dark Mode" Then the white part of their screen is transitioned into a darker shade	A toggle button is available to switch between light and dark modes Clicking the button immediately changes the interface colors according to the selected mode	
LTA-133	As an Admin, I want my theme preference (light or dark) to be saved, so that I can continue using my preferred mode across different sessions without resetting it		5
	Given I am an Admin When I switch my screen to dark mode and then redirect to another page in the application Then my screen should still be on dark mode	The system remembers the user's theme preference (light or dark mode) even after the session ends When the user returns, the interface loads in the previously selected mode.	



SPRINT 3 STORIES COMPLETED

Key	Summary	Criteria	Points
LTA-176	As a Developer, I want to set up my development environment, so that I can extend functionalities in the future		5
	Given I am a Student When I want to duplicate this project Then I can use the Deployment Manual to guide me	Guidelines on naming conventions and coding standards used in the application. Instructions on tests and code quality to keep consistency. Documentation to help understand the structure of the codebase. Steps to create and manage branches in the version control system. Steps for merging new features into the main branch Instructions for deploying updates to the production environment	
LTA-177	As a Student, I want to have a detailed user manual for the application, so that I am aware of all the functionalities of this application		3
	Given I am a Student When I want to use the SpeakeEZ application Then I can use the User Manual to guide me	Should have detailed steps on how to use the application as per the customer's perspective. Should be easy and quick to read and must be well-written. Users should be able to provide feedback and suggest improvements or report issues, including giving a preferable contact method.	



SPRINT 3 STORIES COMPLETED

Key	Summary	Criteria	Points
LTA-175	As a Developer, I want to install the application to a production environment so that I can deploy it successfully		5
	Given I am a Student When I want to install the application Then I can use the Installation Manual to guide me	The manual should include system requirements and software dependencies. It should include instructions for installing tools and software (IDE, version control, dependencies) It should include steps install any missing dependencies. Steps to clone project repository from version control system Instructions on running application locally Steps on how to download, install and start the application Should have a detailed instructions on setting up environment variables and configuration files. It should also include any probably common installation issues and their solutions.	
LTA-179	As a Lawyer, I want to translate the output into the language selected from a dropdown so that I can easily get translations into my preferred language		5
	Given I am a Lawyer When I need to translate audio into different languages Then I can select the dropdown to do so	A language dropdown menu is available, displaying a list of supported languages. The user can select a preferred language from the dropdown. The system translates the output text into the selected language and displays it in the output field.	



