

SPRINT - 2

GROUP - 12

TALE TUNERS

Suguna Garmidi - 11667555 (Scrum Master)

Shravya Kandukuri - 11698456

Sagara Pravalika Garlapati - 11592528

Tharuni Sri Reddy Gangaram - 11706904

Hrithik Reddy Ravulapalli - 11709725

Sai Krishna Kanth Bandi - 11708632

Sai Venkat Raparathi - 11653770

Hyperlink to GitHub project: <https://github.com/users/sugunagar/projects/1>

INTRODUCTION:

TITLE TAG:

Enhancing Sleep for Kids with the Soothing Voice of their Loved Ones.

SOFTWARE VISION:

This Web application is specifically designed **FOR** kids **WHO** are far away from their loved ones, particularly their parents, and experience a longing for their presence and love. **THE** “Tale Tuners” is a personalized web-based application/service provider **THAT** helps to listen to bedtime stories from the voice of their parents. **UNLIKE** the existing audiobooks, **OUR** web application allows the users to upload their recorded voice which can be accessed by their kids at any time from any location. This “Tale Tuners” fosters strong emotional connections between kids and their parents, even when they are physically distant from each other. In addition to providing a default voice for story narration, our web application offers unique profile creation for each user and user suggestions for stories based on their favorite genre.

USER STORIES:

- 1. Profile Creation and login:** **As a** Parent(new user), **I want** to create a profile on the platform, **so that** I can access personalized features and services.
As a child, **I want** to log in to the parent-created profile, **so that** I can access and listen to the already uploaded recordings.
- 2. Genre Selection:** **As a** parent or guardian, **I want** to introduce my child to a variety of genres, **so that** they can develop diverse reading interests and expand their imagination.
- 3. Options:** **As a** parent, **I want** to view the options available, whether it is a voice recording option or only the system voice **so that** I can select the option I need.
- 4. Displaying Story:** **As a** Parent, **I want** to view the story details and summary of a selected book, **so that** I can introduce my child to a variety of preferences.

5. Record Voice: **As a** parent, after choosing the options, **I want** to record stories with my voice(the voice of the loved ones), **so that** my child can access and listen to the stories.

6. Time Restrictions: **As a** Parent, **I want** to set a timer, **so that** the child can be notified of the listening time. And can listen to the recordings and sleep at the right time.

7. Folder of Favorites: **As a** parent, **I want** to add the stories that my child likes the most into a favorites folder **so that** I can view or play those books whenever I need them.

8. Suggestions: **As a** reader/parent looking for new books, **I want** to explore suggestions based on the most played books, **so that** I can find captivating stories that resonate with my child's interest.

As a parent, **I want** to be able to select a suggestion from the list and have it automatically populate the search box, **so that** I can save time and effort in typing.

As a parent, **I want** to see the loading spinner or progress indicator while the suggestions are being fetched, **so that** I know the system is working on providing me with the suggestions.

ACTIVE USER STORIES:

1. Audio Options

As a parent, **I want** to have a look at the options that are available whether the given ones are voice recording or only the system voice, **so that** I could have a choice in selecting the option which I need.

2. Summary of Story Books

As a parent, **I want** to view the story details and summary of a selected book, **so that** I can introduce my child to a variety of preferences.

3. Availability of Story Books

As a kid/parent, **I want** to see the available story books, **so that** I can select a tale of my choice.

TASKS AND SPIKES OF USER STORIES:

User Story - 1

Related Tasks:-

- Audio Options.
- Providing recording options.

User Story - 2

Related Tasks:-

- Displaying the story on click(uploading)

User Story - 3

Related Tasks:-

- Admin.css,user.css,styles.css
- View Story Books

Spikes:-

- Saving recorded files
- Users table, storybooks storage, audio data, pdf evaluation (backend database)
- Admin Console
- Storybook as pdf/API's link
- Researching for storybooks to store
- Storing and retrieving stories from the database
- Forgot password service(research)

What Was Planned:- For sprint 2, the idea was to implement 3 user stories.

What Was Done:- As we planned we have done those features.

Deviation From The Plan:- There was a deviation from the project while implementing the displaying of the story books and viewing those books. However, we faced several issues but that never stopped our user stories.

Sprint 3:-

User Story - 1

As a parent, after choosing the options, **I want** to record stories with my voice(voice of the loved ones) **so that** my child can access and listen to the stories.

User Story - 2

As a parent, **I want** to add the stories that my child likes the most into a favorites folder **so that** I can view or play those books whenever I need them.

User Story - 3

As a Parent, **I want** to set a timer, **so that** the child can be notified of the listening time. And can listen to the recordings and sleep at the right time.

Tasks:-

These tasks will be implemented by multiple members. In the future, we may break it into further smaller tasks.

- accessing the recorded voice
- listing recorded voices with details(date and timings)
- favorite folders- Creation
- favorites folders - access

Spikes:-

- adding animation to the web pages
- (bug1)displaying the story on click(uploading)
- (bug2)view-storybooks

SUMMARY OF SCRUM MEETINGS:

Scrum Meeting - 1: (Online)

Date: October 16th

Meeting Minutes:- (4 min)

Suguna Garmidi - 11667555 (Scrum Master): Assigned tasks to everyone. Discussed the project's scope and set the initial plans for the development team. Initiated the project and outlined the requirements for providing recording options, and audio options, and integrating storybooks as PDFs or API links.

Shravya Kandukuri - 11698456: Initiated the project and outlined the requirements for storing and retrieving stories from the database. Discussed the project's scope and set the initial plans for the development team.

Sagara Pravalika Garlapati - 11592528: kicked off the project by outlining the requirements and setting up the groundwork for providing recording and audio options. Discussed the objectives, scope, and initial planning.

