**AI Chatbot**

**Topic**

The chosen topic for this project is a League of Legends (LoL) chatbot. League of Legends in one of the biggest MOBA which is an online team game. The aim of the chatbot is to help beginners with simple knowledge about the game and different terminology used online and their meanings.

**Requirements**

The few requirements that the chatbot should have are:

* Exchange greetings with the user and show politeness
* Should give basic information about the what is League of Legend and MOBA in general
* Explain the different roles with the game
* Explain different hero classes available to choose from
* Remember user’s name (if provided) and recall their name when user exists the chatbot
* Recommend the team composition for beginners
* Explain the terminology used in the game
* Talk about who the bot’s favourite champion with the user and then ask them their fav
* Talk about the bot’s preferred role and champion class
* Take in an imagine of the champion and recognise who it is and provide basic information about the champion

**Modules**

This chatbot will include the following modules:

**Rule-Based Component**

The chatbot will learn various rules on how to interact with the user and how to respond to user questions. The rule-based components will be saved in an AIML file which the bot will use to learn the rules before interacting.

**Similarity-Based Component**

Similarity based component is what will help the bot if it cannot find the pattern to respond to with. The bot will achieve this by using the users input and comparing it with the predefined questions in separate file. It will use the questions to determine which response is most appropriate by using tf/idf and cosine similarity.

**Imagine Classification Component**

Imagine classification component will allow the user to upload an imagine which the chatbot will then try to classify it using some rules to help determine what the imagine is off. The chatbot will then provide some information about the image. For this project, it will help determine imagines of champions used in League of Legends.

**Toy World Reasoning System**

The chatbot will translate language sentences into first-order login using the code provided which will be based on NLTK and will try doing some reasoning based on the knowledge. The chatbot will take key words associated with League of Legend and will add it to the knowledge based in order to answer user queries.

**Sequence to Sequence network extension**

This component will be used when other modules fail to detect any pattern in the user input. It will build a network which will be trained using existing conversation datasets. The trained network will be able to save and load these again when the chatbot is run.

**Flow Diagram**

Correct response

TOY WORLD REASONING

No correct response

User uploads image

Found correct response

Found correct response

COSIGN SIMILIARTY PROCESS

READ IMGAGE

IMAGE CLASSIFICATION

No correct response

READ CSV FILE

Input not ‘Bye’

START

READ/LEARN AIML RULES

GREET USER

USER INPUT

COMPARE WITH AIML RULES

OUTPUT

Correct response

END

User inputs ‘Bye’