SPRINT 3 STORIES NOT COMPLETED

All User Stories Were Completed





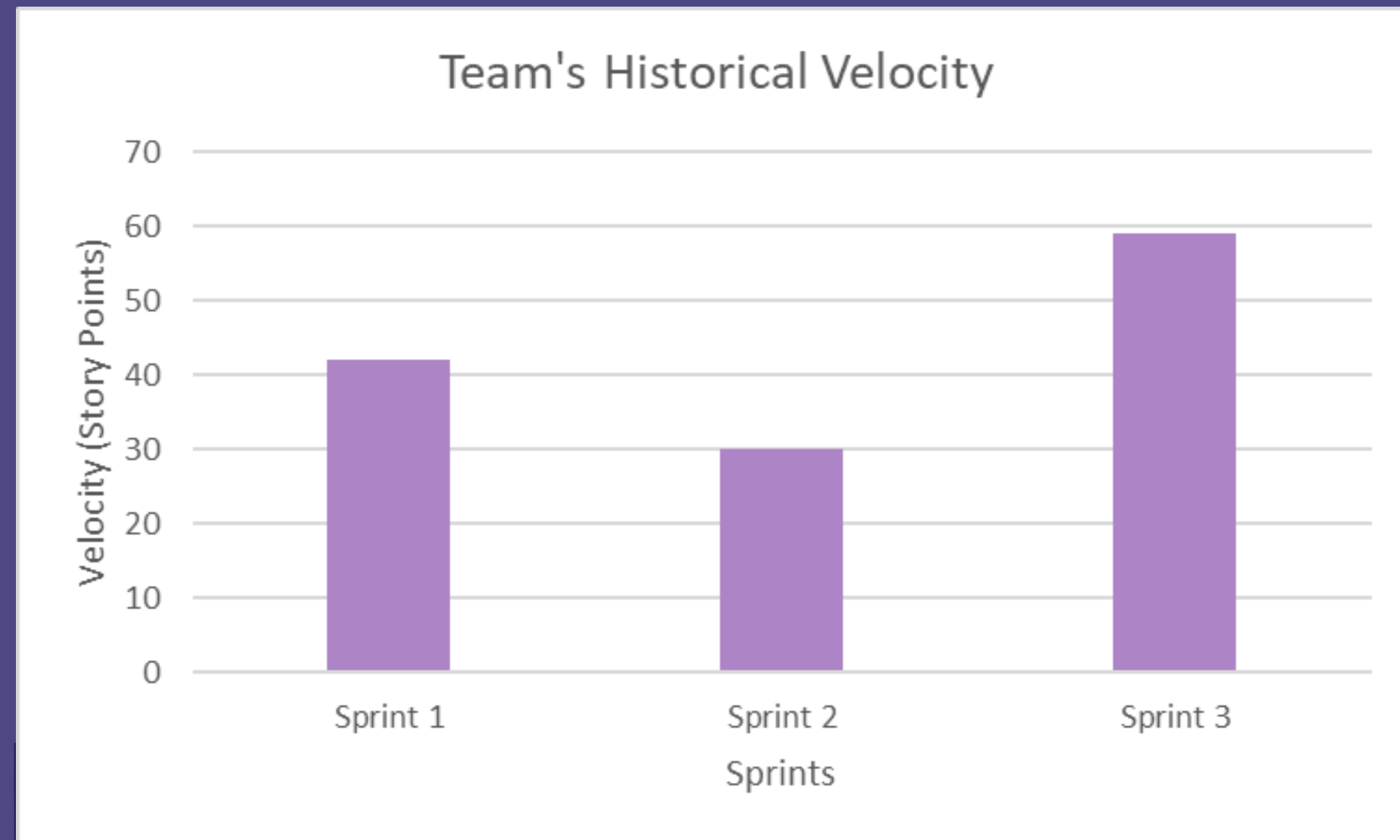
TEAM VELOCITY- SPRINT 3

TOTAL STORY POINT COMPLETED: 59 POINTS



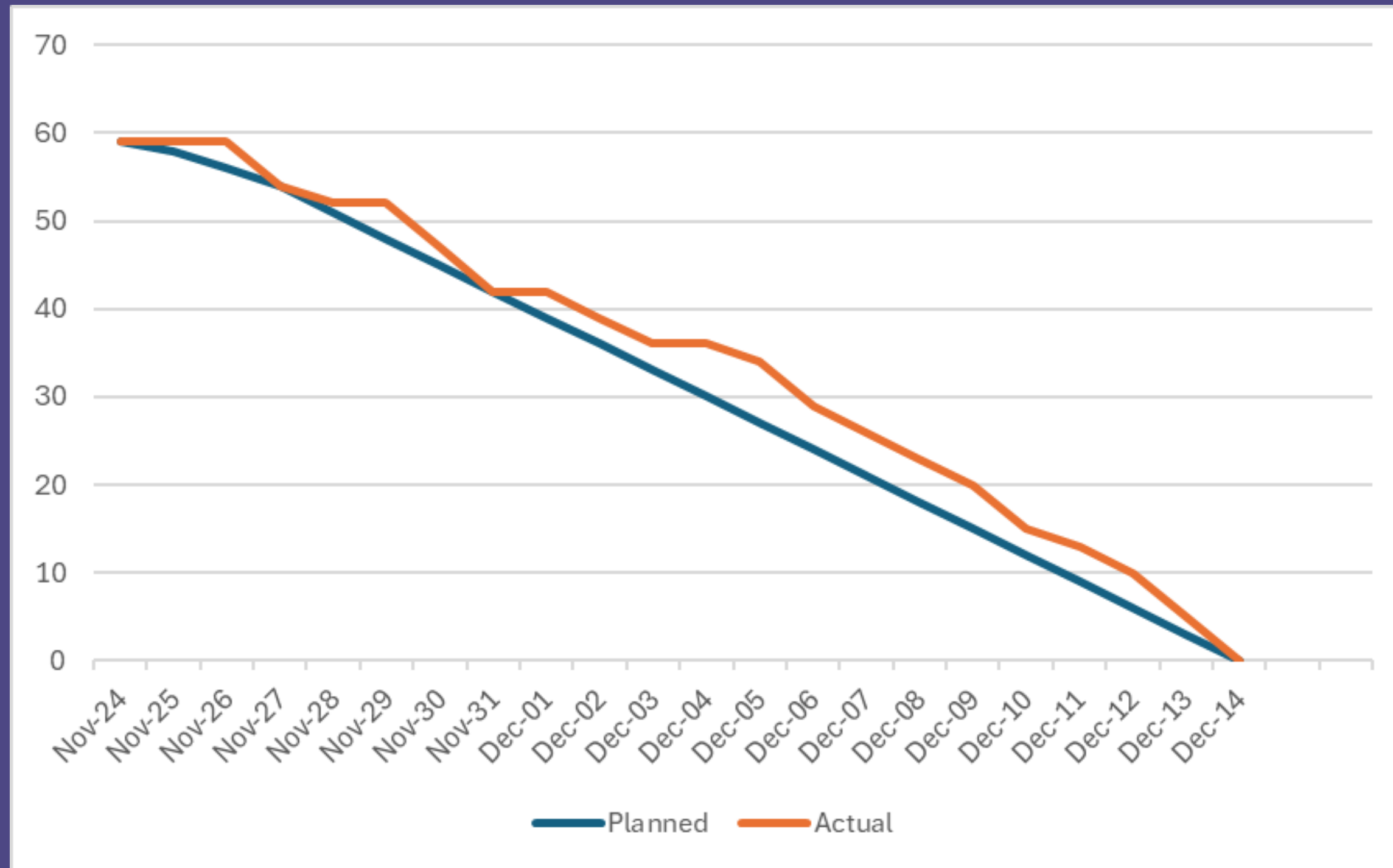


TEAM'S HISTORICAL VELOCITY(AVERAGE)





BURNDOWN CHART





COMPLETED / COMMITTED RATIO

Completed Story Points = 59

Committed Story Points = 59

Completed/committed Ratio = 59/ 59

100%






RETROSPECTIVE

Awesome, Retrospective completed!

Here are the results:


Sprint 3

created: 12-12-2024 17:37



14

cards created




6


users joined




1

action items created











RETROSPECTIVE

What went well

What were you happy about this sprint

Kudos! we are in our last sprint



TANVI

The team worked well together this sprint. We had good communication and collaboration. Also, everyone made an effort to share updates regularly.