Tharuni Sri Reddy Gangaram - 11706904: Initiated the development of saving recorded files and the foundational styling of our application. We set the stage for these tasks by outlining the initial requirements and design considerations.

Hrithik Reddy Ravulapalli - 11709725: began working on the task of saving recorded files. Set up the initial structure and laid the foundation for this feature. We discussed the requirements and established the groundwork for future progress.

Sai Krishna Kanth Bandi - 11708632: Initiated the project and outlined the requirements for developing the admin console and integrating storybooks as PDFs or API links. Discussed the project's scope and set the initial plans for the development team.

Sai Venkat Raparathi - 11653770: Began by setting up the project and discussed the planning for the backend database tasks. Laid out the groundwork for creating the Users table, storage for storybooks, audio data, and PDF evaluation, as well as storing and retrieving stories from the database.

Scrum Meeting - 2: (Online)

Date: October 17th

Meeting Minutes:- (3 min)

Suguna Garmidi - 11667555 (Scrum Master): Began the development of the recording functionality. Discussed the technical aspects and requirements, and the core recording feature is now operational.

Shravya Kandukuri - 11698456: Reported on the progress made in defining the database schema for storing stories and kicked off the development process. The team began working on the database structure.

Sagara Pravalika Garlapati - 11592528: Focused on the development of the recording functionality. Discussed the technical aspects and requirements, and now, the core recording feature is operational.

Tharuni Sri Reddy Gangaram - 11706904: Focused on developing the recording feature, enabling users to save recorded files. Simultaneously, began working on the styling aspect by creating the initial CSS structure for admin.css, user.css, and styles.css.

Hrithik Reddy Ravulapalli - 11709725: Continued the development of the feature for saving recorded files. Made progress in implementing the core functionality, and the feature is starting to take shape.

Sai Krishna Kanth Bandi - 11708632: Reported on the progress made in setting up the admin console. Officially kicked off the development of the admin console, focusing on its core features.

Sai Venkat Raparathi - 11653770: Concentrated on implementing the Users table in the database. Discussed the structure and functionality required, and now, the Users table is operational.

Scrum Meeting - 3: (Offline)

Date: October 19th

Meeting Minutes:- (4 min)

Suguna Garmidi - 11667555 (Scrum Master): Shifted my focus to implementing audio options. Discussed the various ways users can interact with audio in our application, and these options are now part of our system.

Shravya Kandukuri - 11698456: Provided updates on the implementation of data storage for stories. The core functionality for storing stories is now operational.

Sagara Pravalika Garlapati - 11592528: Attention shifted to implementing audio options. Discussed the various ways users can interact with audio in our application, and the audio options are now part of our system.

Tharuni Sri Reddy Gangaram - 11706904: Efforts were directed at refining the user interface. Incorporated design elements and layout considerations, enhancing the overall look and feel of the application. Simultaneously, Continued to develop the recording functionality.

Hrithik Reddy Ravulapalli - 11709725: Carried on with the development of the saving recorded files feature. We've made headway in addressing technical challenges and are working towards making this functionality more robust.

Sai Krishna Kanth Bandi - 11708632: Provided updates on the strategy for integrating story books as PDFs or API links. Discussed the various approaches and decided on the best method to proceed.

Sai Venkat Raparathi - 11653770: Shifted our focus towards integrating storybook storage and audio data into the database. Successfully implemented storage for storybooks and integrated audio data, making them accessible through the backend.

Scrum Meeting - 4: (Online)

Date: October 20th

Meeting Minutes:- (5 min)

Suguna Garmidi - 11667555 (Scrum Master): Initiated the integration of storybooks as PDFs. Discussed the technical aspects and how storybooks can be accessed in PDF format.

Shravya Kandukuri - 11698456: Discussed the progress made in developing the retrieval functionality for stories. Simultaneously, Started working on user interface design elements for retrieving stories from the database.

Sagara Pravalika Garlapati - 11592528: Worked on enhancing the user interface for both recording and audio options. Discussed design elements and layout considerations, improving the user experience.

Tharuni Sri Reddy Gangaram - 11706904: presented the progress made on the recording feature. Conducted testing to ensure that it functions correctly and gathered feedback to make necessary adjustments.

Hrithik Reddy Ravulapalli - 11709725: Continued to iteratively improve and enhance the feature. We've incorporated feedback received from stakeholders, and the feature is becoming more refined.

Sai Krishna Kanth Bandi - 11708632: Reported on the development progress of the admin console. Discussed the implemented features and functionality, and the admin console is now operational.

Sai Venkat Raparthi - 11653770: Worked on implementing the PDF evaluation functionality in the backend. Users can now evaluate PDF documents through our system.

Scrum Meeting - 5: (Online)

Date: October 23th

Meeting Minutes:- (3 min)

Suguna Garmidi - 11667555 (Scrum Master): Worked on enhancing the user interface for all these features. Discussed design elements, layout considerations, and styling, improving the overall user experience.

Shravya Kandukuri - 11698456: Conducted user testing and gathered valuable feedback on the retrieval process. This feedback is instrumental in refining the retrieval feature.

Sagara Pravalika Garlapati - 11592528: Concentrated on optimizing the performance of both the recording and audio features. Discussed ways to ensure these features operate efficiently.

Tharuni Sri Reddy Gangaram - 11706904: shifted focus towards enhancing the styling. Ensured that the styles in admin.css, user.css, and styles.css are consistent and well-designed. Additionally, worked on making the application responsive to different screen sizes.

Hrithik Reddy Ravulapalli - 11709725: Discussed the progress made in the task. Conducted user testing to ensure the feature aligned with user expectations, and integrated valuable feedback into the development process.

