# ONLINE LEARNING PLATFORM FOR HEARING IMPAIRED PEOPLE

Project ID: 2022\_59

#### Logbook

Wanasinghe W. A. D. B. – IT19201160

Bachelor of Science (Hons) Degree in Information Technology Specializing in Data Science

Department of Information Technology
Faculty of Computing

Sri Lanka Institute of Information Technology Sri Lanka

November 2022

## Contents

1.	Week 1 – January 10 to January 16	1
2.	Week 2 – January 17 to January 23	1
3.	Week 3 – January 23 to January 30	2
4.	Week 4 – January 31 to February 6	2
5.	Week 5 – February 7 to February 13	3
6.	Week 6 – February 14 to February 20	3
7.	Week 7 – February 21 to February 27	3
8.	Week 8 – February 28 to 6 March	4
9.	Week 9 – March 7 to March 13	4
10.	Week 10 - March 14 to March 20	. 4
11.	Week 11 – March 21 to March 27	5
12.	Week 12 – March 28 to April 3	5
13.	Week 13 – April 4 to April 10	5
14.	Week 14 – April 11 to April 17	5
15.	Week 15 – April 18 to April 24	6
16.	Week 16 – April 25 to May 1	6
17.	Week 17 – May 2 to May 8	6
18.	Week 18 – May 9 to May 15	7
19.	Week 19 – May 16 to May 22	7
20.	Week 20 – May 23 to May 29	8
21.	Week 21 – May 31 to June 5	8
22.	Week 22 – June 6 to June 12	8
23.	Week 23 – June 13 to June 19	9
24.	Week 24 – June 20 to June 26	9
25.	Week 25 – June 27 to July 3	9
26.	Week 26 – July 4 to July 10	9
27.	Week 27 – July 11 to July 17	10
28.	Week 28 – July 18 to July 24	10
29.	Week 29 – July 25 to July 31	10
30.	Week 30 – August 1 to August 7	10
31.	Week 31 – August 8 to August 14	11
32.	Week 32 – August 15 to August 21	11

33.	Week 33 – August 22 to August 28	11
34.	Week 34 – August 29 to September 4	12
35.	Week 35 – September 5 to September 11	12
36.	Week 36 – September 12 to September 18	12
37.	Week 37 – September 19 to September 25	12
38.	Week 38 – September 26 to October 2	13
39.	Week 39 – October 3 to October 9	13
40.	Week 40 – October 10 to October 16	13
41.	Week 41 – October 17 to October 23	14
42.	Week 42 – October 24 to October 30	14
43.	Week 43 – October 31 to November 6	14
44.	Week 44 -November 7 to November 13	15
45.	Week 45 – November 14 to November 20	15

# 1. Week 1 – January 10 to January 16

Component	Person Responsible	Work Done
Google Chatbot Component	W. A. D. B. Wanasinghe	<ul> <li>Research on Sri Lankan Sign Language.</li> <li>Project Charter Submission</li> </ul>

# 2. Week 2 – January 17 to January 23

Component	Person Responsible	Work Done
Google Chatbot Component	W. A. D. B. Wanasinghe	<ul> <li>Literature survey on learning platforms developed for hearing impaired around the world.</li> <li>Working on proposal document draft version.</li> </ul>

# 3. Week 3 – January 24 to January 30

Component	Person Responsible	Work Done
Google Chatbot Component	W. A. D. B. Wanasinghe	<ul> <li>Proposal draft submission</li> <li>Research on Sri Lankan sign language and its features.</li> </ul>

# 4. Week 4 – January 31 to February 6

Component	Person Responsible	Work Done
Google Chatbot Component	W. A. D. B. Wanasinghe	<ul> <li>Research on google search using sign language</li> <li>Prepare for proposal presentation.</li> <li>Recording of proposal presentation videos for supervisor feedback.</li> <li>Practice with group members</li> </ul>

## 5. Week 5 – February 7 to February 13

Component	Person Responsible	Work Done
Google Chatbot Component	W. A. D. B. Wanasinghe	<ul> <li>Background study on tools and technologies for google search using sign language.</li> <li>Finalizing proposal document and submitting for supervisor feedback.</li> <li>Submitted proposal document after supervisor feedback was received.</li> </ul>

## 6. Week 6 – February 14 to February 20

Component	Person Responsible	Work Done
Google Chatbot Component	W. A. D. B. Wanasinghe	Setting up python environments and testing necessary tools to get familiarized with them.

## 7. Week 7 – February 21 to February 27

Component	Person Responsible	Work Done
Google Chatbot Component	W. A. D. B. Wanasinghe	Gathering data about google search component

# 8. Week 8 – February 28 to 6 March

Component		Person Responsible	Work Done
Google C Component	Chatbot	W. A. D. B. Wanasinghe	<ul> <li>Background study on tools and technologies for google search component</li> <li>Finalizing proposal document and submitting for supervisor feedback.</li> <li>Submitted proposal document after supervisor feedback was received.</li> </ul>

#### 9. Week 9 – March 7 to March 13

Component		Person Responsible			ible	Work Done
Google Component	Chatbot	W. Wana			В.	<ul> <li>Implemented first model based on research findings for text to sign language</li> <li>40% accuracy achieved in first model.</li> </ul>

## 10. Week 10 – March 14 to March 20

Component		Person Responsible		ible	Work Done	
Google Component	Chatbot		A. asingh	D. e	В.	• Research on improving accuracy for trained models.