STEVE

What needs to be improved

What are some areas we could do better in

We improved ourselves in each sprint and nothing to point out specifically at this point. However, if something I would change for my next project is to have a better idea on the approaches we are going to follow to develop an application and stick to that following the standard coding and agile practices



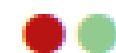
PAVAN POLIREDDY

Gather more user feedback and refine the product.



VENKAT SAI PALLAPU

initiate more proactively to take the tasks



TANVI

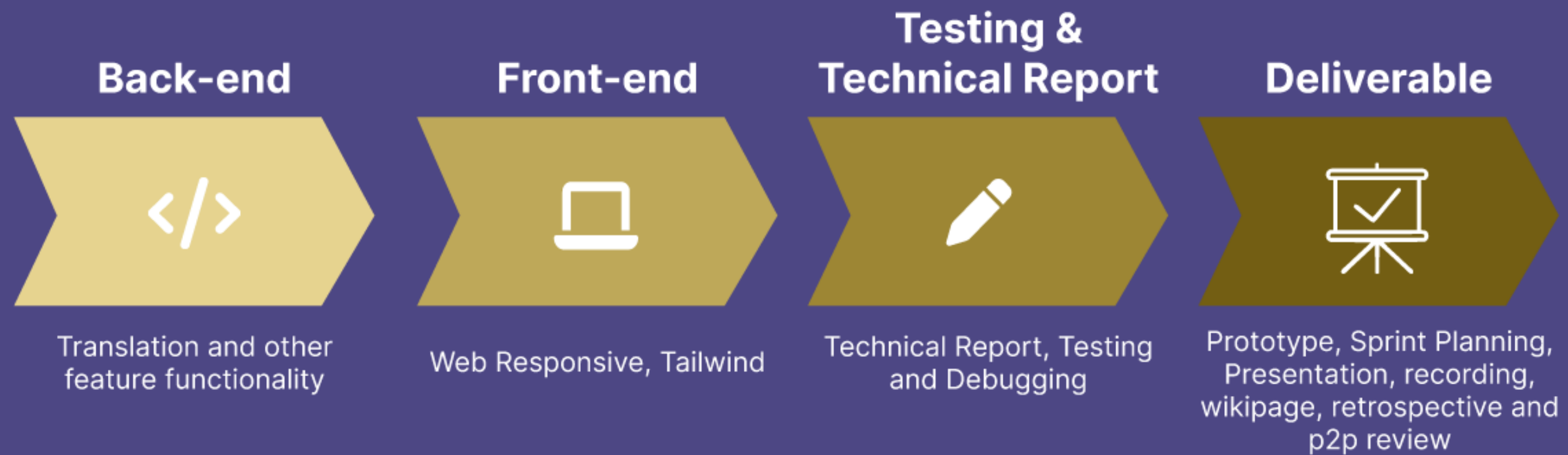
Action Items

If a team member do not have lot of tasks please make it a point to ask others if they need assistance