Sai Krishna Kanth Bandi - 11708632: Shifted focus towards the integration of storybooks as PDFs. We discussed the technical aspects of this integration, and users can now access storybooks in PDF format.

Sai Venkat Raparathi - 11653770: Began the task of storing and retrieving stories from the database. This feature allows users to save and access their stories seamlessly.

Scrum Meeting - 6: (Offline)

Date: October 24th

Meeting Minutes:- (6 min)

Suguna Garmidi - 11667555 (Scrum Master): Concentrated on optimizing the performance of all three functionalities - recording, audio options, and storybook integration. Discussed ways to ensure these features operate efficiently.

Shravya Kandukuri - 11698456: Concentrated on optimizing the performance of the database for retrieving stories. Discussed database query optimizations to ensure fast and efficient data retrieval.

Sagara Pravalika Garlapati - 11592528: Conducted usability testing and gathered user feedback on the recording and audio options. This feedback helped us refine the features further.

Tharuni Sri Reddy Gangaram - 11706904: the primary focus was on optimizing the recording feature. Made improvements to enhance its performance, ensuring that it functions efficiently and reliably.

Hrithik Reddy Ravulapalli - 11709725: Dedicated time to optimizing the performance of the feature. Identified areas for improvement and are working on enhancing the efficiency and reliability of the saving recorded files functionality.

Sai Krishna Kanth Bandi - 11708632: Discussed the progress made in enhancing the user interface of both the admin console and storybook integration. Worked on improving the visual aspects and user experience.

Sai Venkat Raparathi - 11653770: Focus was on performance and optimization. Discussed and implemented optimizations in the backend processes to ensure efficient storage, retrieval, and evaluation of data.

Scrum Meeting - 7: (Offline)

Date: October 26th

Meeting Minutes:- (4 min)

Suguna Garmidi - 11667555 (Scrum Master): Conducted usability testing and gathered user feedback on these features. This feedback was invaluable in refining the functionalities and user experience.

Shravya Kandukuri - 11698456: Emphasized security and data validation for the stored stories. Data integrity and user data privacy are key priorities.

Sagara Pravalika Garlapati - 11592528: Discussed the security and data validation aspects of both features. Data integrity and user data privacy were prioritized.

Tharuni Sri Reddy Gangaram - 11706904: conducted a final polish of the styles, making them visually appealing and user-friendly. Additionally, ensured cross-browser compatibility to make the application work seamlessly on various web browsers.

Hrithik Reddy Ravulapalli - 11709725: reported on the testing process and any bug fixes that were addressed. Committed to delivering a stable and bug-free feature.

Sai Krishna Kanth Bandi - 11708632: Concentrated on optimizing the performance of the admin console and storybook integration. Also ensured that the user interface is responsive to different screen sizes and devices.

Sai Venkat Raparthi - 11653770: Dedicated time to thorough testing, including performance and user testing. Integrated valuable feedback and made necessary adjustments to ensure the database functions as expected.

Scrum Meeting - 8: (Online)

Date: October 27th

Meeting Minutes:- (5 min)

Suguna Garmidi (Scrum Master): Discussed security and data validation aspects for all three features. Data integrity, user data privacy, and security were prioritized.

Shravya Kandukuri: Conducted thorough testing and addressed any identified bugs or issues to ensure the retrieval feature works smoothly.

Sagara Pravalika Garlapati: Presented the testing results and discussed any bug fixes that were addressed to ensure both the recording and audio features work smoothly.

Tharuni Sri Reddy Gangaram: presented the recording feature for thorough testing, resolving any identified issues, and adding final touches to improve the user experience.

Hrithik Reddy Ravulapalli: Shared the progress on improving the feature's usability and user experience. Adding final touches to make the functionality of the saved recorded file user-friendly.

Sai Krishna Kanth Bandi: Reported on the testing results and discussed any bug fixes that were addressed to ensure that the admin console and storybook integration work smoothly.

Sai Venkat Raparathi: Concentrated on enhancing security and data validation in the database. Data integrity and user data privacy are key priorities.

Scrum Meeting - 9: (ONLINE)

Date: October 30th

Meeting Minutes:- (6 min)

Suguna Garmidi - (Scrum Master): Given Feedback to the user stories implemented by team members. Showcased the completed recording options, audio options, and storybook integration. All three functionalities are now stable, user-friendly, and ready for production deployment, enhancing our application's functionality.

Shravya Kandukuri: Presented the completed storage and retrieval system for stories. It's now stable, secure, user-friendly, and almost ready for production deployment.

Sagara Pravalika Garlapati: Showcased the completed recording and audio options. Both features are now stable, user-friendly, and ready for production deployment, enhancing our application's functionality.

Tharuni Sri Reddy Gangaram: showcased the completed recording feature and styling. The application is now stable, user-friendly, and almost ready for production deployment.

Hrithik Reddy Ravulapalli: Presented the completed feature for final review. It is now stable, user-friendly, and ready for production deployment. Achieved the goal we set out to accomplish.

Sai Krishna Kanth Bandi: Presented the completed admin console and storybook integration. Both are now stable, user-friendly, and ready for production deployment, enhancing our application's functionality.

Sai Venkat Raparathi: Presented the completed backend database system. It's now stable, secure, and ready for production use, offering the ability to store and retrieve stories, evaluate PDFs, and manage users' data.

Scrum Review Meeting : (Online)

Date: October 31th

Meeting Minutes:- (28-30 min)

SUMMARY:-

In the review, we have given a Quick introduction to the Project to give an idea for the Product Manager. Later we discussed the Active user stories with relative tasks done in sprint 2 and the bugs we faced during the execution, feedback was given by the scrum master. Plan for Sprint 3 (User Stories and tasks) are discussed as we are going to implement 3 of them in Sprint 3 which are added to the sprint board. The regular scrum meeting schedule for Sprint 3 is given below

Monday- 7 p.m(online)

Wednesday – 7 p.m. (online)

Thursday – 5p.m(offline)-infront of B185.

