

Mobile Base Sinhala Book Reader For Visually Impaired Individuals

Group ID: 2023-198



Research Logbook

Jayathunga T.M.

IT20146238

B.Sc. (Hons) Degree in Information Technology Specialization in
Information Technology

Sri Lanka Institute of Information Technology

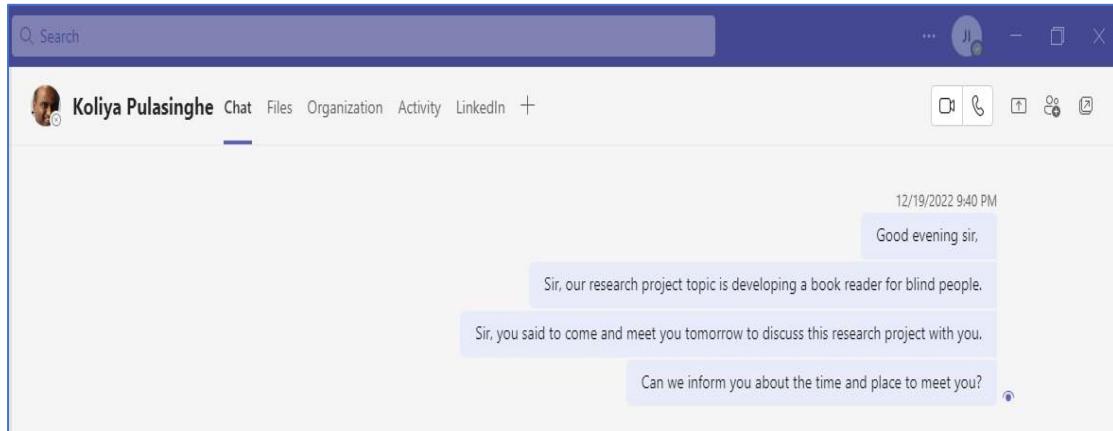
Sri Lanka

October 2023

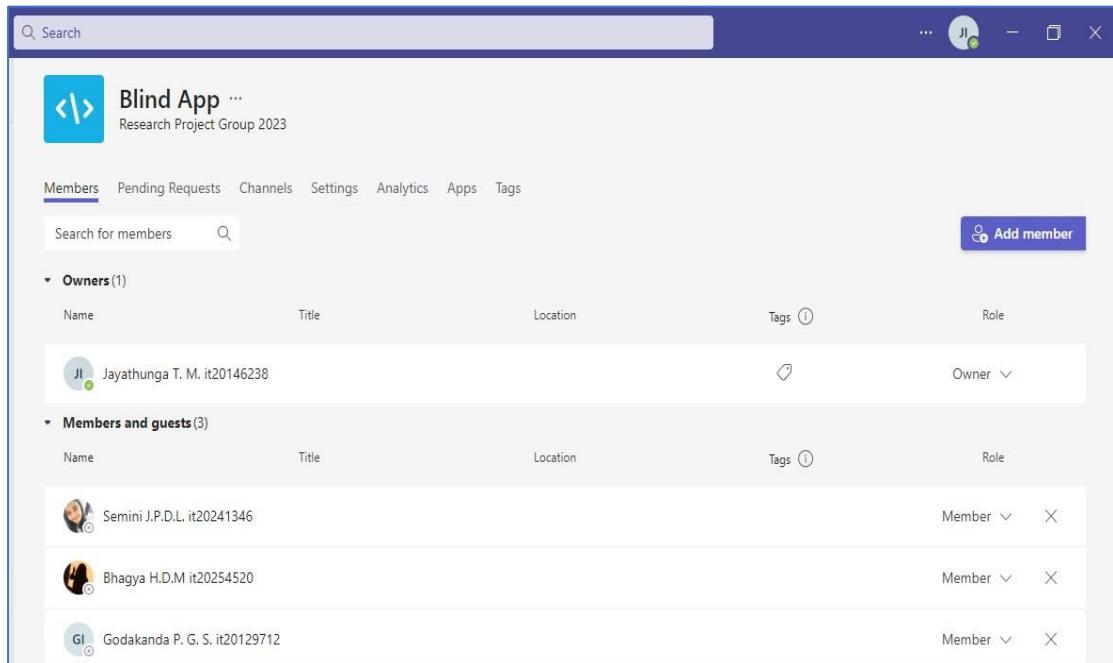
Tasks

- ❖ Meeting with the supervisor to discuss the project topic for the first time.

- Physically meet the supervisor.
- Discuss the research project topic area.
- Get the supervisor ideas about the research topic.



- ❖ Created separate MS Teams channels for Conversation.



❖ Created the Research Team WhatsApp Group.

- Discuss the research topic with team members.
- Discuss the research problem.
- Get the solution ideas with brainstorming sessions.
- Identify the main solutions.
- Assign tasks and conversation highlights.



❖ Created a separate MS Teams channel with Co-Supervisor conversation.

- Assign tasks and conversation highlights.
- Completed task and conversation highlights.

The screenshot shows the Microsoft Teams 'Members' page for a group named 'Mobile Base Sinhala Book Reader for Visually Impaired Individuals'. The group was created by '2023 Research Project Group'. The 'Owners' section lists one owner, Jayathunga T. M. (it20146238), with the role set to 'Owner'. The 'Members and guests' section lists four members/guests: Semini J.P.D.L. (it20241346), Bhagya H.D.M (it20254520), Godakanda P. G. S. (it20129712), and Poorna Panduwawala (Assistant Lecturer, Malabe). There is a search bar at the top and a blue 'Add member' button.

Name	Title	Location	Tags	Role
Jayathunga T. M. it20146238				Owner

Name	Title	Location	Tags	Role
Semini J.P.D.L. it20241346				Member
Bhagya H.D.M it20254520				Member
Godakanda P. G. S. it20129712				Member
Poorna Panduwawala	Assistant Lecturer	Malabe		Member

❖ Completed Task and Conversation Highlights

- Contacting Prof.Koliya Pulasinghe and Ms. Poorna Panduwawala regarding the research topic.
- Writing a literature survey about the topic as requested by Prof.Koliya Pulasinghe.
- Narrowing of the scope as suggested by the Supervisor and Co-Supervisor.
- Submit proposal draft document.
- Changing the draft submission upon the advice of the supervisor.
- Accepting the proposal document.

Tasks

✓ **Create Project Charter**
Completed on 05/26/2023 by you

⊕ G J B D M

⌚ **High** X Documentation X

Bucket	Progress	Priority
Documentations	Completed	Important

Start date	Due date	Repeat
02/28/2023	03/13/2023	Does not repeat

Notes Show on card

After the Topic Assignment Form Submission, We received our research project panel feedback with minor changes. According to the feedback given by the panel to Topic Assignment Form, we changed it, obtained supervisor and co-supervisor signature and submitted it before the due date.

Tasks

✓ **Create Project Proposal (draft) Individual Document(IT20146238-Jayathunga-...**
Completed on 03/27/2023 by you

⊕ J Jayathunga T. M. it20146238

⌚ **Documentation** X

Bucket	Progress	Priority
Documentations	Completed	Medium

Start date	Due date	Repeat
03/15/2023	03/19/2023	Does not repeat

Notes Show on card

Create an individual Project Charter Report for adding Overall project Details with Research gap in Our Component.

❖ Completed Task and Conversation highlights.

- Creating the proposal document at supervisor request.
- Doing a literature review upon supervisor request.

PROJECT DETAILS

Brief Description of your Research Problem: (extract from the topic assessment form)

Blind people face several challenges when reading books, but the main problem is a lack of accessibility to printed materials. Despite advancements in assistive technology, such as text-to-speech software and Braille displays, most books are still not accessible to blind individuals in an easily readable format. This can limit the opportunities for blind people to gain knowledge, engage in literary experiences, and improve their education and employment prospects. [1]

One issue is the cost of specialized devices and software, which can be prohibitively expensive for many blind people. Even when these tools are available, they may not provide an experience that is comparable to reading a traditional printed book. For example, text-to-speech software can struggle with complex language and formatting, and Braille displays can be slow and clunky.

Another issue is the limited availability of audiobooks and Braille materials. While more audiobooks are being produced, the selection is still limited compared to the vast number of printed books. Braille books are even harder to come by, as the process of translating printed books into Braille is time-consuming and costly. This means that blind people may not have access to the latest best-selling books or popular educational materials.

In conclusion, the main problem that blind people face in reading books is a lack of accessibility to printed materials. Despite advances in assistive technology, there are still significant barriers to overcome, such as the cost of specialized devices and software, the limited availability of audiobooks and Braille materials, and the difficulty in providing a comparable reading experience to that of a traditional printed book. To address these challenges, there needs to be a concerted effort to make books more accessible to blind people and to ensure they have the same opportunities to engage with literature and gain knowledge as sighted individuals.

❖ Proposed Sinhala Text-to-Speech (TTS) System.

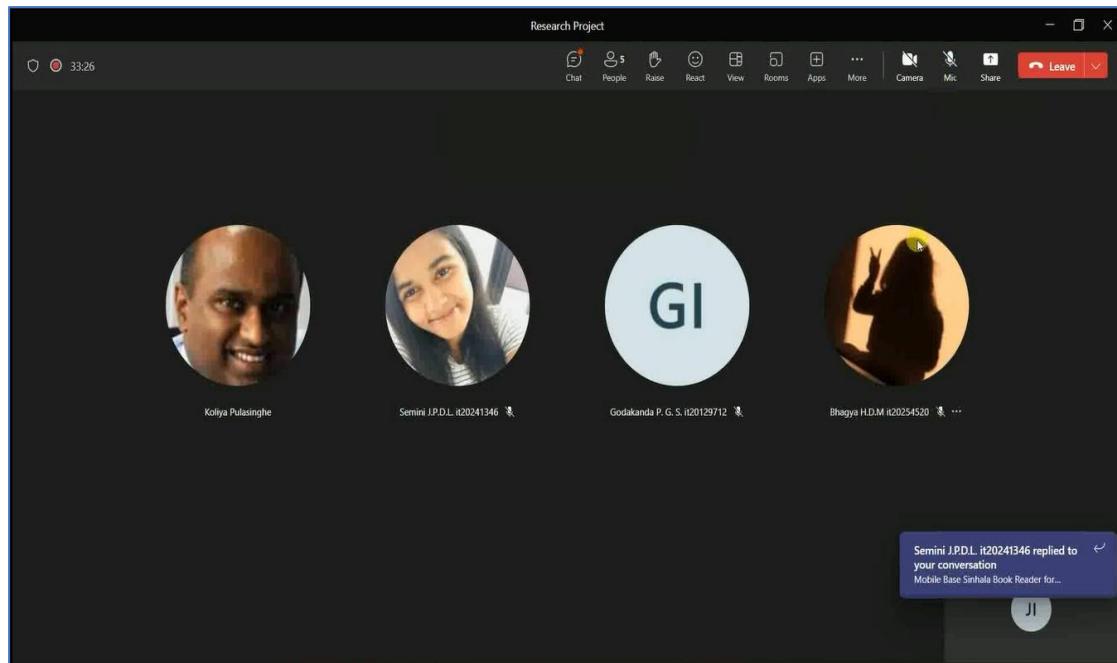
MEMBER 1	Jayathunga T.M. IT20146238
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Text To Speech (TTS) Synthesizer

- Here, the main purpose of using Text to speech (TTS) technology is to give a blind person the ability to access the written text of a Sinhala book. This allows them to easily listen to the valuable content of Sinhala books.
- TTS technology allows the written text in a Sinhala book to be read out loud in a natural-sounding voice, which makes it easier for visually impaired people to understand the content.
- The technology uses computer algorithms to analyze the Sinhala text and generate an appropriate pronunciation, intonation, and rhythm for each word and sentence.
Here are the steps for TTS,
 - An audio notification should be sent to visually impaired person after the OCR process is complete.
 - Here, Texts that have been extracted and identified in Sinhala characters should be transmitted to the TTS system.
 - Finally, TTS should be used to read aloud and clearly audibly to visually impaired people the Sinhala text recognized in the camera picture.
 - Overall, the main task of using TTS for visually impaired people in a Sinhala book reader is to provide them with a way to access written text and enjoy the content of books, regardless of their visual impairment.

❖ Completed Task and Conversation Highlights.

- Determining the components for each member and discussing with the Supervisor.
- Fine tuning the scope for each component.
- Discussing the proposed components with co-supervisor.



❖ Completed Task and Conversation Highlights.

- Find the Related research paper for individual TTS Component.
- Get a full idea of each research paper.
- Mark down the not covering Sinhala Text-to-Speech (TTS) areas in these research papers.
- Identify the novelty parts of each individual component.
- Creating the Topic Assignment Form (TAF)
- Getting the approval from the Supervisor.

