CSE498R Spring 2021 WEEKLY REPORT

Intelligent Reply System (NSU Chatbot)

Week 01 (23rd February - 4th March)

Abdullah Al Mahfuj Shaan 172 1275 042

Date: 4th March, 2021

Date	Today's Task	Tomorrow's Task	Roadblocks
23rd February, 2021	Today's task is to receive the PC and install the necessary softwares, that is required for this project. Also I set up and fixed my workstation with all the necessary items that are necessary.	Studying related topics on various platforms. Materials are mostly articles, journals, blogs and videos of different Chatbots and its features.	Upon receiving the PC, I installed the OS and installed the necessary softwares. But the PC was very slow initially, so it took a very long time to get everything updated. Also, there was no internet connection on my desk, so I requested for it and it was set up later in the day.
24th February, 2021	I started reading articles on medium.com that are related to Chatbots and its features. I wrote a summary of all the articles that I read throughout the day and gathered a lot of information that is going to help to build this project. Also, I got some insights about some of the roadblocks that I might have to face while doing the project.	Studying related materials: Flask Documentation, Tensorflow, Tech With Tim.	I did not face any major roadblock today. But I did get frustrated sometimes after reading some of the articles.
25th February, 2021	Today I started by reading about the Flask framework. I tried to read some of the codes from Github. I also read about the Tensorflow API which is required for Natural Language Processing. I also saw a tutorial on Youtube, where it is shown how to implement a Chatbot with Flask.	I will see some tutorials related to NLP, Chatbot with Flask. Installing and setting up the environment for developing the Chatbot.	I tried to implement the chatbot by seeing the tutorial. But there were some major environment errors.
28th February, 2021	I read documentation for Flask, Tensorflow and Keras. I also read	To read about the Django framework. Also I need to see	Installing Tensorflow was a hefty task. There were many

	some stackoverflow threads. I also set up my preliminary environment.	some data types for the dataset. For example, JSON or PICKLE format documentation.	conflicts between the dependencies. Python versions were updated to the latest. But it did not have any support for Tensorflow 2.3.1
1st March, 2021	Today I read about Django Framework. And saw if it is actually applicable for the project. I also started to read about JSON and PICKLE data for the dataset.	To collect some Django based Chatbots and go through the documentation and implementation.	I found it very difficult to understand the Django model with the Web API.
2nd March, 2021	Today I downloaded some Django based Chatterbots and tried to implement the baseline version of those projects.	To learn more about Web Widgets and how to run the Deep Learning model in the backend server using Flask.	There were environmental issues related to the Django Framework Chatbots.
3rd March, 2021	I got to know about some of the features of Web Widgets and how it works. Also I learnt about the Flask's server side implementation.	To scribble about the preliminary design for the UI of the Chatbot. Also to learn more about the Dataset preparation and Tensorflow Backend.	I still could not find out completely about integrating the Chatbot into the Website, for example, a pop up will come and say "Hi there". Like it's on most websites these days. There was no proper information regarding these widgets.
4th march, 2021	I downloaded some of the templates that might be useful in building and designing the UI of the Website. Also I tried to implement a particular UI related to the Chatbot. I also learnt about the Dataset. For example: How to set up questions and their corresponding answers using JSON format data.	Next week, I will be working on preparing the Dataset and collecting more information on the Server Side implementation for the Chatbot.	JSON format data needs to be very precise and if there are any anomalies the data doesn't work at all. Even though it might be hard to write each and every single question and answer. This is the easiest way to build the dataset. Or I might also use a text to JSON converter if it works perfectly.