Note:- For longer discussions, we may meet on other days(offline) but within the same location(in front of b185). But we will inform you a day before that meeting.

Online meeting link:-

<https://us05web.zoom.us/j/81374494516?pwd=eg6sCAuJwTN9RgRqjWUsYQsk00d5sB.1>

The strengths and Weaknesses of our project are discussed in the meeting and feedback is given by the product manager. The issues we faced during the implementation haven't stopped any of our 3 user stories. However, we will overcome those bugs by the next sprint.

DevOps Measurement:-

Process measurement: Our Project is a web-based application that is relatable specifically for kids. Our project has currently been in the development process. We are still working on the rest of the user stories.

- We have developed signup and login pages for the past sprints. We now styled them a bit and added other tasks too.
- In the development process, the tasks have been equally shared with all the teammates. We developed the project using HTML and CSS for the front end, Flask Framework for the Backend and We are using MySQL for databases. We have used the VSCode IDE for writing and Debugging the code.
- In the testing process, we had a few bugs in the past sprint which were already resolved and for this sprint, we had a couple of bugs that didn't prevent our user from uploading the files. The user isn't finding a successful page after file upload. However, we are getting correct and proper outputs.
- In the deployment process, we appealingly created the webpage to attract more users. The web page is working well now. We had several options of uploading audio files, recording audio, and also deleting that recording if not needed which was disabled for now as we have to do some more work in the audio player user interface and will be done by the next sprint.

Service measurement: use tools like Prometheus or Datadog

- **Process Metrics:** There are two kinds of metrics. One is the process metrics and the other one is the service metrics.
- ❖ In our Software Project, we had a few decreases and increases in the metrics.
- ❖ Process Metrics includes various metrics defined. A few of them are listed below:

Number of failed deployments:

- **displaying the story on click(uploading).**

We had a couple of bugs for the present sprint. Also, those bugs didn't affect the software output.

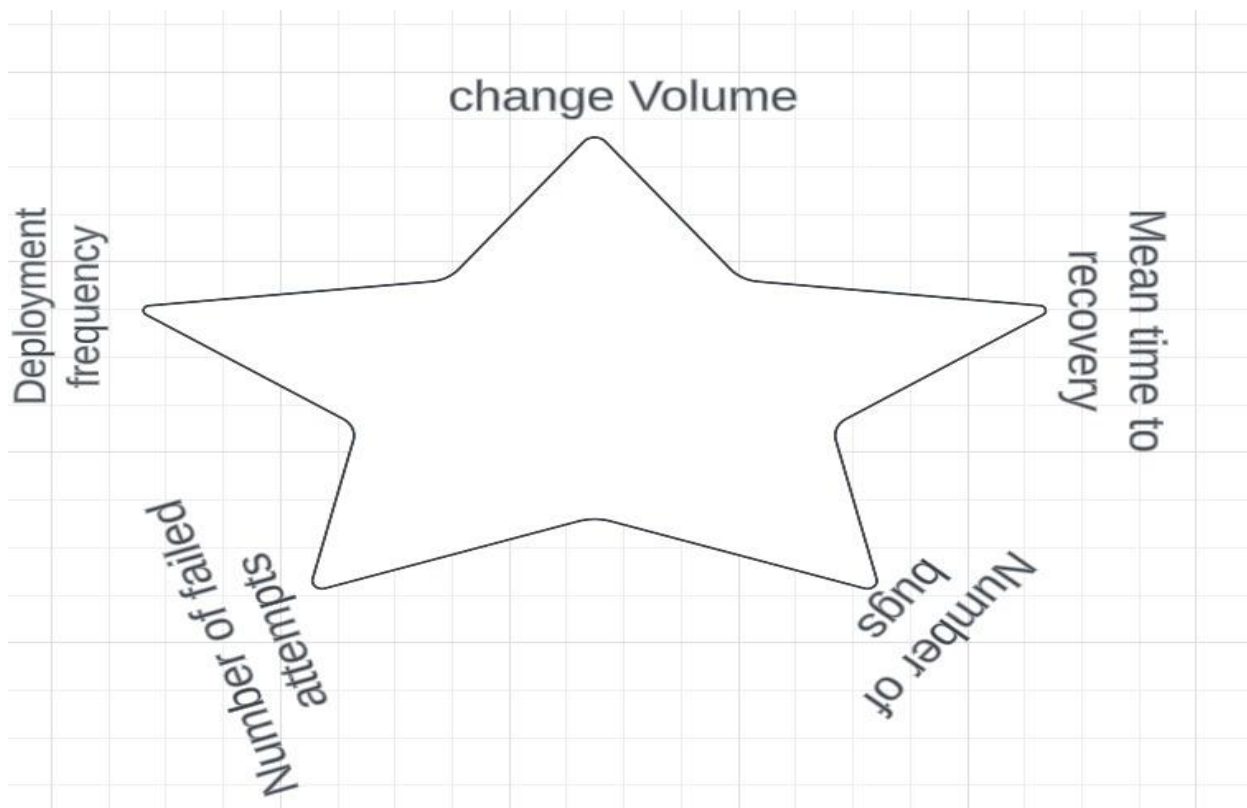
- **View story books.**

We were getting a few errors while viewing the storybooks on the display console. After the successful file uploading the interface design that shows the