Name	Date modified	Type	Size
3e4b695b7a52ad3ca6cc080d45d7dbeef45e8398	3/7/2023 9:52 PM	Microsoft Edge PDF Do...	256 KB
10.1109INFOCT.2019.8711051	8/13/2023 10:19 AM	Microsoft Word Docum...	182 KB
10.1109INFOCT.2019.8711051	5/8/2023 2:13 AM	Microsoft Edge PDF Do...	2,120 KB
42_E2108	9/13/2023 1:59 AM	Microsoft Edge PDF Do...	852 KB
529	3/25/2023 2:37 PM	Microsoft Edge PDF Do...	529 KB
978-3-540-74628-7_61	9/13/2023 2:05 AM	Microsoft Edge PDF Do...	782 KB
1903.07398 - Copy	9/13/2023 1:59 AM	Microsoft Edge PDF Do...	1,552 KB
1903.07398	9/13/2023 1:59 AM	Microsoft Edge PDF Do...	1,552 KB
1906.02358	6/2/2023 5:49 AM	Microsoft Edge PDF Do...	2,768 KB
2018 BA 032	6/2/2023 5:47 AM	Microsoft Edge PDF Do...	1,232 KB
2208.07864v2	5/22/2023 10:14 PM	Microsoft Edge PDF Do...	160 KB
08421888	9/13/2023 2:02 AM	Microsoft Edge PDF Do...	245 KB
1570418705!IntelligentEyeAMobileApplicationforAssisti...	5/8/2023 3:06 AM	Microsoft Edge PDF Do...	311 KB
9789241516570-eng	3/19/2023 5:07 PM	Microsoft Edge PDF Do...	5,362 KB
A Human Quality Text to Speech System for Sinhala	2/18/2023 1:10 PM	Microsoft Edge PDF Do...	807 KB
A_Human_Quality_Text_to_Speech_System_fo	9/13/2023 2:11 AM	Microsoft Edge PDF Do...	621 KB
Android Based Sinhala Document	2/18/2023 1:11 PM	Microsoft Edge PDF Do...	2,342 KB
Automatic_segmentation_of_given_set_of_Sinhala_tex	9/13/2023 1:59 AM	Microsoft Edge PDF Do...	278 KB
BERTfying_Sinhala--A_Comprehensive_Analysis_of_-	5/22/2023 10:21 PM	Microsoft Edge PDF Do...	160 KB
BlindnessPrevalence	5/8/2023 3:23 AM	Microsoft Edge PDF Do...	265 KB
Continuous Sinhala Speech Recognizer	2/18/2023 1:13 PM	Microsoft Edge PDF Do...	154 KB
Festival_si_A_Sinhala_Text_to_Speech_Sys	3/19/2023 10:52 PM	Microsoft Edge PDF Do...	135 KB
Festival-si_A_Sinhala_Text-to-Speech_System	2/18/2023 1:10 PM	Microsoft Edge PDF Do...	772 KB
Festival-si_A_Sinhala_Text-to-Speech_System	9/13/2023 2:03 AM	Microsoft Edge PDF Do...	288 KB
I08-2142	3/17/2023 1:52 PM	Microsoft Edge PDF Do...	367 KB
IALP2019_059	5/31/2023 7:31 AM	Microsoft Edge PDF Do...	315 KB
ICCSCE.2018.8468858	5/8/2023 2:46 AM	Microsoft Edge PDF Do...	4,092 KB
IEEE Template	8/15/2023 8:42 PM	Microsoft Edge PDF Do...	328 KB
IEEE Template123	8/15/2023 8:39 PM	Microsoft Edge PDF Do...	321 KB
InformationneedsofBlindandvisuallyimpaired1	3/13/2023 5:25 PM	Microsoft Edge PDF Do...	488 KB
Klatt1987	5/8/2023 2:40 AM	Microsoft Edge PDF Do...	9,471 KB
Mobile Base Sinhala Book Reader For Visually Impaire...	8/30/2023 4:21 PM	Microsoft Edge PDF Do...	374 KB
National Survey of Blindness A Report 2014-2015	3/19/2023 4:55 PM	Microsoft Edge PDF Do...	3,570 KB
NITC48475.2019.9114420	5/21/2023 11:42 PM	Microsoft Edge PDF Do...	453 KB
NLP_Applications_of_Sinhala_TTS_and_OCR	3/19/2023 10:53 PM	Microsoft Edge PDF Do...	115 KB
pilot	5/8/2023 2:45 AM	Microsoft Edge PDF Do...	441 KB
Project Proposal Report - IT20146238	5/8/2023 1:42 AM	Microsoft Edge PDF Do...	1,403 KB

ResearchPaper-v1	9/13/2023 2:02 AM	Microsoft Edge PDF Do...	601 KB
SCSE_2020_Proceedings	5/8/2023 2:15 AM	Microsoft Edge PDF Do...	5,450 KB
Sinhala_Grapheme_to_Phoneme_Conversion_a	5/7/2023 11:01 PM	Microsoft Edge PDF Do...	189 KB
Sinhala_Text_to_Speech_System (Gihan Dias)	3/7/2023 10:17 PM	Microsoft Edge PDF Do...	457 KB
Sinhala_Text_to_Speech_System	2/18/2023 1:11 PM	Microsoft Edge PDF Do...	454 KB
Sinhala-Tamil Language	2/18/2023 1:13 PM	Microsoft Edge PDF Do...	3,886 KB
SLTU2018	2/18/2023 12:53 PM	Microsoft Edge PDF Do...	807 KB
SPA.2016.7763604	5/8/2023 3:09 AM	Microsoft Edge PDF Do...	488 KB
The_Sri_Lanka_National_Blindness_Visual_Impairment	3/19/2023 7:05 PM	Microsoft Edge PDF Do...	932 KB
Thesis_MS20902520 (2)	3/18/2023 6:55 PM	Microsoft Edge PDF Do...	1,706 KB
tothb-et-al-2015-towards-modeling-interrogative-hm...	5/8/2023 2:35 AM	Microsoft Edge PDF Do...	573 KB
Translation_of_Multilingual_Text_into_Speech_for_Visu...	3/30/2023 10:39 AM	Microsoft Edge PDF Do...	637 KB

Font	FM	DL	Lakbima	Letter
% Recog.	97.17	96.26	89.89	95.81

Table 1. Experimental Results of Classification*

From this evaluation it can be concluded that the current Sinhala OCR has average accuracy of 95% (Weerasinghe et al., 2006).

4 Conclusion and Future Work

This paper brings together the development of a diphone voice for Sinhala based on the Festival speech synthesis system and an Optical Character Recognizer for Sinhala.

Future work on the Sinhala TTS engine will mainly focus on improving the prosody modules. A speech corpus containing 2 hours of speech has been already recorded. The material is currently being segmented, and labeled. We are also planning to improve the duration model using the data obtained from the annotated speech corpus. It is also expected to develop a female voice in near future. The current Sinhala OCR system is font dependent. Work is in progress to make the OCR system font independent and to improve the accuracy. Sinhala OCR and the TTS systems, which are currently two separate applications, will be integrated enabling the user friendliness to the print disabled.

References

- Alan W. Black and Kevin A. Lenzo. 2003. *Building Synthetic Voices*, Language Technologies Institute, Carnegie Mellon University and Cepstral LLC. Retrieved from <http://festvox.org/bsv/>.
- Microsoft Corporation. (n.d.). *Microsoft Speech SDK Version 5.1*. Retrieved from: <http://msdn2.microsoft.com/en-/library/ms990097.aspx>
- T. Dutoit. 1997. *An Introduction to Text-to-Speech Synthesis*, Kluwer Academic Publishers, Dordrecht, Netherlands.
- C. Kamisetty, S.M. Adapa. 2006. *Telugu Festival Text-to-Speech System*. Retrieved from: http://festival-te.sourceforge.net/wiki/Main_Page
- W.S. Karunatillake. 2004. *An Introduction to Spoken Sinhala*, 3rd edn., M.D. Gunasena & Co. Ltd, 217, Olcott Mawatha, Colombo 11.
- Sami Lemmetty. 1999. *Review of Speech Synthesis Technology*, MSc. thesis, Helsinki University of Technology.
- Screen Reader. 2007. *Screen Reader*. Retrieved from: http://en.wikipedia.org/wiki/Screen_reader.
- Optical Character Recognition. 2007. *Optical Character Recognition*. Retrieved from: http://en.wikipedia.org/wiki/Optical_character_recognition

Project ID:

TMP-23-198

1. Topic (12 words max)

Mobile Base Sinhala Book Reader for Visually Impaired Individuals.

2. Research group the project belongs to

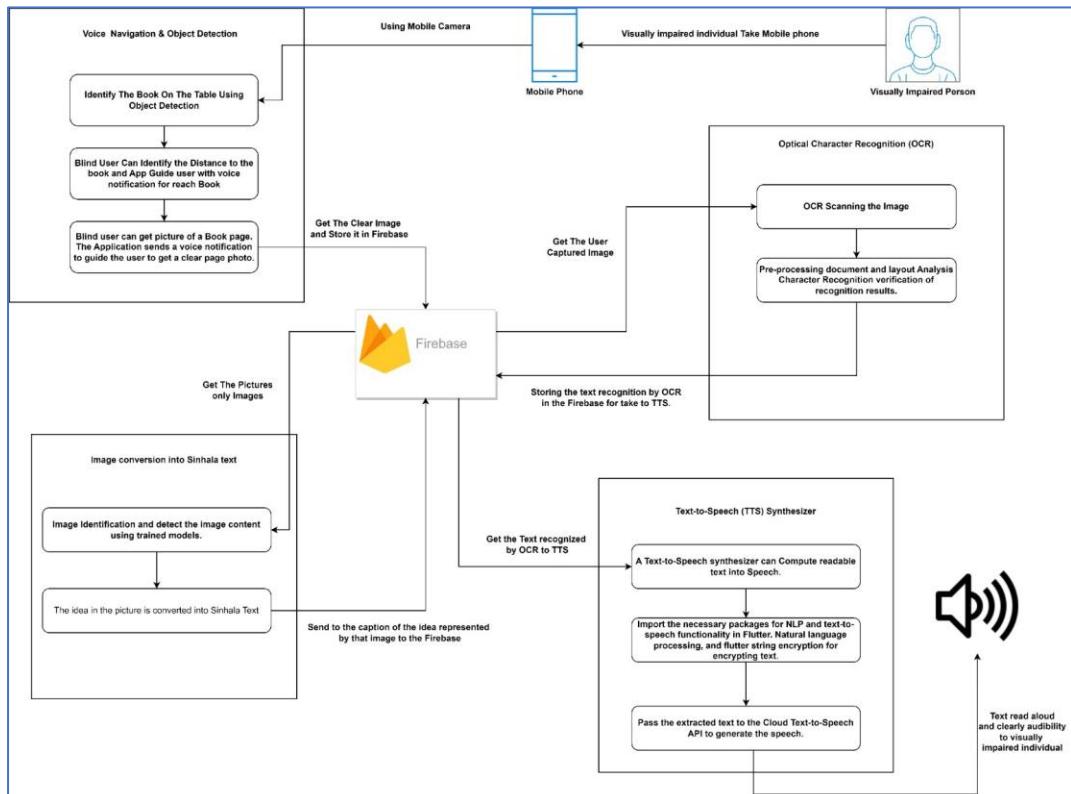
Knowledge Inspired Computing (KIC)

3. Research area the project belongs to

Natural Language Processing (NLP)

❖ Complete Task and Conversation Highlights

- Dividing the software components.
- Doing a thorough background investigation on each component.
- Creating the system architecture diagram of the proposed system.
- Discussing architecture with the Supervisor and Co-supervisor physically meeting.



❖ Complete Task and Conversation Highlights.

- Finalizing the components and getting ready for the progress presentation.
- Discussion the project with the supervisor before the proposal presentation.

