* 1. Why IDP/UDP?

We have selected an UDP Project because we were not able to get in contact with any industrial identity which had the similar problem statement as we developed. We together as a team came up with the given problem statement and aim to develop the project in order to resolve the problem.

1.3 Project Summary & Introduction:

We aim to develop a chatbot which can be used to answer queries of students and well as faculties related to a particular engineering college. Our goal is to solve the problem of time-consuming browsing of college websites as well physical contact required to get the queries answered. A chatbot is a computer program which can converse with the user in natural language and solve their queries.

1.4 Objectives of the project:

* To develop an efficient and effective chatbot to solve queries of students and faculties related to a particular academic institution.

1.5 Problem Specifications:

1.6 Technology used:

* Python
* RASA framework
* Natural Language Processing
* Machine Learning
* Artificial Intelligence
* Database

1.7 Hardware-Software used:

* PyCharm Community Edition
* Command Prompt Windows
* System with 8GB RAM, 2GB NVIDIA Graphics, 1TB Hard-disk, Windows 10 Operating System.

3.1 Project Planning and Project Scheduling:

3.1.1 Project Development approach:

Step-1: Gather information about how a chatbot works.

Step-2: Divide the working and architecture of the chatbot into different components.

Step-3: Design a graphical framework to get an idea about the position of components in the process.

Step-4: The three main components of a chatbot are NLP, Processing and Database.

Step-5: Create a prototype through a framework to understand the working of the chatbot.

Step-6: Gather information about NLP and improve its efficiency for the chatbot.

Step-7: Gather information about Database in order to have less overhead in the process.

Step-8: Create an efficient program to process the NLP output and search the Database.

Step-9: Combine all the components.

Step-10: Train the chatbot to improve its efficiency.

Step-11: Deploy the chatbot.

Step 1-4 are to be completed in Semester 7, Step 5-7 are to be partially completed in Semester 7 and to be fully completed in Semester 8, Step 8-10 are to be completed in Semester 8.

3.1.2 Project Plan:

The Project Plan is the same as the steps mentioned above.

6.3 Market Demand

Automation has always been in demand in the market. We aim to develop to a product which can solve common user queries so the waiting time for unique queries decreases. Also, due to COVID-19, the demand for such products have increased as people now prefer less physical contact.

6.7 Your Business Strategy

Our strategy is to currently develop a product which is focused on solving the queries of a particular institution. Then, we aim to expand our product with any customization required for different clients.

6.8 Our service

Our service is to deploy the chatbot where the client requires it and then maintain the product, i.e. updating the database and maintenance check.

6.9 Who is your client

Our client is any institution or company who requires its employees or clients to access their sites frequently for information.

7 Conclusion and Future Scope

Our product will help the clients as well as employees of any institution or company to get their queries answered more efficiently than ever. Currently, we are preparing the product for an educational institution and we aim to expand our product’s limit to every field possible. We also aim to improve the efficiency of our product through the timeline simuntaneously.