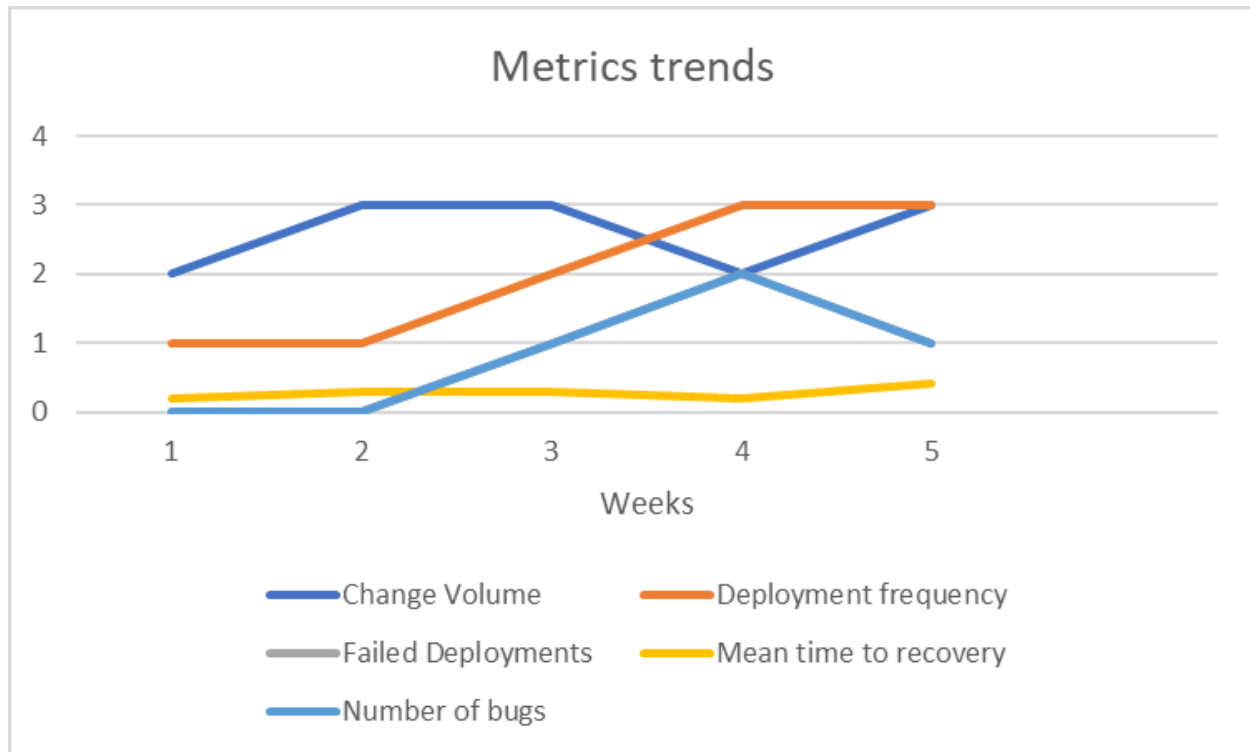
cover page of the book was resized according to the size of the front page of the book, we had to change it and fix a common size for all the books irrespective of their front page.

- **Change Volume:-** The number of changes done in our code during a particular week
- **Deployment Frequency:-** Number of times we have tried to run the application on our local server.
- **Failed Deployment:-** The number of times we got an error while we tried to run the code and locally run the application.
- **Mean time to recovery:-** The time taken to clear errors and bugs in a week.(still recovering)
- **Number of Bugs:-** The number of bugs we have noticed while developing and And deploying the tasks.- 2

❖ PROCESS METRICS



➤ **Metrics Trends:**



ARCHITECTURE OF SOFTWARE:

- **Web-Based application**
A web browser HTML and CSS forms are used to collect the user data for registration and login pages.
- **Authentication and User Management**
A User Authentication Layer i.e., a Login and security page for identifying the User, and a User interface Management layer were used for the web page generation.
- **Application Specific Functionality**
We added a few application-specific layers for this website such as a Pdf view layer for viewing the PDF, and an Audio recording and storing layer for recording and storing the audio in the Database.
- **Integrated Services**
We have included a few services like filtering for filtering the books based on their interest genre.
- **Database Management**
A Database layer was added for storing and retrieving the Books and audio files.