The screenshot shows a SharePoint document library interface. The title bar says 'SharePoint'. The library name is 'CDAPSubmissionCloud' (with a red 'C' icon) and it is a 'Private group'. The search bar says 'Search this library'. The top navigation bar includes 'New', 'Upload', 'Share', 'Copy link', 'Sync', 'Add shortcut to OneDrive', 'Download', 'Export to Excel', 'Automate', and 'All Documents'. The main content area shows a list of files under '2023RegCloud > 23-198-Students > 1. Project Proposal > Presentation'. The files listed are:

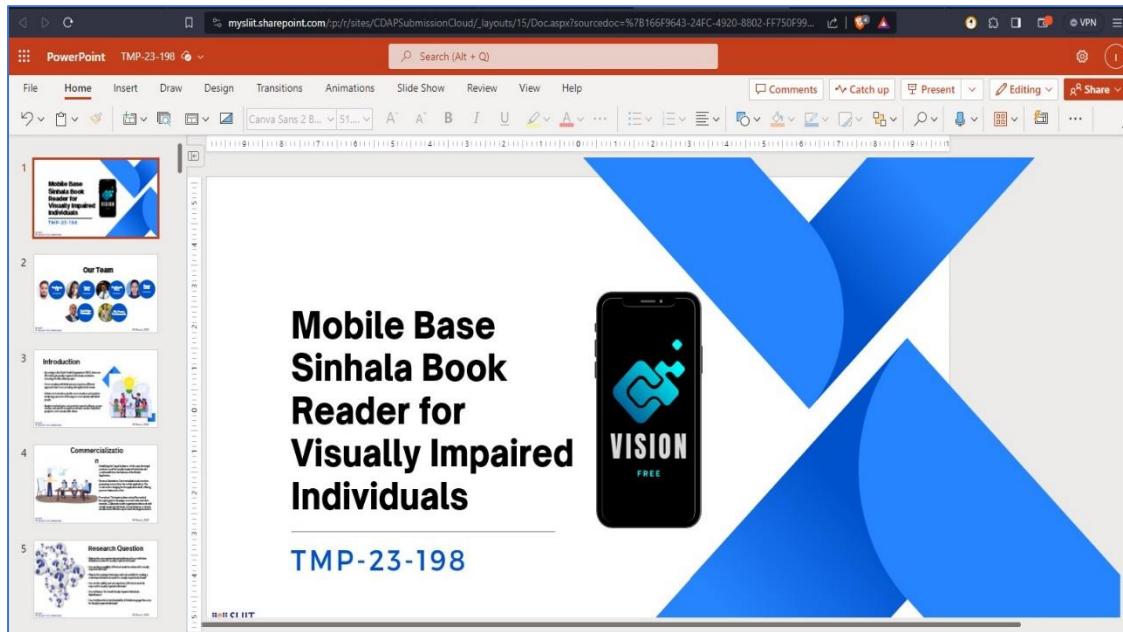
Name	Modified	Modified By	File Size
Proposal-Presentation-Template.potm	April 20	CDAP SLUIT	462 KB
ReadMe.txt	April 20	CDAP SLUIT	53 bytes
TMP-23-198.pptx	May 8	Jayathunga T. M. it201462	10.4 MB

At the bottom, it shows 'Count 3'.

The screenshot shows a SharePoint document library interface. The title bar says 'SharePoint'. The library name is 'CDAPSubmissionCloud' (with a red 'C' icon) and it is a 'Private group'. The search bar says 'Search this library'. The top navigation bar includes 'New', 'Upload', 'Share', 'Copy link', 'Sync', 'Add shortcut to OneDrive', 'Download', 'Export to Excel', 'Automate', and 'All Documents'. The main content area shows a list of files under '2023RegCloud > 23-198-Students > 1. Project Proposal > Individual Reports'. The files listed are:

Name	Modified	Modified By	File Size
Proposal-report_23-198_IT20129712.pdf	May 8	Godakanda P. G. S. it20121	884 KB
Proposal-report_23-198_IT20241346.pdf	May 8	Semini J.P.D.L. it20241346	914 KB
Proposal-report_23-198_IT20254520.pdf	May 8	Bhagya H.D.M. it20254520	684 KB
Proposal-report_23-198_IT20146238.pdf	May 8	Jayathunga T. M. it201462	1.40 MB
ReadMe.txt	April 20	CDAP SLUIT	133 bytes

At the bottom, it shows 'Count 5'.



❖ Complete Task and Conversation Highlights

- Reading research papers related to time series prediction.
- Reading documentation of TTS and understanding which data set could be taken.
- Developing different models for time series prediction.

Tasks

🕒 **Implement Text to Speech Part**

Completed on 07/15/2023 by you

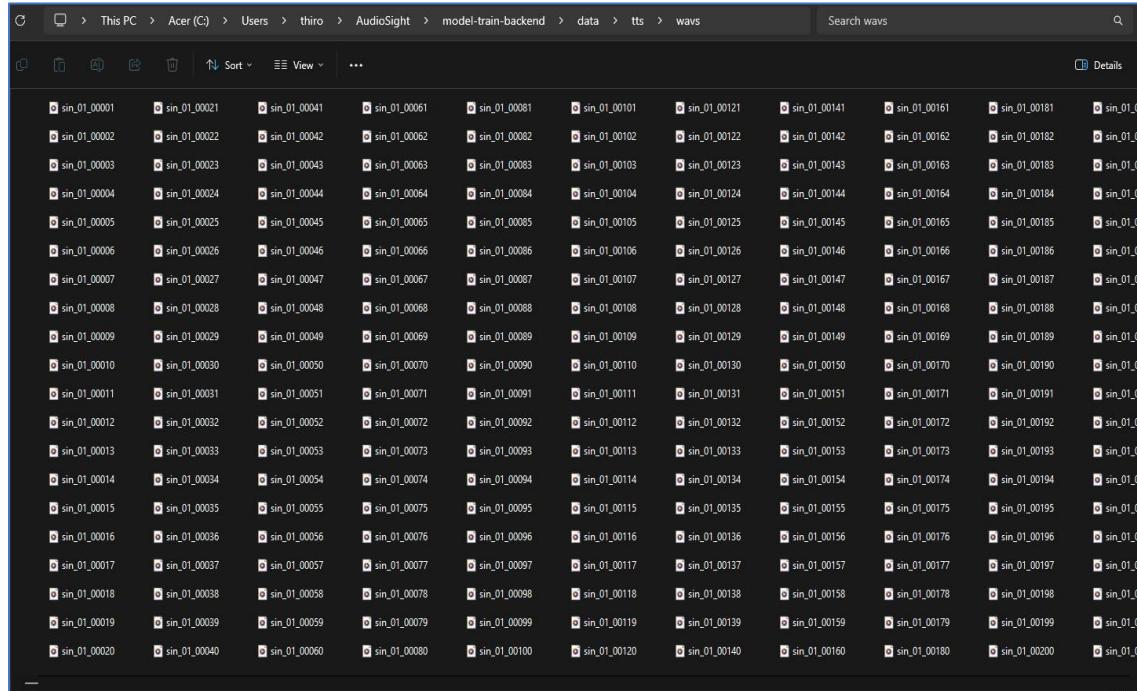
Jayathunga T. M. it20146238

Medium Frontend

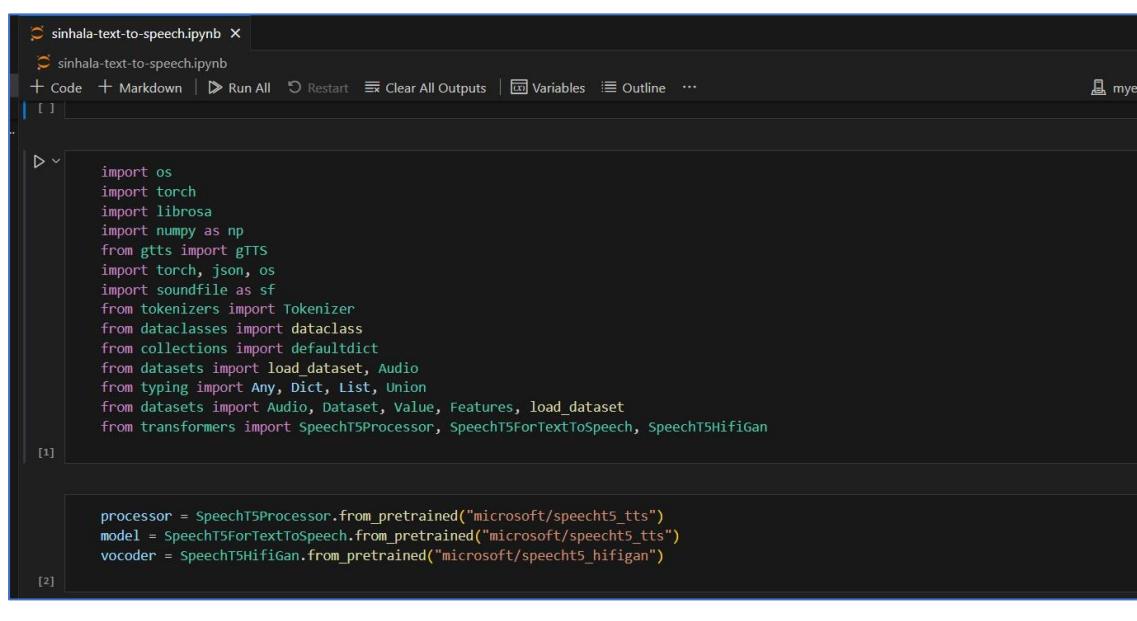
Bucket	Progress	Priority
Figma UI/UX Design	Completed	Medium
Start date	Due date	Repeat
05/24/2023	06/09/2023	Does not repeat

❖ Completed Task and Conversation Highlights

- Finding the sample dataset until TTS system develop.
- Discussing with the co-supervisor the potential model and its accuracy and which model we should proceed with for the prediction.



The screenshot shows a Windows File Explorer window with the path: This PC > Acer (C) > Users > thiro > AudioSight > model-train-backend > data > tts > wavs. The search bar at the top contains "Search wavs". The main area displays a grid of files named sin_01_00001 through sin_01_00200, each ending in .wav.



The screenshot shows a Jupyter Notebook interface with the title "sinhala-text-to-speech.ipynb". The code cell [1] contains the following imports:

```
import os
import torch
import librosa
import numpy as np
from gtts import gTTS
import torch, json, os
import soundfile as sf
from tokenizers import Tokenizer
from dataclasses import dataclass
from collections import defaultdict
from datasets import load_dataset, Audio
from typing import Any, Dict, List, Union
from datasets import Audio, Dataset, Value, Features, load_dataset
from transformers import SpeechT5Processor, SpeechT5ForTextToSpeech, SpeechT5HifiGan
```

The code cell [2] contains the following code:

```
processor = SpeechT5Processor.from_pretrained("microsoft/speecht5_tts")
model = SpeechT5ForTextToSpeech.from_pretrained("microsoft/speecht5_tts")
vocoder = SpeechT5HifiGan.from_pretrained("microsoft/speecht5_hifigan")
```

```
from transformers import Seq2SeqTrainer
trainer = Seq2SeqTrainer(
    args=training_args,
    model=model,
    train_dataset=dataset["train"],
    eval_dataset=dataset["test"],
    data_collator=data_collator,
    tokenizer=processor.tokenizer,
)
trainer.train()
```

74m 15.0s

100%

{'eval_loss': 1.1909888982772827, 'eval_runtime': 550.0506, 'eval_samples_per_second': 0.6, 'eval_steps_per_second': 0.3, 'epoch': 0.01}

{'eval_loss': 1.1043614149093628, 'eval_runtime': 516.7115, 'eval_samples_per_second': 0.639, 'eval_steps_per_second': 0.319, 'epoch': 0.03}

{'loss': 1.1563, 'learning_rate': 5.000000000000001e-07, 'epoch': 0.03}

{'eval_loss': 1.0136581659317017, 'eval_runtime': 526.7695, 'eval_samples_per_second': 0.626, 'eval_steps_per_second': 0.313, 'epoch': 0.04}

{'eval_loss': 0.9542826414108276, 'eval_runtime': 438.6128, 'eval_samples_per_second': 0.752, 'eval_steps_per_second': 0.376, 'epoch': 0.05}

{'loss': 0.9863, 'learning_rate': 1.0000000000000002e-06, 'epoch': 0.07}

93%

153/165 [07:26<00:42, 3.55s/it]

```
from transformers import Seq2SeqTrainer
trainer = Seq2SeqTrainer(
    args=training_args,
    model=model,
    train_dataset=dataset["train"],
    eval_dataset=dataset["test"],
    data_collator=data_collator,
    tokenizer=processor.tokenizer,
)
trainer.train()
```

75m 31.2s

100%

{'eval_loss': 1.1909888982772827, 'eval_runtime': 550.0506, 'eval_samples_per_second': 0.6, 'eval_steps_per_second': 0.3, 'epoch': 0.01}

{'eval_loss': 1.1043614149093628, 'eval_runtime': 516.7115, 'eval_samples_per_second': 0.639, 'eval_steps_per_second': 0.319, 'epoch': 0.03}

{'loss': 1.1563, 'learning_rate': 5.000000000000001e-07, 'epoch': 0.03}

{'eval_loss': 1.0136581659317017, 'eval_runtime': 526.7695, 'eval_samples_per_second': 0.626, 'eval_steps_per_second': 0.313, 'epoch': 0.04}

{'eval_loss': 0.9542826414108276, 'eval_runtime': 438.6128, 'eval_samples_per_second': 0.752, 'eval_steps_per_second': 0.376, 'epoch': 0.05}

