CS 5001

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Assignment 3

1. **Team contracts:**
   1. The team will meet every Monday 11 am to discuss the work that need to do during the week. And an overview of what has been done on last week. Reinforce the goal.
   2. The team will meet with Prof. Yu every Thursday 2 pm to update the progress and receive feedback.
   3. When a team member finishes his/her work, he/she might help other members.
   4. Speaking up when need help
2. **Individual Capstone Assessment:**

\_ The project will be about developing a web. Firstly started with front end, then decide to go with cloud computing for the backend or not. Also picking language is important. The web might be about machine learning models trained to predict something. For example, making a prediction on stock price. If we are not able to create a well-trained model, we will use pre-trained model from open source or well known machine learning API.

\_ My college curriculum: I took Machine Learning class, Intelligent System Class, Cloud Computing class, and Database Development class which are a good fit for this project. Machine Learning and Intelligent System classes will help me to understand what I need to do to create a model. Cloud Computing and Database Development will help me to create a full-stack web. Beside, I have learned by myself JavaScript and its framework React in order to make a better frontend. I am pretty confident on it. Currently, I am taking Data Security and it might help me with this project.

\_ My experience: beside college curriculum, I used to work as a research assistant for school labs. And each involves implementing a machine learning model. I used to do computer vision like object recognition using YOLOV5. Another branch of machine learning is failure prediction, and I used to use LSTM Autoencoder to do anomaly detection and feature forecasting. Currently, I am also working on context-based image retrieval. With some experiences with Machine Learning, I am confident with this project.

\_ I will start the project with making the web first. Starting with the front end with JavaScript and React. Then, figure what type of data I need, and what type of database I need. Learning how to make web first. Then figure out what should be the idea for machine learning. Start training some models on specific field. Seeing which one is better to do. Then integrated to the web.

\_ I am excited because I really want to be a data science with a software engineering background. I hope that my website will catch attention, and somehow it can do something good. The key to my success on this project is the AI model can do something and does it well. I haven’t think about the failure yet. But if there is a failure, I will know what I have done wrong and what I should do better for the future. That is my expectation.