User Interface

Web Application

User Interface Management

Interface Creation

Login

Configuration Services

User interface Configuration

Application configuration

Application Services

Archive Access

Recording Audio

Saving Audio

Playing Audio

Integrated Services

Resource Filtering

Resource Identification

Shared Infrastructure Services

Authentication

User Storage

Application Storage Login

Application Interfacing

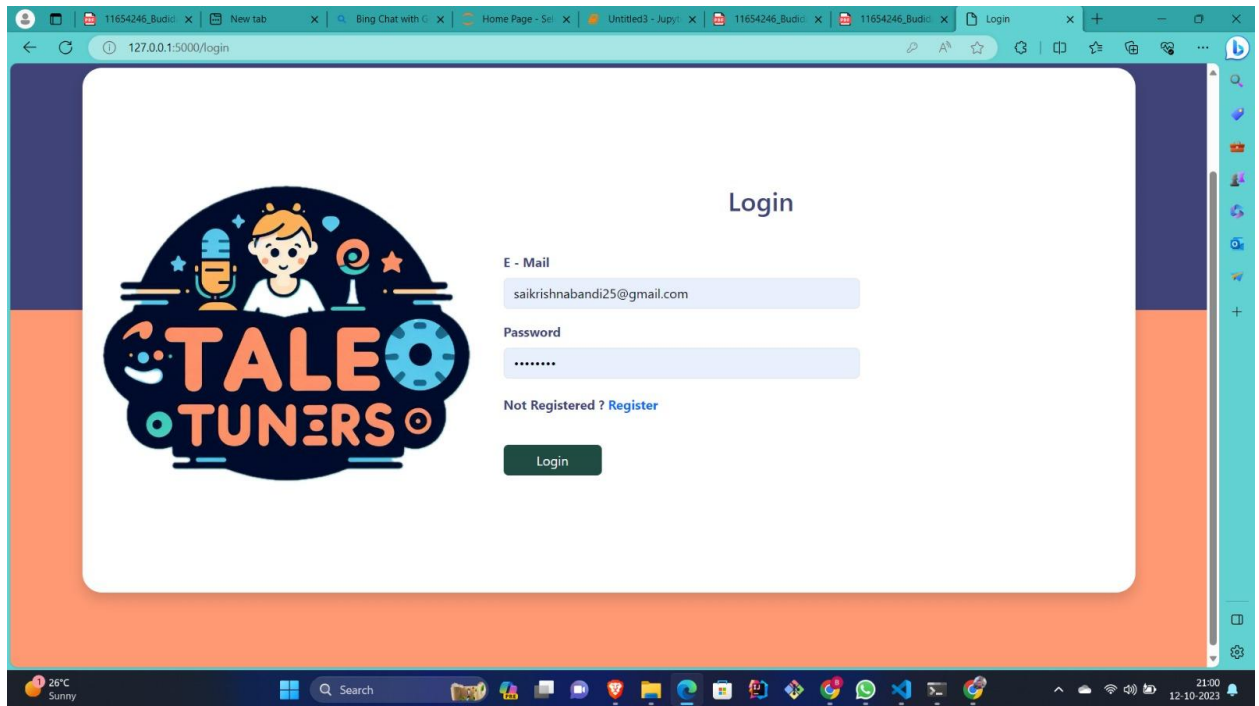
Databases

Story Tel(<u>books</u>)

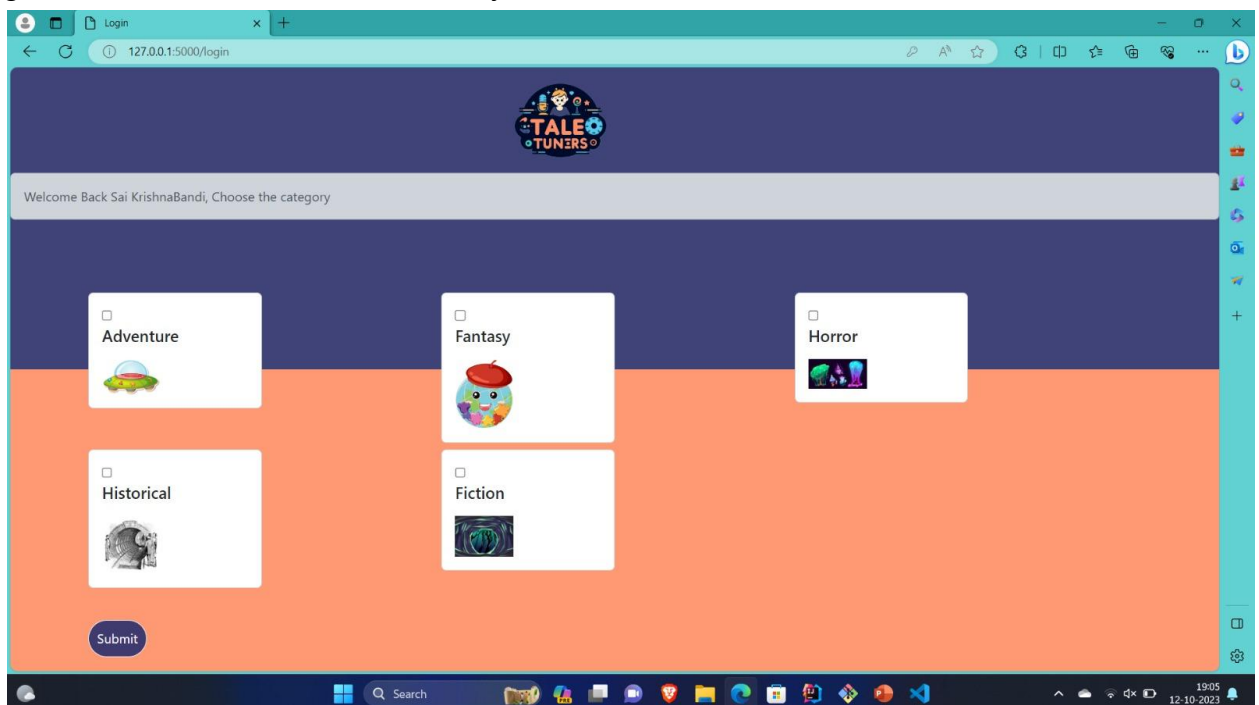
Audio Saving

DEMO:

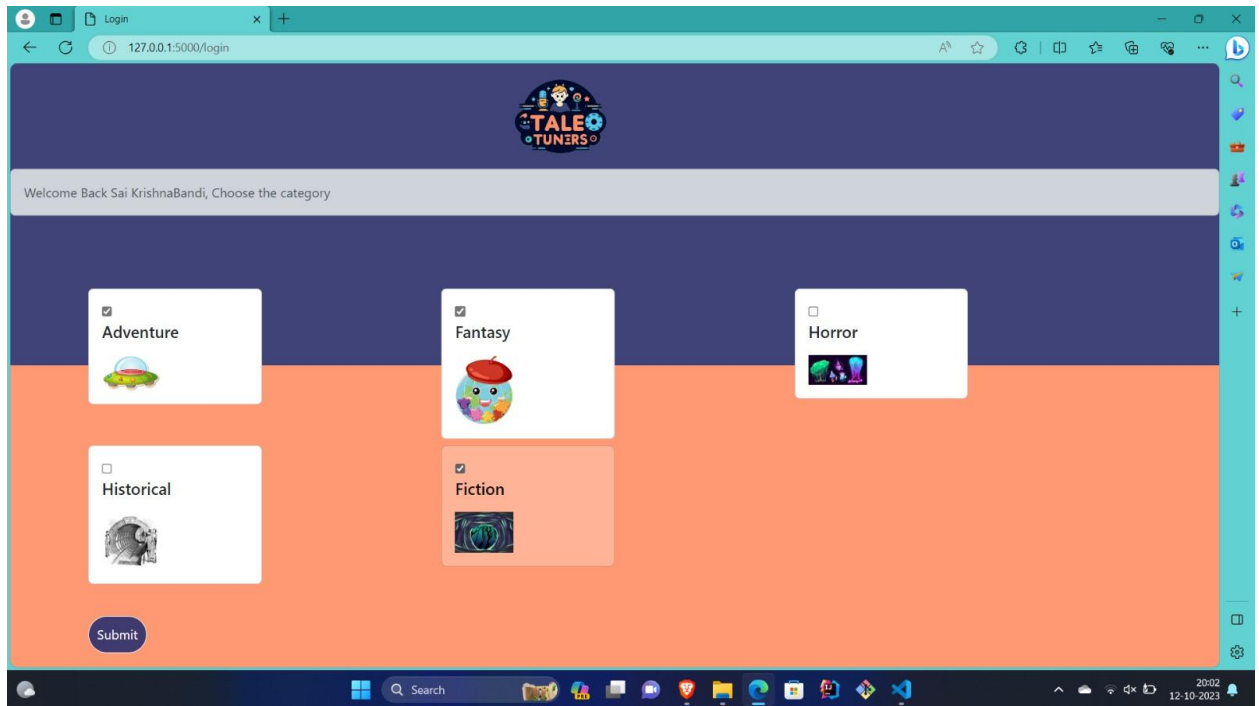
The login page is for existing users or newly signed-up users. Enter the credentials for entering the home page.



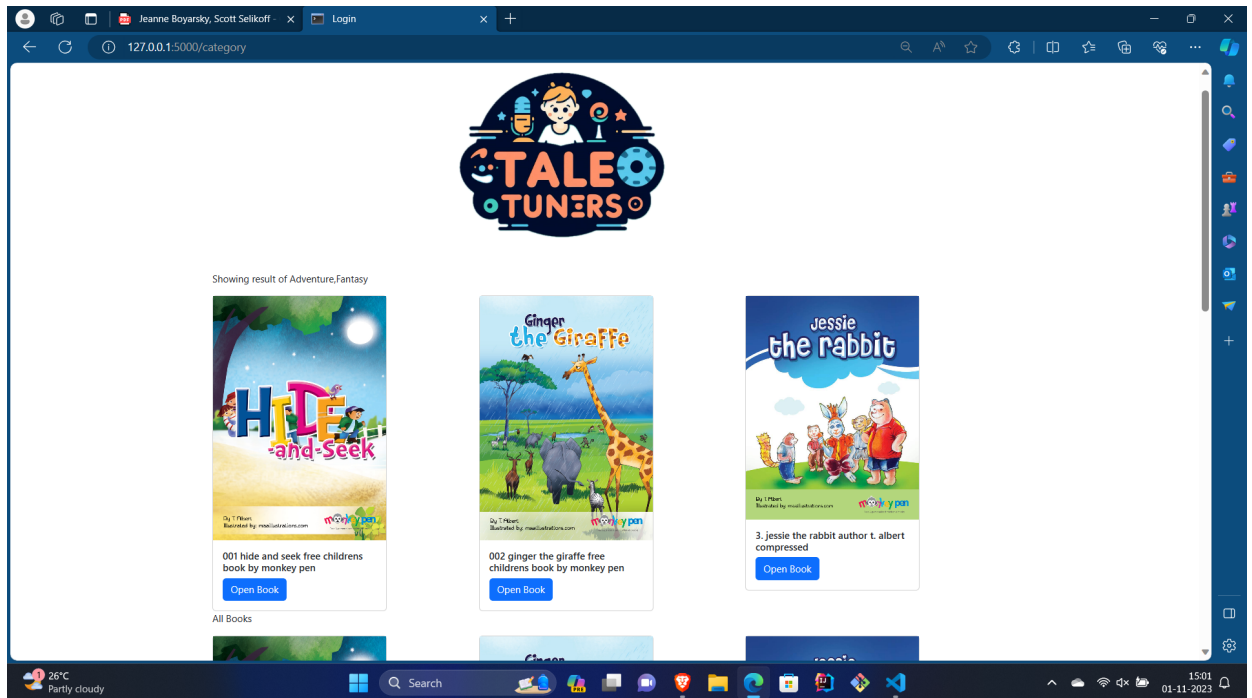
The very first page after login is the Categories Page. Here it consists of different genres such as Adventure, Fantasy, Horror, Historical, and Fiction.