{'loss': 0.9863, 'learning_rate': 1.0000000000000002e-06, 'epoch': 0.07}

{'eval_loss': 0.9130574464797974, 'eval_runtime': 492.0924, 'eval_samples_per_second': 0.671, 'eval_steps_per_second': 0.335, 'epoch': 0.07}

{'train_runtime': 4496.8378, 'train_samples_per_second': 0.644, 'train_steps_per_second': 0.011, 'train_loss': 1.07272735595703, 'epoch': 0.07}

```
from gtts import gTTS
import torch, io, cv2, os
from pydub import AudioSegment
from google.cloud import vision
from matplotlib import pyplot as plt
from PIL import Image as ImagePIL, ImageDraw, ImageFont
from google.cloud.vision_v1.types import Image
from google.oauth2.service_account import Credentials
from transformers import DetrImageProcessor, DetrForObjectDetection, \
    VisionEncoderDecoderModel, ViTImageProcessor, AutoTokenizer, \
    SpeechT5Processor, SpeechT5ForTextToSpeech, SpeechT5HifiGan

device = torch.device("cuda" if torch.cuda.is_available() else "cpu")

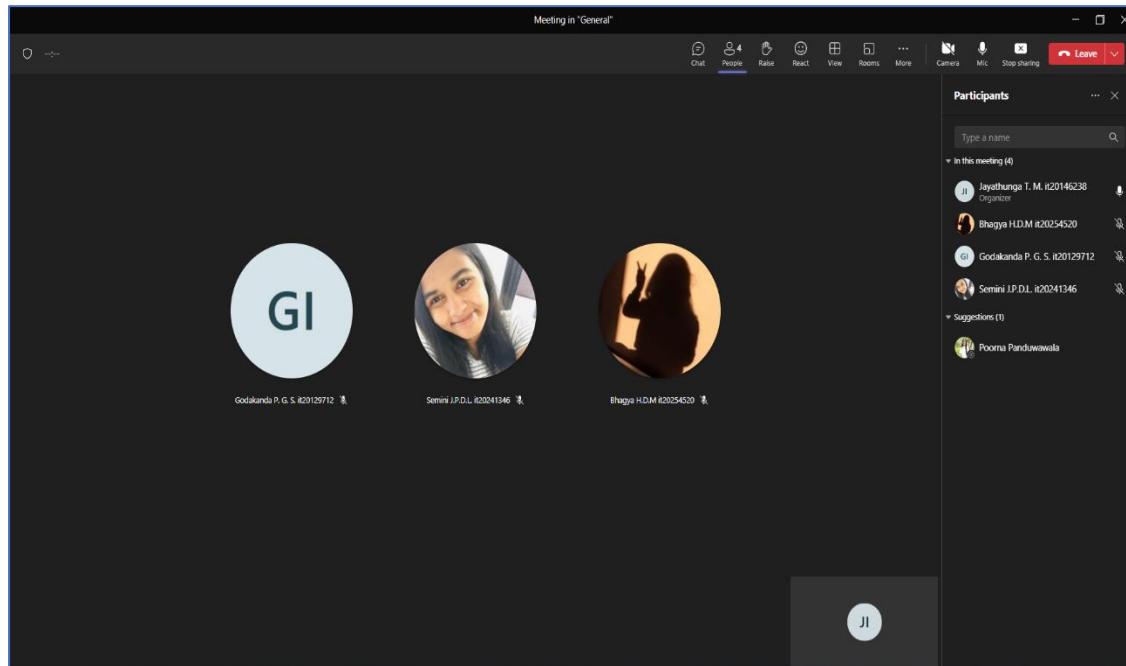
od_model = DetrForObjectDetection.from_pretrained("facebook/detr-resnet-50")
od_image_processor = DetrImageProcessor.from_pretrained("facebook/detr-resnet-50")

ic_model = VisionEncoderDecoderModel.from_pretrained("nlpconnect/vit-gpt2-image-captioning")
ic_feature_extractor = ViTImageProcessor.from_pretrained("nlpconnect/vit-gpt2-image-captioning")
ic_tokenizer = AutoTokenizer.from_pretrained("nlpconnect/vit-gpt2-image-captioning")

creds = Credentials.from_service_account_file('credentials/credentials.json')
ocr_model = vision.ImageAnnotatorClient(credentials=creds)

tts_processor = SpeechT5Processor.from_pretrained("microsoft/speecht5_tts")
tts_model = SpeechT5ForTextToSpeech.from_pretrained("microsoft/speecht5_tts")
tts_vocoder = SpeechT5HifiGan.from_pretrained("microsoft/speecht5_hifigan")

od_model.to(device)
tts_model.to(device)
ic_model.to(device)
```



❖ Complete Tasks and Conversation Highlights

- Creating initial project folder structure.
- Adding the readme files, configuration files and setup instructions for the project.
- Initializing the startup scripts.

The screenshot shows a Microsoft Teams document library titled "General". The library contains the following files:

Name	Modified	Modified By
Project Charter	March 22	Jayathunga T. M. it...
Proposal Presentation	April 2	Jayathunga T. M. it...
Proposal Presentation 1	May 26	Jayathunga T. M. it...
Proposal Presentation(Draft)	March 22	Jayathunga T. M. it...
Recordings	September 2	Semini J.P.D.L. it20...
Topic Assignment Form	February 15	Jayathunga T. M. it...
research papers.zip	August 30	Semini J.P.D.L. it20...
TTS IEEE Template.doc	August 29	Jayathunga T. M. it...

The screenshot shows a GitLab project page for "Mobile Base Sinhala Book Reader for Visually Impaired Individuals". The project overview section includes the following details:

- Project Contributors:
 - Supervisor: Prof. Koliya Pulasinghe
 - Co-Supervisor: Ms. Poorna Panduwawala
- Leader: Jayathunga T.M. -IT20146238
- Member 2: Godakanda P.G.S. - IT20129712
- Member 3: Semini J.P.D.L. - IT20241346
- Member 4: Bhagya H.D.M. - IT20254520

Main objective:

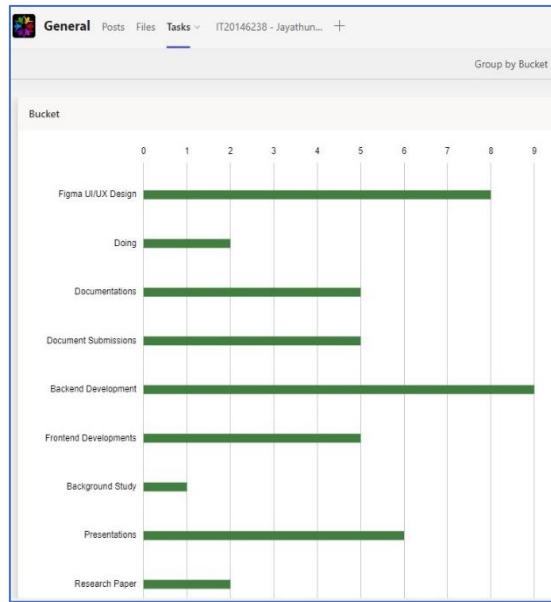
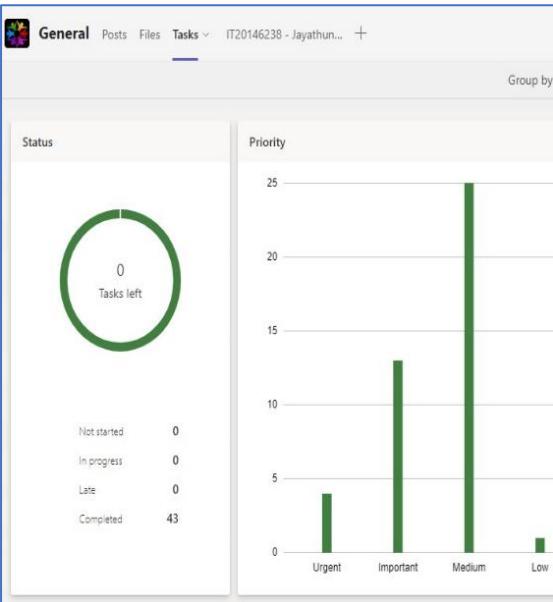
The main objective of developing a mobile app for a Mobile-Based Sinhala Book Reader for Visually Impaired Individuals is to create a comprehensive and user-centric solution that empowers and enriches the reading experience for individuals with visual impairments in the Sinhala language. The app aims to address the unique challenges faced by visually impaired users by providing an intuitive and accessible platform that ensures equal access to Sinhala books. The primary goal is to develop an app that offers a user-friendly interface specifically tailored to the needs and preferences of visually impaired individuals. This includes features such as customizable font sizes, high contrast options, and adaptable layouts to accommodate different visual impairments. The app also aims to incorporate gesture-based or voice-controlled navigation to enhance ease of use and ensure a seamless reading experience. The objective is to leverage advanced technologies, such as optical character recognition (OCR) and natural language processing (NLP), to accurately convert Sinhala text into synthesized speech. By implementing robust text-to-speech functionality, the app aims to enable visually impaired users to listen to Sinhala books in a natural and immersive manner, ensuring comprehension and enjoyment of the content. Furthermore, the app strives to provide a vast and diverse collection of Sinhala books, encompassing various genres, literature types, and educational resources. It aims to collaborate with publishers, libraries, and content providers to acquire digital versions of Sinhala books and create partnerships that facilitate the availability of a wide range of reading materials for visually impaired individuals. Ultimately, the main objective is to foster inclusivity, independence, and equal opportunities for visually impaired individuals in accessing and engaging with Sinhala literature. By developing a mobile app that caters to their specific needs, the objective is to empower visually impaired users to explore, discover, and enjoy the world of Sinhala books, contributing to their personal growth, education, and overall well-being.

❖ Complete Tasks and Conversation Highlights

- Meeting with the research team and deciding the implementation milestone on Microsoft planner.
- The tasks were labeled so that it's easy to filter the important tasks.

This screenshot shows a Microsoft Planner board with three columns: Figma UI/UX Design, Documentations, and Backend Development. The Figma UI/UX Design column contains tasks like 'Implementation Sinhala Speech-to-Text in Figma UI Designs' and 'Create Splash Screen of Figma UI Design'. The Documentations column contains tasks like 'Create Project Charter' and 'Create Project Proposal (draft)'. The Backend Development column contains tasks like 'Research Paper Submission' and 'Model Training'. A sidebar on the right shows completed tasks for each category.

This screenshot shows a Microsoft Planner board with four columns: Presentations, Frontend Developments, and Research Paper. The Presentations column contains tasks like 'Proposal Presentation-2 Slides' and 'Prepare to Project Proposal Presentation'. The Frontend Developments column contains tasks like 'Implement Mobile Application Camera View in Navigation Side' and 'Implement Mobile application Camera View in Book Reading Side'. The Research Paper column contains tasks like 'Research Paper Written' and 'Research Paper Submission to iCAC'. A sidebar on the right shows completed tasks for each category.



