**Project pre-proposal**

**Project title:** Model as a Service

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**Project goal and Objectives:** Build an online platform which can deploy ML & DL model; Allow users to upload their own datasets and specify their requirements. Help them pick up a suitable model to generate result.

**Bonus**: Gather feedback and optimize the model! (will be a big challenge)

**Motivation:**

It is hard to get ML & DL model on those people who know nothing about the Coding but have dataset. To give another chance to use the predictive model. At the very early stage, we will do survey of this kind new feature application.

**Significance:**

So far, we are still experimenting with our model. Our goal is that deployed servers can score user input requirements depend on our model without training and generate new predictions. Now we need to collect some relevant data and prepare for the experiment, in order to change this experiment into a prediction experiment.

We will use “lexi-keyword” for searching the best model in terms of picking the one has best accuracy. Like when the users typing “sement”, it will return a ranked list of models in the searching bar. Thinking of enhance the UI interface for user-oriented, we will get Ajax and angular features in those design.

**Blueprint:**

This is a three-step process:

1.Prepare the layout of the multi-responsive website

2.Deploying the model on it, and point to a specific area.

3.User functionality focus in JS files.

Assuming all the following ref. or API gonna be concerned:

SVM (ML), CNN (DL), Flask (Deployment tool), front-end interface;

Python-embedded web application;

**Bibliography:**

**[1]. Google AutoML:**

**https://cloud.google.com/vision/Team: Team 1**

**[2].Microsoft Azure**

<https://docs.microsoft.com/en-us/azure/machine-learning/studio/walkthrough-5-publish-web-service>

**[3]. Develop movie reviews classifier**

<https://towardsdatascience.com/embedding-machine-learning-models-to-web-apps-part-1-6ab7b55ee428>

**[4]. RESTful API**

<https://blog.csdn.net/hjc1984117/article/details/77334616>

**[5]. Deployment of Web App + ML Model + APIs — Tutorial**

<https://towardsdatascience.com/simple-deployment-of-web-app-ml-model-apis-tutorial-2ece8e66d98c>

**[6]. An example**

<https://www.quora.com/What-is-the-easiest-way-to-deploy-a-machine-learning-model-say-a-regression-for-production>