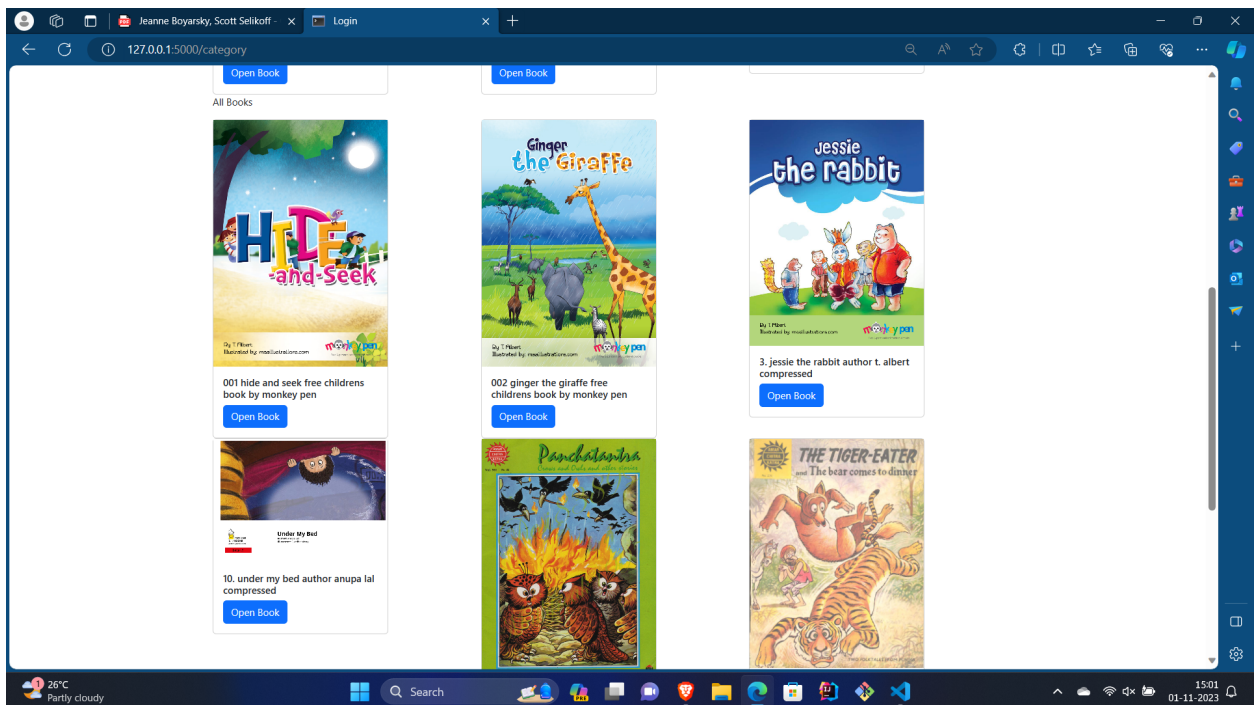
All these categories can be selected by users of their interests. We have provided check boxes for genres so that users can access more than one genre they like.



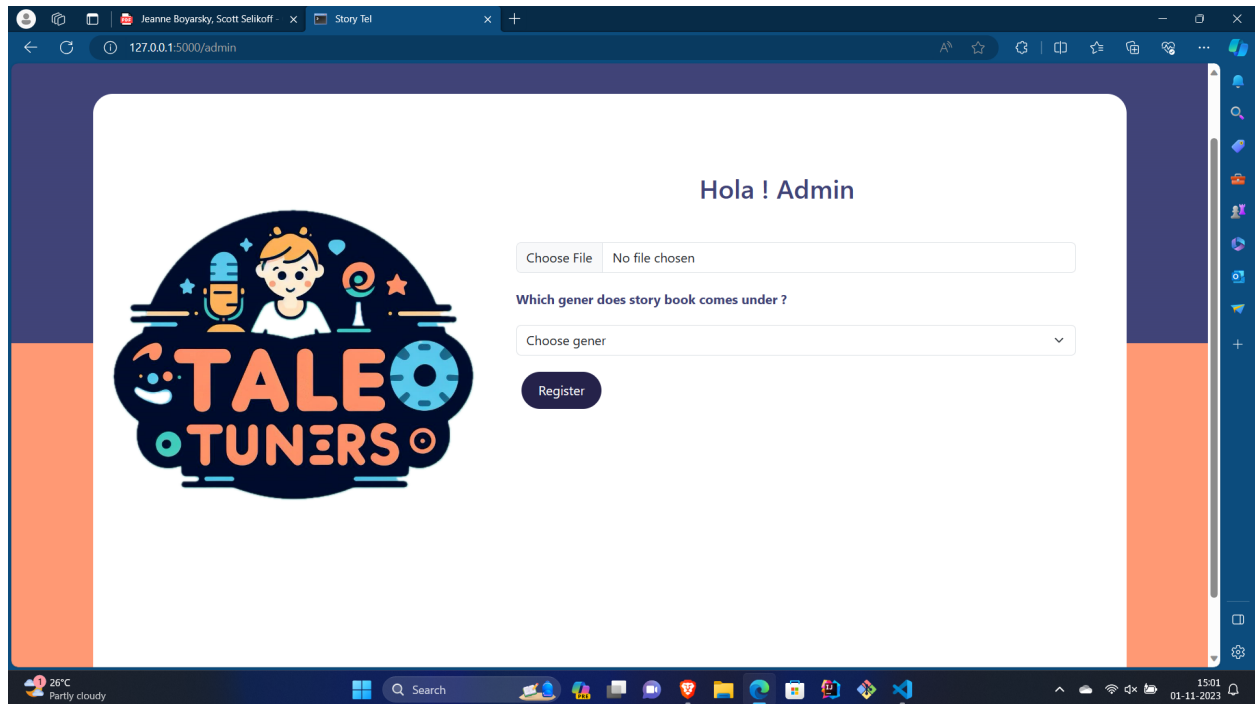
After Selecting the required categories the user can see the books related to those categories at the start of the page.



At the bottom of the page, the User will be able to see all the available books.



We created an admin console that can be accessed by the admin to upload the books and specify the category for that book.



After opening the book the User can see the book as a PDF on one side and on the other side the user can see all the recordings available and options to record and save the audio recordings.

