Team ThunderBirds

Chatbot with Customizable Voice

Team Representative: Menaga M

Team Members: Krithika,Nivethidha,Renuga Devi

Overall Plan:

- We use Rasa opensource Conversational AI to create chatbot for covid related queries.

- Our chatbot **Coco**, can tell you about covid symptoms , number of cases , prevention ,vaccination centres ,home remedies and most of all be a companion for the covid affected people in their lone time.Coco constantly checks and keeps track of your health

- . To train Rasa model , we produce the possible covid related questions for each category. For number of covid cases in a region and vaccination centres we use api to fetch current data.

- For Text-to-speech conversion, we will use python library. For custom voice dataset,**Speech recognition** module which supports various speech recognition engines and Google Cloud Speech API will be used. We will train 3 different voices and the user can select any one of the voices in the website. She can type the text and be able to hear the voice read out of the typed text by model.

- HTML CSS and JS is used for building frontend and flask framework is used as backend for requests dispatching. We deploy the chatbot model in Google cloud platform.

Detailed Schedule

#	Task	Owner	Start Date	End Date	Dependencies
1.	Collecting dataset for training rasa	Krithika	6/10/2021	6/10/2021	
2.	Testing api's for use in chatbot	Nivethidha	6/10/2021	6/10/2021	Postman
3.	Training the Rasa model with dataset and api's	Menaga	7/10/2021	7/10/2021	Python,Conda,Rasa
4.	Testing the Rasa model with various queries	Renuga	8/10/2021	8/10/2021	Python, Conda,Rasa
5.	Building Chatbot UI	Menaga	8/10/2021	8/10/2021	
6.	Integrating the Frontend with Rasa model	Nivethidha	9/10/2021	9/10/2021	
7.	Testing the website and fixing bugs	Krithika	10/10/2021	10/10/2021	
8.	Generate dataset with the custom voices	Renuga	10/10/2021	10/10/2021	
9.	Build and train the model with voice dataset	Menaga	11/10/2021	11/10/2021	
10.	Trying out the Voice bot in website	Nivethidha	11/10/2021	11/10/2021	
11.	Deploying the model in cloud	Renuga	12/10/2021	12/10/2021	Google Cloud platform
12.	Final testing and Documentation	Krithika	13/10/2021	13/10/2021	

Risks & Mitigation / Action plan

#	Risk	Severity	Probability	Mitigation / Action Plan
1.	Social Interaction of chatbot	Medium	Medium	Train with various conversations
2.	Text given with spelling errors	Low		Enabling Autocorrect in the input text.
3.	Quality related risk	Low	Low	Quality check must be done for each step and if changes are required, these must be implemented right away.
4.	Miscommunication	Medium	Low	Frequent meetings and discussions


Thank you