ATM

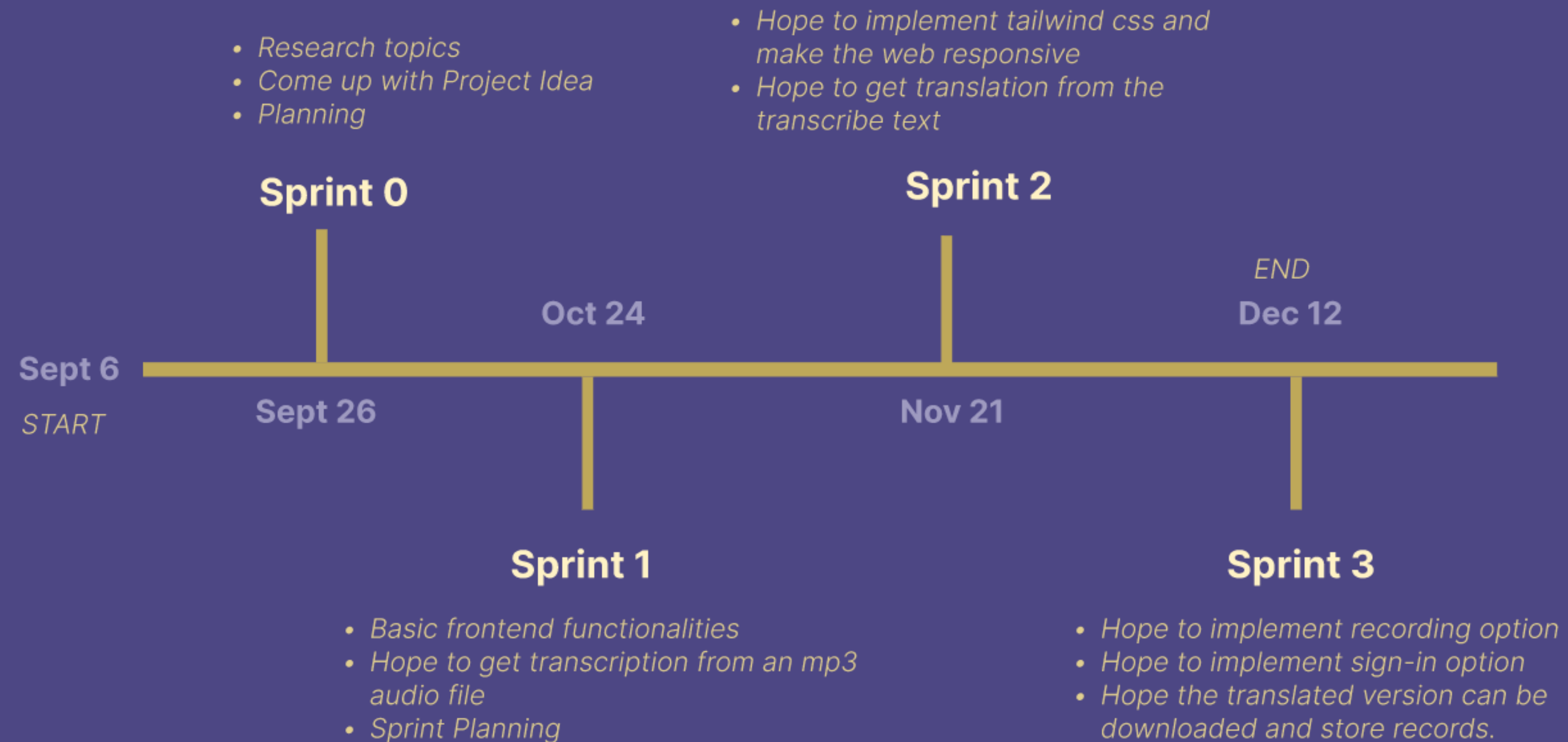


TIMELINE





PROJECT SCHEDULE





SPEAKEZ SCREENSHOT



Login

Dark Mode

Create a new account

Name

Email address

Password


Confirm Password

Sign Up

Already a member? [Login](#)



SPEAKEZ SCREENSHOT



LogoutDark Mode

Drag and drop or [browse](#) your file

polish.mp3

Output Language

German

Translate

Transcription

Jak się masz?