< > May 2023 ▾

Hide future recurring tasks Week Month

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	1	2	3	4	5	6
✓ Find Text to Speech Sinhala Datasets +2 more ✓ Create Spl... +2 more +3 more +3 more +3 more						
7	8	9	10	11	12	13
✓ Find Text to Speech Sinhala Datasets ✓ Find Sinhala TTS Datasets +2 more ✓ Sinhala Tex...						
14	15	16	17	18	19	20
✓ Find Text to Speech Sinhala Datasets ✓ Sinhala Text-to-Speech Model Training						
21	22	23	24	25	26	27
✓ Sinhala Tex... ✓ Implement... ✓ Implement OCR Function Book Reader ✓ Implement Mobile Applicati... ✓ Implement... +2 more +4 more +4 more +3 more						
28	29	30	31	1	2	3
✓ Implement OCR Function Book Reader ✓ Implement Text to Speech Part +2 more +2 more +2 more +2 more						
4	5	6	7	8	9	10
✓ Implement Text to Speech Part						

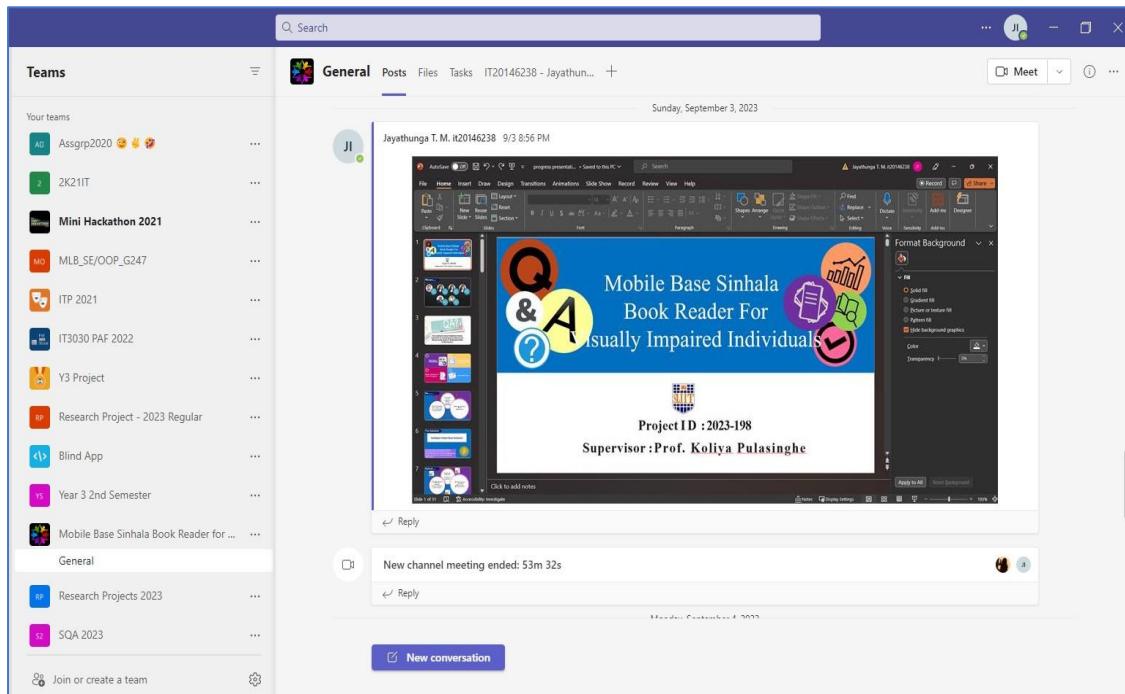
✓ Select Mobile Application Name		Jayathunga T. M. it2...	5/26	Figma UI/UX Desi...	...
✓ Find-Text-to-Speech Sinhala Datasets		Jayathunga T. M. it2...	5/26	Background Study	...
✓ Project Charter Confirmation Submission		Jayathunga T. M. it2... !	5/26	Document Submi...	...
✓ Create Topic Assignment Form		Jayathunga T. M. it2... !	5/26	Documentations	...
✓ Create Project Charter		Jayathunga T. M. it2... !	5/26	Documentations	...
✓ Progress Presentation-1		Jayathunga T. M. it2... !	5/26	Presentations	...
✓ Project Proposal Presentation Date		Jayathunga T. M. it2... !	4/2	Presentations	...
✓ Prepare to Project Proposal Presentation		Jayathunga T. M. it2... !	3/30	Presentations	...

Task title	Completed by	Priority	Completed ↑	Bucket
Ready To Final Viva	Jayathunga T. M. it2...	10/29		Presentations
Proposal Presentation 2 Slides	Jayathunga T. M. it2...	10/29		Presentations
Complete Our Website	Jayathunga T. M. it2...	10/29		Doing
Complete Thesis Individual draft	Jayathunga T. M. it2...	10/29		Doing
Find Image Captioning Datasets	Jayathunga T. M. it2...	9/8		Backend Develop...
Find Object Detection Datasets	Jayathunga T. M. it2...	9/8		Backend Develop...
Find OCR Datasets	Jayathunga T. M. it2...	9/8		Backend Develop...
Sinhala Voice Navigation Model Complete	Jayathunga T. M. it2... !	9/8		Backend Develop...
Research Paper Submission	Jayathunga T. M. it2...	9/8		Document Submi...
Image Captioning Model training	Jayathunga T. M. it2... !	9/8		Backend Develop...
Object Detection Model Training	Jayathunga T. M. it2... !	9/8		Backend Develop...
OCR Model Training	Jayathunga T. M. it2... !	9/8		Backend Develop...
Implement Mobile Application Camera View in Navigation Side	Jayathunga T. M. it2...	9/8		Frontend Develo...
Implement Mobile Application Home	Jayathunga T. M. it2...	9/8		Frontend Develo...
Implement Mobile application Camera View in Book Reading Side	Jayathunga T. M. it2...	9/8		Frontend Develo...
Research Paper Written	Jayathunga T. M. it2... !	9/8		Research Paper
Research Paper Submission to ICAC	Jayathunga T. M. it2... !	9/8		Research Paper

Task title	Completed by	Priority	Completed ↑	Bucket
Implement Text to Speech Part	Jayathunga T. M. it2...	7/15		Figma UI/UX Desi...
Implement OCR Function Book Reader	Jayathunga T. M. it2...	7/15		Figma UI/UX Desi...
Implement Mobile Application Home Page	Jayathunga T. M. it2...	7/15		Figma UI/UX Desi...
Implement Navigation Part of Frontend	Jayathunga T. M. it2...	7/15		Figma UI/UX Desi...
Status Document +	Jayathunga T. M. it2... !	5/27		Documentations
Implement Mobile Application Splash Screen	Jayathunga T. M. it2... ↓	5/26		Frontend Develo...
Proposal Presentation Individual draft	Jayathunga T. M. it2...	5/26		Presentations
TAF Submission	Jayathunga T. M. it2... !	5/26		Document Submi...
Project Charter Submit	Jayathunga T. M. it2...	5/26		Document Submi...
Individual Project Charter Document Submission	Jayathunga T. M. it2... !	5/26		Document Submi...
Find Sinhala TTS Datasets	Jayathunga T. M. it2... !	5/26		Backend Develop...
Sinhala Text-to-Speech Model Training	Jayathunga T. M. it2... !	5/26		Backend Develop...
Created OCR figma UI	Jayathunga T. M. it2...	5/26		Figma UI/UX Desi...
Create Proposal Presentation Document	Jayathunga T. M. it2...	5/26		Documentations
Implementation Sinhala Speech to Text in Figma UI Designs	Jayathunga T. M. it2...	5/26		Figma UI/UX Desi...
Create Splash Screen of Figma UI Design	Jayathunga T. M. it2...	5/26		Figma UI/UX Desi...
Select Mobile Application Name	Jayathunga T. M. it2...	5/26		Figma UI/UX Desi...

❖ Completed Tasks and Conversation Highlights

- Prepare for Progress Presentation 1 (PP1).
- Creating the presentation.
- Finalizing the GitLab Projects.
- Communication with the supervisor after finalizing the project.



A screenshot of the GitLab project page for 'Mobile Base Sinhala Book Reader for Visually Impaired Individuals'. The sidebar on the left includes options like 'Project overview', 'Repository', 'Issues', 'Merge Requests', 'CI / CD', 'Operations', 'Analytics', 'Wiki', 'Snippets', and 'Settings'. The main content area shows the project details: 'Mobile Base Sinhala Book Reader for Visually Impaired Individuals' (Project ID: 1947), 76 commits, 5 branches, 0 tags, and 6.6 MB files. It lists recent activity: a merge branch 'IT20146238-Jayathunga-TM' into 'master' by Jayathunga T.M. (authored 2 days ago). Below this, there are sections for README, Auto DevOps enabled, Add LICENSE, Add CHANGELOG, Add CONTRIBUTING, and Add Kubernetes cluster. A table shows the last commit history:

❖ Completed Task and Conversation Highlights

- Prepare for Progress Presentation 2 (PP2).
- Creating the presentation.
- Finalizing the GitLab Projects.
- Communication with the supervisor after finalizing the project.

The screenshot shows a SharePoint document library titled "CDAPSubmissionCloud". The library contains two files: "Mobile Base Sinhala Book Reader for Visually Impaired Individuals.pdf" and "ReadMe.txt". The "Mobile Base Sinhala Book Reader for Visually Impaired Individuals.pdf" file was uploaded on September 15 by Jayathunga T. M. it201462, with a file size of 7.44 MB. The "ReadMe.txt" file was uploaded on April 20 by CDAP SLUIT, with a file size of 37 bytes. There are 2 documents in total.

The screenshot shows a GitLab project page for "Mobile Base Sinhala Book Reader for Visually Impaired Individuals". The commit history is displayed, showing a series of commits from Thirosh Madhusha. The latest commit, "completed all API backend integration python file", was authored 2 days ago. Other commits include "app.py", "image-captioning.ipynb", "inference.ipynb", "room-object-detection.ipynb", "sinhala-ocr.ipynb", and "sinhala-text-to-speech.ipynb", all completed within the last 3 days.

Name	Last commit	Last update
app.py	completed all API backend integration python file	2 days ago
image-captioning.ipynb	Sinhala image captioning training model ipynb file	3 days ago
inference.ipynb	Complete integrate training model ipynb file	2 days ago
room-object-detection.ipynb	Sinhala object detection training model ipynb file	3 days ago
sinhala-ocr.ipynb	complete Sinhala ocr training model ipynb file	3 days ago
sinhala-text-to-speech.ipynb	add sinhala text to speech training ipynb file	3 days ago

❖ Completed Task and Conversation Highlights

- Started writing the research paper.
- Exploring Mendeley tool.
- Exploring the IEEE standards and word tools.
- Communicating with supervisor and getting the supervisor feedback.
- Attending prof. Chandimal's Session on how to write a good research paper.
- Writing 3 separate research papers for:
 - ★ **5ICAC2023** – 5th International Conference on Advancements in Computing 2023.
 - **Title:** Mobile Base Sinhala Book Reader For Visually Impaired Students
 - ★ **ICITR2023** – 8th International Conference on Information Technology Research.
 - **Title:** Android Base Sinhala Story Book Reader For Visually Impaired Children
 - ★ **IJEMR** – International Journal of Engineering and Management Research
 - **Title:** Enhancing Android Based Storytelling Application for Sinhala-Speaking Visually Impaired Children

The screenshot shows a task management interface with the following details:

- Task Name:** Research Paper Written (Completed)
- Completion Date:** 09/08/2023
- Assignees:** G, J, [Profile Pictures]
- Labels:** Research Paper (highlighted), High, Document Submission
- Bucket:** Research Paper
- Progress:** Completed
- Priority:** Important
- Start Date:** 08/01/2023
- Due Date:** 08/31/2023
- Repeat:** Does not repeat