#### 11. Week 11 – March 21 to March 27

Component		Person Responsible				Work Done
Google Component	Chatbot		A. asingh		В.	<ul> <li>Fine tuning text to sign language model</li> <li>Started implementing google search module</li> </ul>

## 12. Week 12 – March 28 to April 3

Component		Person Responsible			ible	Work Done
Google Component	Chatbot		A. asingh	D.	B.	• In google search module achieved 60% of accuracy

## 13. Week 13 – April 4 to April 10

Component		Pers	on Re	spons	ible	Work Done
Google Chat Component	bot		A. asingh		В.	<ul> <li>Due to a java path error while using Stanford parser implementation was halted to rectify the issue in text to sign language module.</li> </ul>

## 14. Week 14 – April 11 to April 17

Component	Pe	rson Re	espons	ible	Work Done
Google Char Component	bot W. Wa	A. nnasingl		В.	<ul> <li>Java error solved.</li> <li>Not much work due to Sinhala and Tamil New Year.</li> </ul>

# 15. Week 15 – April 18 to April 24

Component	Person Responsible	Work Done
Google Chatbot Component	W. A. D. B. Wanasinghe	<ul> <li>Finished Text to SSL model.</li> <li>Started on combining google search module and text to sign language model.</li> </ul>

# 16. Week 16 – April 25 to May 1

Component	Person Responsible	Work Done
Google Chatbot Component	W. A. D. B. Wanasinghe	<ul> <li>Implementation update to the supervisor.</li> <li>Made changes based on supervisor feedback.</li> <li>Finished necessary work required for progress presentation 1.</li> </ul>

# 17. Week 17 – May 2 to May 8

Component	Person Responsible	Work Done
Google Chatbot Component	W. A. D. B. Wanasinghe	<ul> <li>Presented demo to the supervisor required for progress presentation         <ol> <li>Started creating progress presentation slides.</li> <li>Finished creating Status document.</li> </ol> </li> </ul>

# 18. Week 18 – May 9 to May 15

Component		Person Resp	onsible	Work Done
Google Component	Chatbot	W. A. Wanasinghe	D. B.	<ul> <li>Submitted Status document 1</li> <li>Progress presentation 1 was postponed due to crisis in the country.</li> <li>Started on further research on tuning the build models to improve accuracy and also on building an 3D avatar for output using blender.</li> </ul>

# 19. Week 19 – May 16 to May 22

Component		Person Responsible V	Work Done
Google Component	Chatbot	W. A. D. B. Wanasinghe	<ul> <li>Finalized the presentation for PP1.</li> <li>Recorded a presentation video along with other team members and submitted for supervisor feedback.</li> <li>Made changes based on supervisor feedback</li> </ul>

# 20. Week 20 – May 23 to May 29

Component		Pers	on Re	spons	ible	Work Done
Google Component	Chatbot	W. Wan	A. asingh	D.	В.	<ul> <li>Had progress presentation 1 and was told that to developed sign language to text first and then continue with other work</li> <li>Had a discussion with supervisor and got advice on what should be done from this point on.</li> </ul>

## 21. Week 21 – May 31 to June 5

Component		Person Responsible				Work Done
Google Char Component	bot		A. asingł		В.	<ul> <li>Planning component structure to adjust to changes suggested by the panel during PP1.</li> <li>Research on sign language to text</li> </ul>

## 22. Week 22 – June 6 to June 12

Component	Person Responsible	Work Done
Google Chatbo Component	W. A. D. B. Wanasinghe	<ul><li>Started working on the research paper.</li><li>Research on sign language to text</li></ul>

#### 23. Week 23 – June 13 to June 19

Component	Person Responsible	Work Done
Google Chatb Component	W. A. D. B. Wanasinghe	<ul> <li>Worked on the research paper.</li> <li>No other major work due to final exams the following week.</li> </ul>

#### 24. Week 24 – June 20 to June 26

Component		Person Responsible			ible	Work Done
Google Component	Chatbot		A. asingh		B.	<ul> <li>No project work due to semester final exams.</li> </ul>

# 25. Week 25 – June 27 to July 3

Component		Person Responsible			ible	Work Done
Google Component	Chatbot		A. asingh		B.	<ul> <li>Research Paper submission for CDAP.</li> <li>Research on sign language to text</li> </ul>

## 26. Week 26 – July 4 to July 10

Component	Person Respo	nsible	Work Done
Google Chath Component	ot W. A. D Wanasinghe	. В.	Not much work due to down with illness

## 27. Week 27 – July 11 to July 17

Component		Pers	on Re	spons	ible	Work Done
Google Component	Chatbot		A. asingh		В.	Using information gathered during research identified a way to combine text to sign language, google search module and sign language to text