Translation

Wie geht es dir?

Translation History

Chinese → Spanish

你好嗎?

¿Hola?

Chinese → French

你好嗎?

Allô ?

Polish → German

Jak się masz?

Wie geht es dir?

[Clear History](#)



SPEAKEZ AI MODEL INTEGRATION

```
const translate = async () => {
  setLoading(true);
  try {
    const formData = new FormData();
    formData.append("audioFile", file);
    const response = await fetch("http://localhost:3000/transcribe", {
      method: "POST",
      body: formData,
    });
    if (response.ok) {
      const res = await response.json();
      setOutput(res);
    } else {
      console.error("Failed to process file");
    }
  } catch (error) {
    console.error("Error while processing file:", error);
  } finally {
    setLoading(false);
  }
};
```

```
app.post("/transcribe", upload.single("audioFile"), (req, res) => {
  if (!req.file) {
    return res.status(400).json({ error: "Audio file is required" });
  }

  const tempFilePath = path.join(os.tmpdir(), `audio_${Date.now()}`);

  fs.writeFile(tempFilePath, req.file.buffer, (err) => {
    if (err) {
      return res.status(500).json({ error: "Failed to save audio file" });
    }

    transcribeAndTranslate(tempFilePath)
      .then((response) => {
        fs.unlink(tempFilePath, (err) => {
          if (err) console.error("Error deleting file:", err);
        });
        res.json(response);
      })
      .catch((err) => {
        console.error("Error during transcription and translation:", err);
        fs.unlink(tempFilePath, (err) => {
          if (err) console.error("Error deleting file:", err);
        });
        res.status(500).json({ error: "Transcription or translation failed" });
      });
  });
});
```



SPEAKEZ AI MODEL INTEGRATION

```
const transcribeAndTranslate = (filePath) => {  
  return new Promise((resolve, reject) => {  
    const pythonProcess = spawn("python", ["helper.py", filePath]);  
  
    let response = "";  
  
    pythonProcess.stdout.on("data", (data) => {  
      response += data.toString();  
    });  
  
    pythonProcess.stderr.on("data", (data) => {  
      console.error("Error:", data.toString());  
    });  
  
    pythonProcess.on("close", (code) => {  
      if (code !== 0) {  
        return reject("Error: Transcription and translation process failed");  
      }  
      try {  
        const parsedResponse = JSON.parse(response);  
        resolve(parsedResponse);  
      } catch (error) {  
        reject("Error parsing response");  
      }  
    });  
  });  
};
```

```
import whisper  
import sys  
import librosa  
import json  
import os  
  
def transcribe_and_translate_audio(file_path):  
    file_path = file_path.strip()  
    model = whisper.load_model("base")  
  
    audio, sr = librosa.load(file_path, sr=16000)  
  
    transcription_result = model.transcribe(audio)  
    original_text = transcription_result['text']  
  
    translation_result = model.transcribe(audio, task="translate")  
    translated_text = translation_result['text']  
  
    return original_text, translated_text  
  
if __name__ == "__main__":  
    file_path = sys.argv[1].strip()  
  
    original_text, translated_text = transcribe_and_translate_audio(file_path)  
  
    print(json.dumps({"transcription": original_text, "translation": translated_text}))  
  
    if os.path.exists(file_path):  
        os.remove(file_path)
```




SPEAKEZ DEMO

[Sprint 1 Demo Link](#)

[Sprint 2 Demo Link](#)

[Sprint 3 Demo Link](#)





WIKIPAGE LINK

<https://github.com/htmw/2024F-Bytes/wiki>

Welcome to the 2024F-Bytes wiki!

SpeakEZ - Pace University Capstone Project



Live Website: Coming Soon.

[Send an email to Team Bytes!](#)

Pages 1

Find a page...

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SpeakEZ - Pace University
Capstone Project

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Team Members

Project Design

Brainstorming Design

Languages and Tools

Programming Languages and
Frameworks

Libraries

Tools

Deployment

SpeakEZ Final Artifacts

Application Manuals

SpeakEZ Technical Paper



THANK YOU!

- Do you have any questions?