Tasks

✓ Research Paper Submission to ICAC

Completed on 09/08/2023 by you

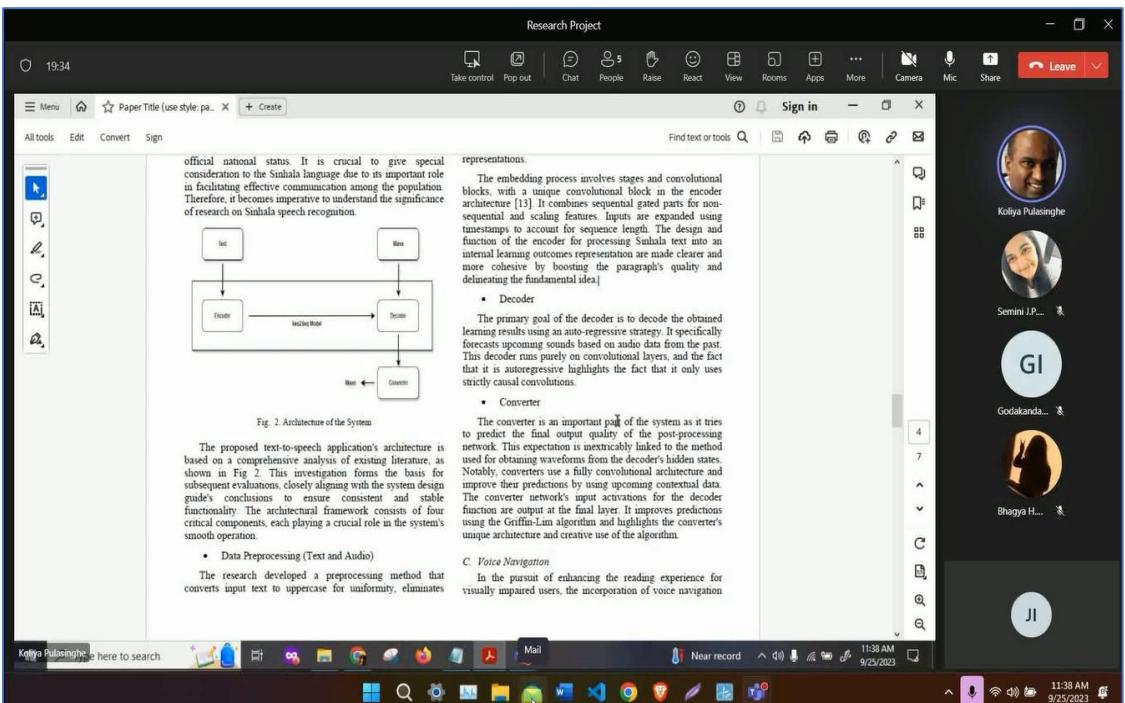
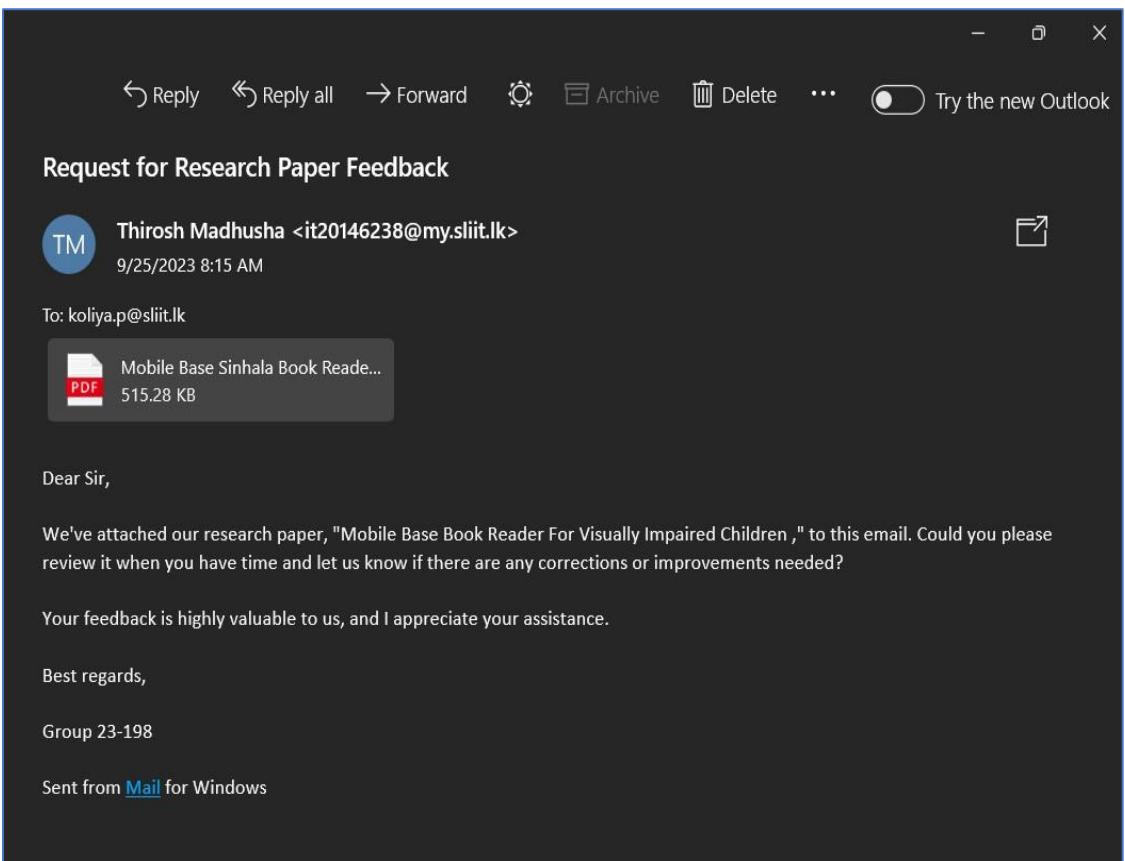
Group X Research Paper X High X Documentation X Document Submition X

Bucket	Progress	Priority
Research Paper	Completed	Urgent
Start date	Due date	Repeat
Start anytime	08/30/2023	Does not repeat

We're thrilled to announce that the deadline for paper submission has been extended to August 30th!

This gives you extra time to refine your work and contribute to the diverse tapestry of ideas that the ICAC Conference is known for. We're excited to receive your contributions and can't wait to see the impact your research will have on the academic community.





cmt

Results All folders ▾

Friday, October 27, 2023

Microsoft CMT IEEE 3rd SAMRTGENCON 2023 Fri 10/27
Dear Thirosh M Jayathunga Pa

Microsoft CMT ICAC 2023 - Reminder on Regi Fri 10/27
Dear author, Congratulations ↗

Thursday, October 26, 2023

Microsoft CMT ACCEPTANCE NOTIFICATION Thu 10/26
Dear Thirosh M Jayathunga P

Monday, October 23, 2023

TM Thirosh Madhusha, Microsoft ↗
Acceptance Notification: 5 Mon 10/23
Thirosh Madhusha
Sent from Mail for Windows Frc: All Mail
Thirosh Madhusha
----- Forwarded message - All Mail
Microsoft CMT ↗
Dear Thirosh M Jayathunga, Co: All Mail

Sunday, October 22, 2023

MC Microsoft CMT Microsoft Conference Manag Sun 10/22
Microsoft Conference Manag

Microsoft CMT <email@msr-cmt.org>
10/14/2023 10:40 PM

To: Thirosh M Jayathunga

Dear Thirosh M Jayathunga,

Congratulations! We are pleased to inform you that your paper has been accepted to be presented at the 5th International Conference on Advancements in Computing.

Paper ID: 481
Paper Title: Mobile Base Sinhala Book Reader For Visually Impaired Students

Please visit <https://cmt.research.microsoft.com/5ICAC2023/Submission/Index> to view the reviews given during the double-blind review process.

When preparing the camera-ready version of your paper, please address all the review comments and follow the camera-ready guidelines given in the <https://icac.lk/for-authors>

Please note that the camera-ready deadline is 1st of November 2023.

Camera-ready Submission Guidelines for Authors:
(also available at <https://icac.lk/for-authors>)

- Check the review comments in the [EW](#). The authors are expected to address all reviewer comments and revise the paper accordingly. (NOTE: You are not allowed to make significant structural changes to the accepted article.)
- The paper must comply with IEEE format in order to be published in IEEE Xplore.
- The title, author names and affiliations must be in the correct format.
(refer https://ieeepublications.ieee.org/wp-content/uploads/IEEE_Style_Manual.pdf)
- Manuscript should be limited to 150-200 words.
- All references and citations must be in IEEE referencing style.
(refer to https://researchcenter.ieee.org/wp-content/uploads/IEEE_Reference_Guide.pdf).
- Paper should be proofread and must be free of any spelling and grammar mistakes.
- Figures and tables must be clear, readable, and the captions should follow the IEEE formatting guidelines.
(refer https://ieeepublications.ieee.org/wp-content/uploads/IEEE_Style_Manual.pdf)
- Include the following copyright notice in the footer (left-aligned) of the first page:
979-8-3503-5813-1/23/\$31.00 ©2023 IEEE
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Creating PDF eXpress Account:

Log in to the IEEE PDF eXpress TM site (<https://ieee-pdf-express.org/>)

cmt

Results All folders ▾

Friday, October 27, 2023

Microsoft CMT IEEE 3rd SAMRTGENCON 2023 Fri 10/27
Dear Thirosh M Jayathunga Pa

Microsoft CMT ICAC 2023 - Reminder on Regi Fri 10/27
Dear author, Congratulations ↗

Thursday, October 26, 2023

MC Microsoft CMT ACCEPTANCE NOTIFICATION Thu 10/26
Dear Thirosh M Jayathunga P

Monday, October 23, 2023

TM Thirosh Madhusha, Microsoft ↗
Acceptance Notification: 5 Mon 10/23
Sent from Mail for Windows

Sunday, October 22, 2023

MC Microsoft CMT Microsoft Conference Manag Sun 10/22
We're writing to let you know

Tuesday, October 17, 2023

MC Microsoft CMT 8th International Conference 10/17/2023
Hello, The following submis:

Microsoft CMT <email@msr-cmt.org>
10/26/2023 3:09 PM

To: Thirosh M Jayathunga

Dear Thirosh M Jayathunga,

Paper ID / Submission ID : 209

Title : Android Base Sinhala Story Book Reader For Visually Impaired Children

Greeting from SMARTGEN - The premier conference for the latest discoveries in Technology

We are pleased to inform you that your paper has been accepted for the Oral Presentation as a full paper for the "IEEE 2023 3rd Smart Generation Technologies in Computing, Networking & Communication (SMARTGENCON)", Bengaluru, Karnataka, India with following reviewers' comment.

All accepted and presented papers will be submitted to IEEE Xplore for the further publication and will be indexed by Ei Compendex and Scopus Indexing.

You should finish the registration before deadline, or you will be deemed to withdraw your paper:

Complete the SMARTGENCON Registration Process (The last date of payment Registration is 31 OCTOBER 2023)

Payment Links

For Indian Authors: <https://rpx.io/l/JkgqeZ703Y>

For Foreign Authors: <https://in.explata.com/e/ieee-smartgencon-2023/checkout>
(Kindly use stripe payment option)

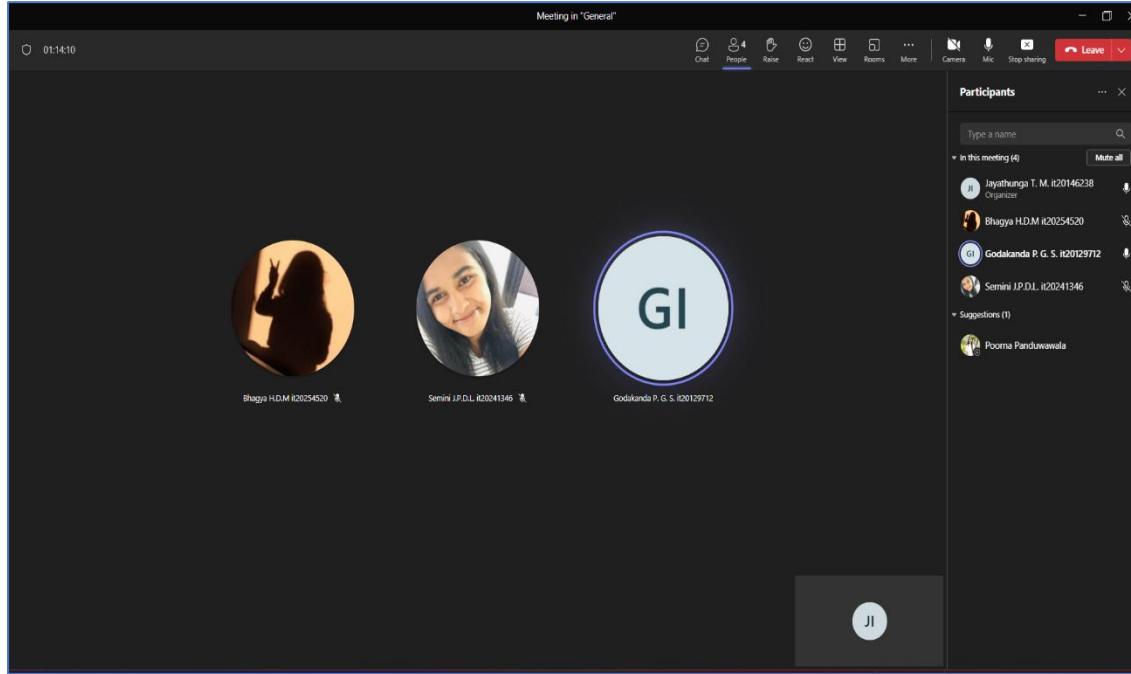
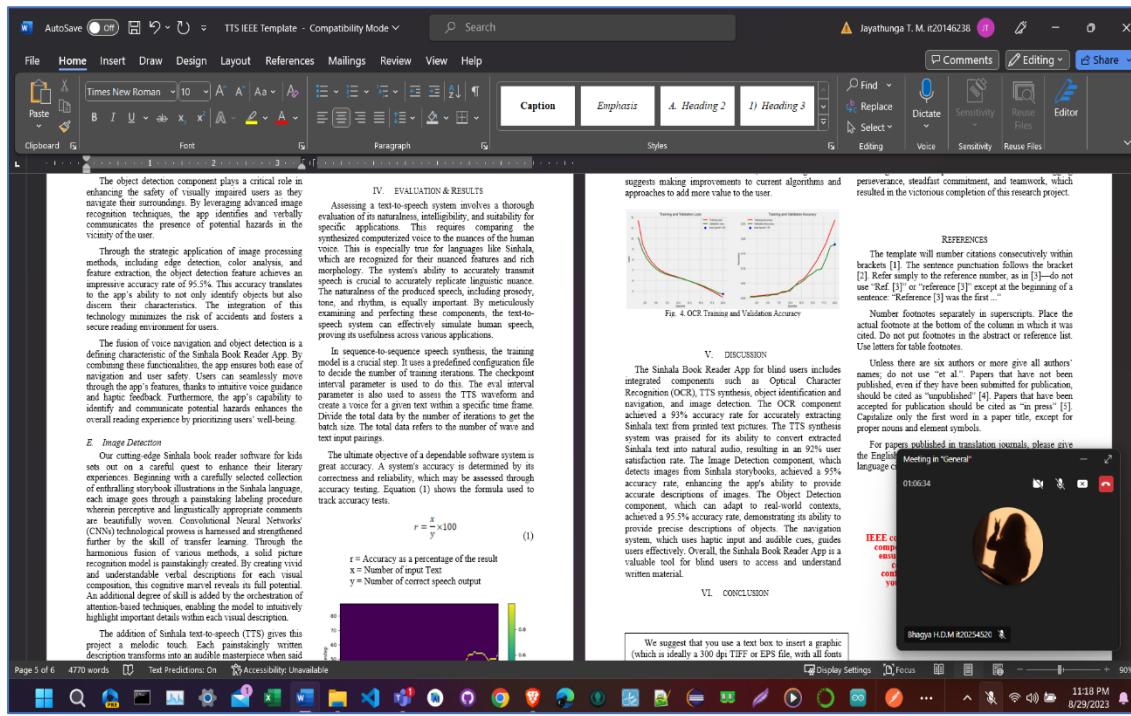
Further steps like IEEE PDF xpress and E copyright will be given later once registration is over after the deadline.

