**PROJECT PROPOSAL**

1. **Name of the Project:**

Intelligent myCourseBot using advanced ML algorithm and Python

1. **Feasibility & Requirements:**

We are trying to build a knowledge system which is a chatbot that can be used exclusively for AI and ML course. The name of our chatbot is “myCourseBot”, which can be used as a virtual assistant for solving student queries related to AI and ML course. In the initial stage, we are trying to build a small prototype using a limited AI and ML knowledge base as a data source that can be leveraged in the future. We can enhance the knowledge base by training our chatbot with AI and ML related information collected from other sources, students from our class, and upcoming batches. This bot can be used as AI and ML course assistance.

The Bot is a web-based application with a front end using Angular or React Native. The knowledge system of the bot will be trained using advanced machine learning algorithms like deep learning. The technologies that will be used in the chatbot are:

* Python 3.9.5
* Tensorflow 2.5.0
* Flask framework 2.0.1
* nltk 3.4.5
* tflearn 0.3.2
* Angular/React Native

**Requirements:**

Minimum Hardware Requirement

* + Intel i5 5th Gen or Equivalent
  + 4GB RAM
  + Windows 10

1. **Modules:**

* Data preparation and pre-processing
* Model creation and training
* Model evaluation
* Python function development
* Flask Framework
* Front end development using Angular/React Native

1. **Team Member Responsibilities:**

* Data preparation and pre-processing – Pooja Selby
* Model creation and training – Patricia Adolph
* Model evaluation – Lekshmi Chandran Sheela
* Python function development – Patricia Adolph
* Flask Framework – Pooja Selby
* Front end development using Angular/React Native – Lekshmi Chandran Sheela

1. **References:**

* Angular. (n.d.). <https://angular.io/start>.
* Flask Tutorial. Tutorialspoint. (n.d.). <https://www.tutorialspoint.com/flask/index.htm>.
* Tutorial: Intro to React. React. (n.d.). <https://reactjs.org/tutorial/tutorial.html>.
* Kharwal, A. (2021, June 23). Deploy a Chatbot with Python. Data Science | Machine Learning | Python | C++ | Coding | Programming | JavaScript. <https://thecleverprogrammer.com/2020/08/21/deploy-a-chatbot-with-python/>.