## 28. Week 28 – July 18 to July 24

Component		Person Responsible			ible	Work Done
Google Component	Chatbot		A. asingh	D. e	В.	• Implementation of model. Faced a performance issue on personal PC

## 29. Week 29 – July 25 to July 31

Component	Person Responsible	Work Done
Google Chatbo Component	W. A. D. B. Wanasinghe	Tried to complete implemented model but failed due to performance issue

## 30. Week 30 – August 1 to August 7

Component		Person Re	sponsible	Work Done
Google Component	Chatbot	W. A. Wanasingh		<ul> <li>Started working on research paper for ICAC 2022.</li> <li>Started redoing all the work due to the loss of models because of performance issue.</li> </ul>

## 31. Week 31 – August 8 to August 14

Component		Person Re	sponsible	Work Done
Google Component	Chatbot	W. A. Wanasingh		<ul> <li>Research paper for ICAC submitted to the supervisor for feedback.</li> <li>Tried to complete personal component.</li> </ul>

# 32. Week 32 – August 15 to August 21

Component		Person 1	Respons	ible	Work Done
Google Component	Chatbot	W. A Wanasin		В.	<ul> <li>Discussion with supervisor to finalize research paper for ICAC 2022.</li> <li>UI development process started with fellow members</li> </ul>

## 33. Week 33 – August 22 to August 28

Component		Person Responsible				Work Done
Google Char Component	tbot	W. Wanas			В.	<ul> <li>Finalizing research paper for ICAC 2022 paper submission along with paper submission for ICTer 2022.</li> </ul>

## 34. Week 34 – August 29 to September 4

Component		Person Responsible			ible	Work Done
Google Chat Component	oot		A. asingh	D. e	В.	Started working on the final report draft version.

## 35. Week 35 – September 5 to September 11

Component		Pers	on Re	spons	ible	Work Done
Google Component	Chatbot		A. asingh		В.	<ul> <li>Final Report Draft version submitted.</li> <li>Completed UI development and started again with performance issue.</li> </ul>

## 36. Week 36 – September 12 to September 18

Component		Pers	on Re	sponsi	ible	Work Done
Google Component	Chatbot		A. asingh	D. e	B.	• Minor changes to the Final report draft.

## 37. Week 37 – September 19 to September 25

Component		Person Responsible				Work Done
Google Chat Component	bot	W. A Wanasi			В.	<ul> <li>Completed UI part</li> <li>But failed with again due to version problem when trying to fix performance issue.</li> </ul>

## 38. Week 38 – September 26 to October 2

Component		Person Responsible				Work Done
Google Component	Chatbot		A. asingh		В.	<ul> <li>Fixed packages version issue but back with personal PC performance issue.</li> <li>Created Research poster.</li> </ul>

#### 39. Week 39 – October 3 to October 9

Component		Pers	on Re	sponsi	ible	Work Done
Google Component	Chatbot		A. asingh	D.	B.	No project work due to mid exams

#### 40. Week 40 – October 10 to October 16

Component		Perso	n Re	sponsi	ible	Work Done
Google Component	Chatbot	W. Wana	A. asingh	D. e	В.	<ul> <li>Had PP2 and positive feedback received.</li> <li>Minor changes were suggested related to the useability of the system.</li> <li>Advised to increase the data library.</li> <li>Received acceptance notification for ICAC 2022.</li> </ul>

#### 41. Week 41 – October 17 to October 23

Component	Person Responsible	Work Done
Google Chatbo Component	W. A. D. B. Wanasinghe	<ul> <li>Worked on suggestions made by the panel during PP2.</li> <li>Made changes to research paper for ICAC camera ready submission based on reviewer feedback.</li> </ul>

#### 42. Week 42 – October 24 to October 30

Component		Person Responsible Work Done
Google Component	Chatbot	<ul> <li>W. A. D. B.</li> <li>Wanasinghe</li> <li>Made changes to research paper for ICAC camera ready submission based on reviewer feedback.</li> <li>Submitted ICAC camera ready submission.</li> </ul>

## 43. Week 43 – October 31 to November 6

Component		Perso	n Res	sponsi	ible	Work Done			
Google Component	Chatbot	W. Wana	A. singh		В.	<ul> <li>Received acceptance notification for ICTer 2022.</li> <li>Started on changes for ICTer paper based on reviewer feedback for camera ready submission.</li> <li>Withdrew from ICAC 2022.</li> </ul>			

#### 44. Week 44 -November 7 to November 13

Component	Person Responsible	Work Done
Google Chatbot Component	W. A. D. B. Wanasinghe	<ul> <li>Finished final implementations and finalized all documents for final submission.</li> <li>Created research website and submitted.</li> <li>Updated GitLab for final presentation and viva.</li> </ul>

## 45. Week 45 – November 14 to November 20

Component		Pers	on Re	sponsi	ible	Work Done
Google Component	Chatbot		A. asingh	D.	B.	Final Viva and Presentation