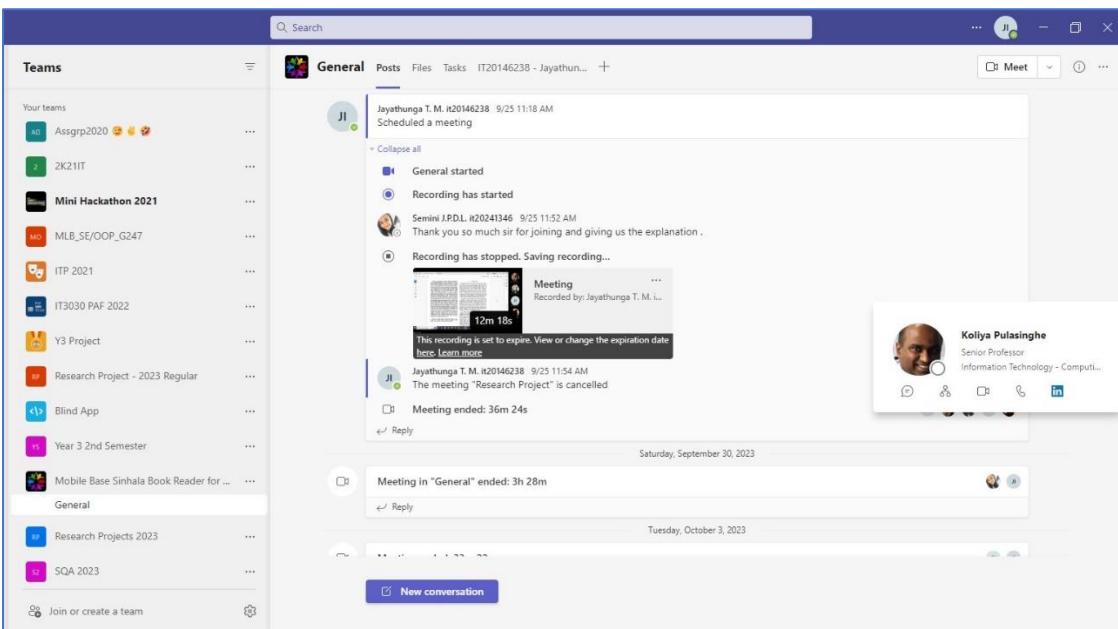
Note :

- Any changes with the Author name, Affiliation and content of paper will not be allowed after acceptance.
- This is Hybrid Conference, both online and physical presentation mode is available,

Note: No major revisions in paper.

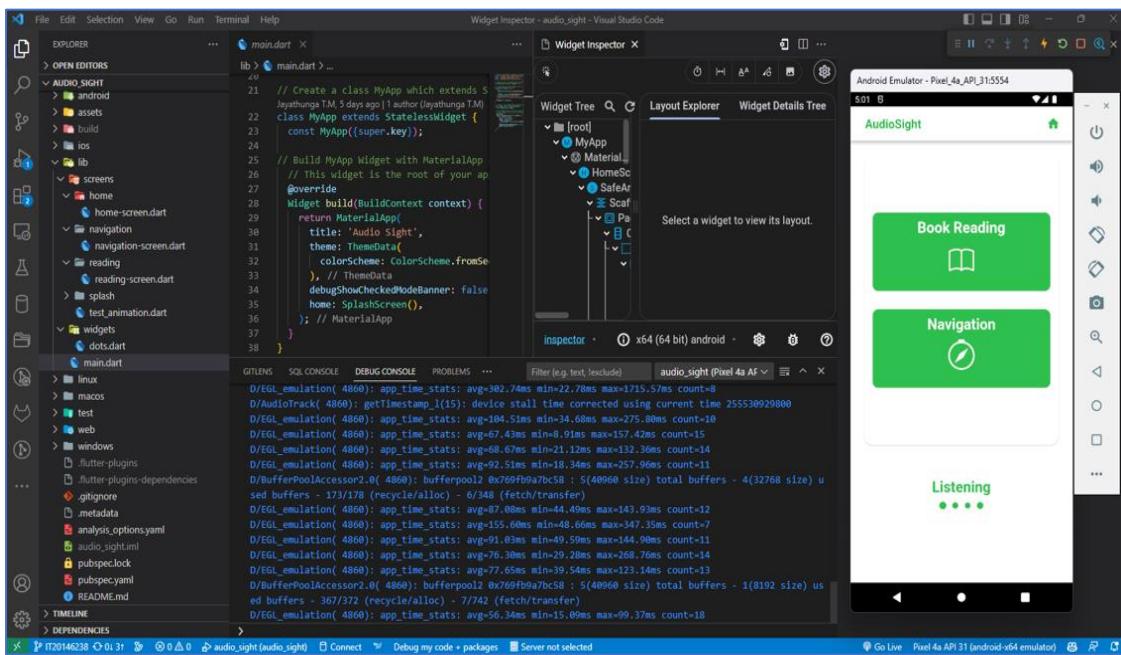
The reviews are below





❖ Completed Tasks and Conversation Highlights

- Creating the front-end of the application.
- Integration all the components.
- Discussing the supervisor's suggestions.



❖ Completed Tasks and Conversation Highlights

- Complete Status Documents.
- Complete Individual Thesis Reports.
- Creation Group Thesis Reports.

The screenshot shows a SharePoint library named "CDAPSubmissionCloud". The library is a private group and contains four items:

Name	Modified	Modified By	File Size
2_StatusDoc_IT20146238_Jayathunga T.M.p...	September 9	Jayathunga T. M. it201462	7.64 MB
ReadMe.txt	April 20	CDAP SLUIT	39 bytes
StatusDoc_2_IT20254520.pdf	September 9	Bhagya H.D.M it20254520	2.26 MB
TMP-23-198_IT20241346_StatusDocument0...	September 8	Semini J.P.D.L it20241346	3.99 MB

Count: 4

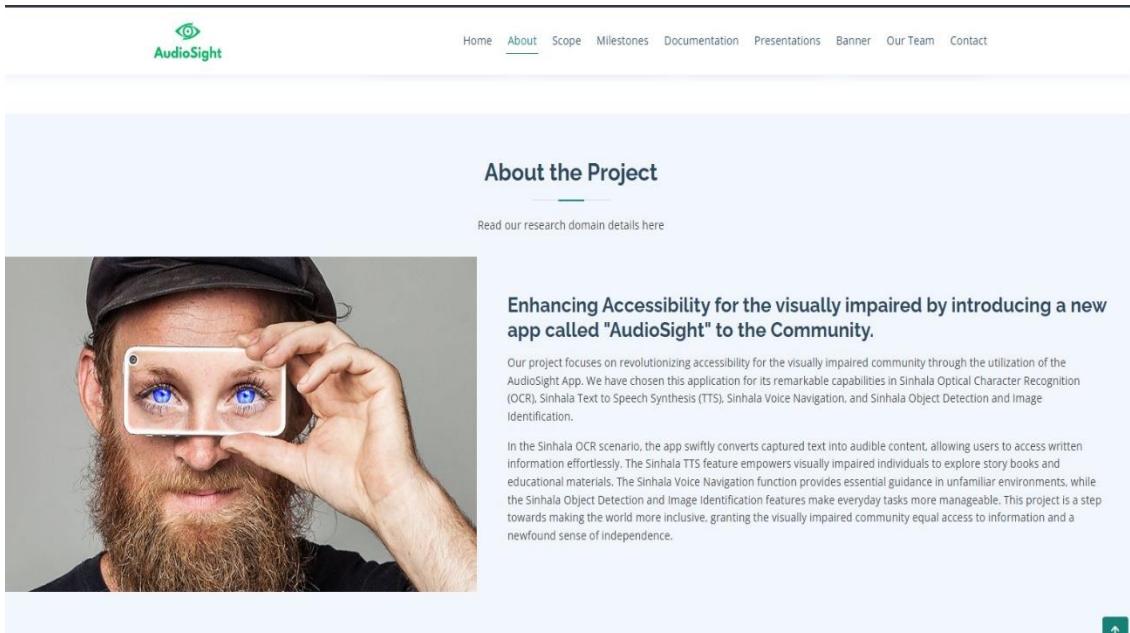
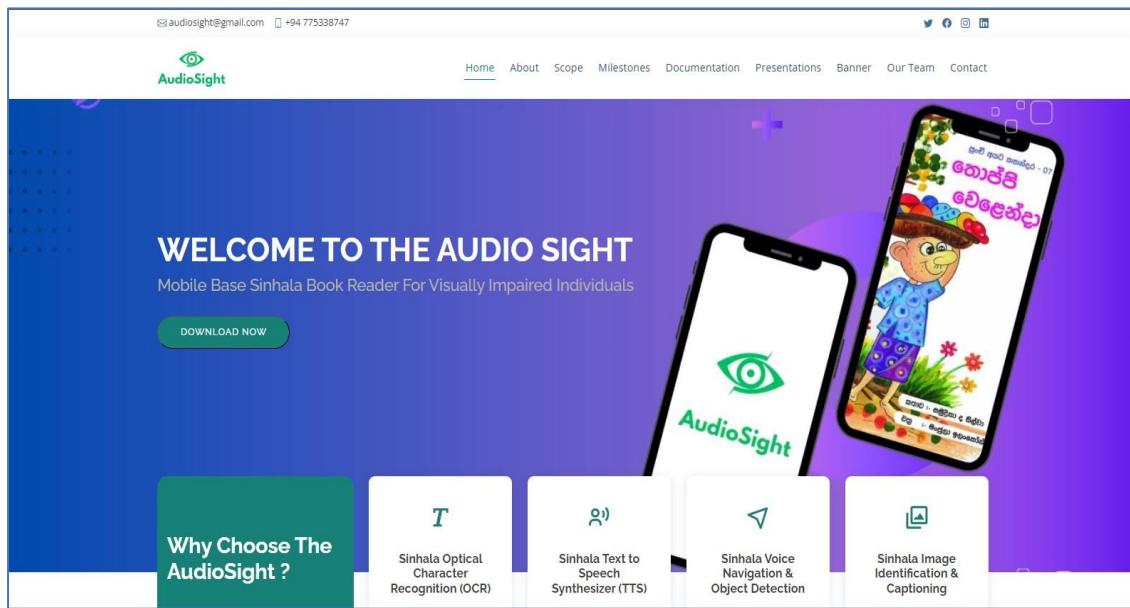
The screenshot shows a SharePoint library named "CDAPSubmissionCloud". The library is a private group and contains seven items:

Name	Modified	Modified By	File Size
Drafts	September 16	Jayathunga T. M. it201462	1 item
Turnitin reports	April 20	CDAP SLUIT	4 items
2023-198-Final-Thesis-Group_Report.pdf	Yesterday at 12:48 AM	Jayathunga T. M. it201462	6.64 MB
Final_Report_23-198_IT20241346.pdf	October 6	Semini J.P.D.L it20241346	3.38 MB
Final_Report_23-198_IT20254520.pdf	October 10	Bhagya H.D.M it20254520	1.59 MB
Final_Report_23-198-IT20146238.pdf	September 16	Jayathunga T. M. it201462	2.00 MB
ReadMe.txt	April 20	CDAP SLUIT	66 bytes

Count: 7

❖ Completed Tasks and Conversation Highlights

- Create a website for the solution.



❖ Completed Tasks and Conversation Highlights

- Creation Issues.
- Creation Milestone on GitLab.
- Creation Branches for Each Commitments.
- Creation Tags.
- Merge Request to Main Branch

GitLab Project Overview - Milestones

Mobile Base Sinhala Book Reader for Visually Impaired Individuals

23-198 / Mobile Base Sinhala Book Reader for Visually Impaired Individuals > Milestones

Open 0 Closed 6 All 6

Application Instructions Guidance Making (Aug 2, 2023–Aug 31, 2023) 1 issue · 0 Merge Requests 100% complete Reopen Milestone

New Frontend Changes (Aug 1, 2023–Aug 31, 2023) 5 issues · 2 Merge Requests 100% complete Reopen Milestone

Mobile Application Backend (May 26, 2023–Aug 20, 2023) 12 issues · 0 Merge Requests 100% complete Reopen Milestone

Primary Instructions (Jul 29, 2023–Aug 15, 2023) 1 issue · 0 Merge Requests 100% complete Reopen Milestone

Mobile Application Frontend (May 20, 2023–May 26, 2023) 5 issues · 7 Merge Requests 100% complete Reopen Milestone

Mobile Application Figma UI/UX Design (May 9, 2023–May 20, 2023) 1 issue · 3 Merge Requests 100% complete Reopen Milestone

GitLab Project Overview - Repository - Branches

Mobile Base Sinhala Book Reader for Visually Impaired Individuals

23-198 / Mobile Base Sinhala Book Reader for Visually Impaired Individuals > Repository > Branches

Overview Active Stale All

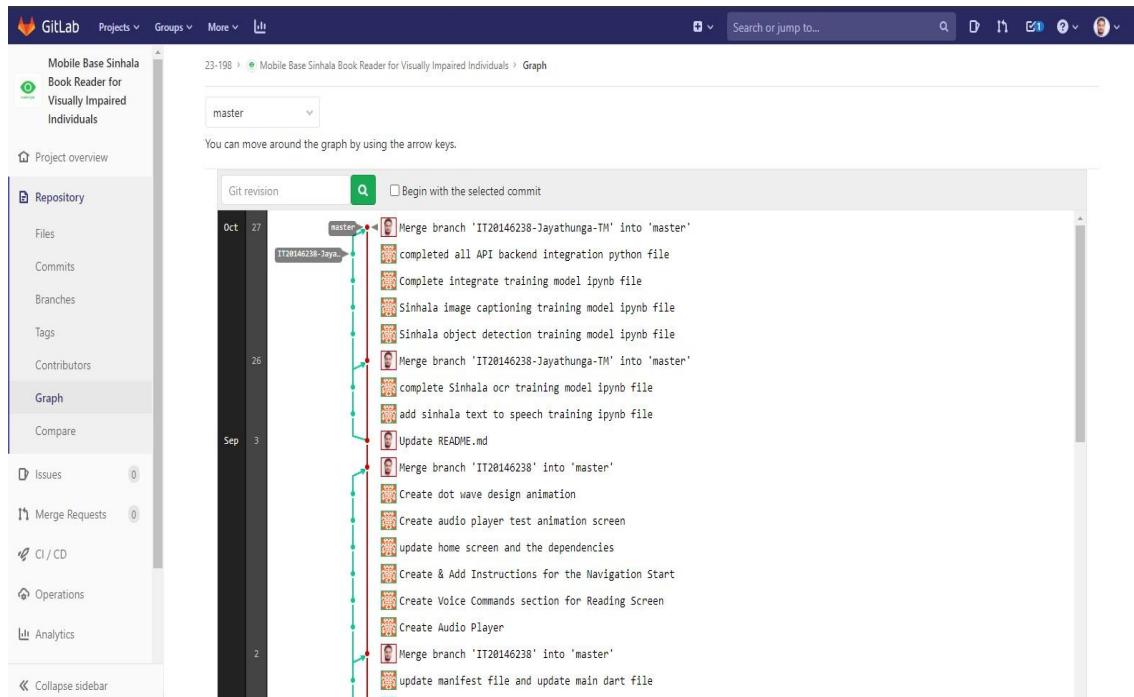
Protected branches can be managed in project settings.

Active branches

- V master [default] protected
 - 082a0942 · Merge branch 'IT20146238-Jayathunga-TM' into 'master' · 3 days ago
- V IT20146238-Jayathunga-TM merged
 - 9885448b · completed all API backend integration python file · 3 days ago

Stale branches

- V 2-create-figma-ui-ux-designs merged
 - 7b855de2 · Merge branch 'IT20146238-Text-to-Speech(TTS)' into 'master' · 5 months ago
- V IT20129712-Voice_navigation
 - 66fdf92b · Updating readme file individual research question and objective · 5 months ago
- V IT20254520_Image_Detection merged
 - cb12d7c6 · Update README.md · 5 months ago



The screenshot shows the GitLab project commits for commit `IT20146238-Jayathunga-TM`. The table lists the commits in chronological order:

Date	Author	Commit Message	SHA	Actions
26 Oct, 2023	Jayathunga T.M.	Merge branch 'IT20146238-Jayathunga-TM' into 'master' ...	082a0942	
	Thirosh Madhusha	completed all API backend integration python file	9b85448b	
	Thirosh Madhusha	Complete integrate training model ipynb file	d64af861	
	Thirosh Madhusha	Sinhala image captioning training model ipynb file	4874b2e4	
	Thirosh Madhusha	Sinhala object detection training model ipynb file	0bec819f	
	Jayathunga T.M.	Merge branch 'IT20146238-Jayathunga-TM' into 'master' ...	668eaaf4	
	Thirosh Madhusha	complete Sinhala ocr training model ipynb file	fc1dbbe6	
	Thirosh Madhusha	add sinhala text to speech training ipynb file	261af306	
03 Sep, 2023	Jayathunga T.M.	Update README.md	df7369e5	

GitLab Project Overview

Mobile Base Sinhala
Book Reader for Visually Impaired Individuals

Project overview

Repository

Commits

Branches

Tags

Contributors

Graph

Compare

Issues

Merge Requests

CI / CD

Operations

Analytics

Collapse sidebar

03 Sep. 2023 5 commits

- Update README.md
Jayathunga T.M. authored 1 month ago
- Merge branch 'IT20146238' into 'master'
Jayathunga T.M. authored 1 month ago
- Create dot wave design animation
Jayathunga T.M. authored 1 month ago
- Create audio player test animation screen
Jayathunga T.M. authored 1 month ago
- update home screen and the dependencies
Jayathunga T.M. authored 1 month ago

02 Sep. 2023 3 commits

- Create & Add Instructions for the Navigation Start
Jayathunga T.M. authored 1 month ago
- Create Voice Commands section for Reading Screen
Jayathunga T.M. authored 1 month ago
- Create Audio Player
Jayathunga T.M. authored 1 month ago

01 Sep. 2023 4 commits

- Merge branch 'IT20146238' into 'master'
Jayathunga T.M. authored 1 month ago
- update manifest file and update main dart file
Jayathunga T.M. authored 1 month ago

df7369e5, 32124b76, a4c21e0b, 9a3f70a8, 701d1d3c, 25165e26, ab2b0f04, 59a03f0d, b70c4cf1, 165b96a6

Search or jump to...

GitLab Project Overview

Mobile Base Sinhala
Book Reader for Visually Impaired Individuals

Project overview

Repository

Commits

Branches

Tags

Contributors

Graph

Compare

Issues

Merge Requests

CI / CD

Operations

Analytics

Collapse sidebar

20 Aug. 2023 6 commits

- Merge branch 'IT20146238' of...
Jayathunga T.M. authored 1 month ago
- add primary voice instructions & update gradle sdk
Jayathunga T.M. authored 1 month ago
- Merge branch 'IT20146238' into 'master'
Jayathunga T.M. authored 2 months ago
- Merge branch 'master' into 'IT20146238'
Jayathunga T.M. authored 2 months ago
- Add Comments for each Sections
Jayathunga T.M. authored 2 months ago
- Create a list of cameras and a variable in camera
Jayathunga T.M. authored 2 months ago

19 Aug. 2023 1 commit

- Create a class MyApp which extends StatelessWidget
Jayathunga T.M. authored 2 months ago

17 Aug. 2023 5 commits

- Create Main Function Widgets
Jayathunga T.M. authored 2 months ago
- Create Listening Container
Jayathunga T.M. authored 2 months ago
- Import main packages and add gap between component
Jayathunga T.M. authored 2 months ago

2cd5979a, 6f4eeeb7, 6979ca11, 3688b1a8, 2683426c, 71b88450, cef3529, b2ac07d1, 1d7340e5, e6eb7ffe

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15 Aug. 2023 5 commits

- Merge branch 'IT20146238' into 'master' ...
Jayathunga T.M. authored 2 months ago
ceb6a6bb
- import main camera view and material packages
Jayathunga T.M. authored 2 months ago
11fa5515
- complete navigation screen camerapreview container
Jayathunga T.M. authored 2 months ago
fa2d9d81
- Build Navigation Screen Widget
Jayathunga T.M. authored 2 months ago
e8d1f870
- Create Navigation Screen State Class
Jayathunga T.M. authored 2 months ago
edad827d

13 Aug. 2023 1 commit

- import home screen package & add commets
Jayathunga T.M. authored 2 months ago
ff9417d0

12 Aug. 2023 8 commits

- Create Home Page Screen StatefulWidget
Jayathunga T.M. authored 2 months ago
ccda8a329
- Create Navigation Screen StatefulWidget
Jayathunga T.M. authored 2 months ago
6bce8d90
- Create Reading Screen StatefulWidget
Jayathunga T.M. authored 2 months ago
4ed99c8d
- create set flash mode with take picture option
Jayathunga T.M. authored 2 months ago
65ed8610

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11 Aug. 2023 6 commits

- create camera controller with lock capture option
Jayathunga T.M. authored 2 months ago
c7069088
- create reading screen StatefulWidget class
Jayathunga T.M. authored 2 months ago
5d595982

10 Aug. 2023 3 commits

- Merge branch 'IT20146238' into 'master' ...
Jayathunga T.M. authored 2 months ago
202b5ea3
- Import material, scheduler and svg package paths
Jayathunga T.M. authored 2 months ago
db707b72
- widget 'build' method for ui splashscreen component
Jayathunga T.M. authored 2 months ago
0a4b2f06

09 Aug. 2023 3 commits

- add main application assets svg files and images
Jayathunga T.M. authored 2 months ago
e1345062
- Create and extend the splash screen State class
Jayathunga T.M. authored 2 months ago
b56cf4ca
- create splash screen StatefulWidget main class
Jayathunga T.M. authored 2 months ago
ebdcdd69

08 Aug. 2023 1 commit

- Merge branch 'IT20146238' into 'master' ...
Jayathunga T.M. authored 2 months ago
e340aa81

07 Aug. 2023 1 commit

- change the splash screen theme path
Jayathunga T.M. authored 2 months ago
b2d87bdc

06 Aug. 2023 1 commit

- add flutter dependencies for camera
Jayathunga T.M. authored 2 months ago
e7e276e7

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07 Aug. 2023 1 commit

Add User permissions for internet & open camera
Jayathunga T.M authored 2 months ago

0fc6b22b

03 Aug. 2023 4 commits

Merge branch 'IT20146238' into 'master'
Jayathunga T.M. authored 2 months ago

Merge branch 'master' into 'IT20146238'
Jayathunga T.M. authored 2 months ago

Add home screen Nav Bar Design
Jayathunga T.M authored 2 months ago

change home screen format
Jayathunga T.M authored 2 months ago

24 May. 2023 8 commits

Merge branch 'IT20146238' into 'master'
Jayathunga T.M. authored 5 months ago

Create Splash Screen
Jayathunga T.M. authored 5 months ago

Merge branch 'master' into 'IT20146238'
Jayathunga T.M. authored 5 months ago

Create splash screen logo
Jayathunga T.M. authored 5 months ago

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Jayathunga T.M. authored 5 months ago

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Create Flutter Project
Jayathunga T.M. authored 5 months ago

Update flutter file
Jayathunga T.M. authored 5 months ago

create flutter project
Jayathunga T.M. authored 5 months ago

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Merge branch 'IT20146238-Text-to-Speech(TTS)' into 'master'
Jayathunga T.M. authored 5 months ago

Figma UI Images
Jayathunga T.M. authored 5 months ago

Merge branch 'IT20146238-Text-to-Speech(TTS)' into 'master'
Jayathunga T.M. authored 5 months ago

Create Figma UI Designs
Jayathunga T.M. authored 5 months ago

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Merge branch 'IT20129712-Voice_navigation' into 'master'
Jayathunga T.M. authored 5 months ago

IT20129712 voice navigation
IT20129712 P. G. S. Godakanda authored 5 months ago

Update README.md
Jayathunga T.M. authored 5 months ago

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Jayathunga T.M. authored 5 months ago

16 May. 2023 1 commit

Update README.md
Jayathunga T.M. authored 5 months ago

15 May. 2023 1 commit

Initial commit
Jayathunga T.M. authored 5 months ago