# **CIS598**

### Plan Ver 2.0

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### Schedule

#### March:

One people: Focus on basic functions and API version App, make it workable at least

The other: Focus AWS development and try to complete the training part

## April & May:

If API version doesn't go well, both focus on API version first (worst case)

If API version goes well, then complete the model version

## **Develop a complete Product:**

Subtitle Generator with Speech Recognition

#### **Problem:**

- 1. Little AI / Web Develop / Speech Recognition Experience Both of us
  - 1.1 Detail info (What we know):

AI – Python Sklearn dealing with sentiment data analysis

Web – Flask

Speech Recognition – Zero Experience

## **Strategy:**

- 1. Mainly focus on developing a complete product with Baidu API
  - 1.1 Function need to be implemented

#### Core:

API Interaction – Sending audio, Get result

Subtitle related – Sperate Audio into piece, time recording, output

#### **Additional:**

Language Support

Ability of processing video / various types of audio

Realtime output

Make it a web application

## **After that - Challenging:**

Make best effort to build our own model

#### Potential Solution:

## Mozilla Deep Speech

- 1. Open Source
- 2. With enough guide on GitHub

## Amazon LightSail

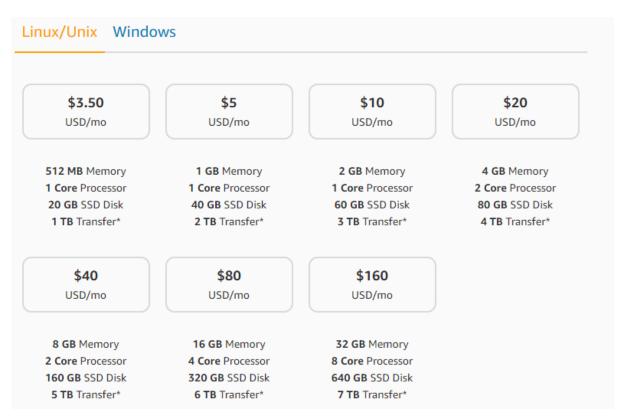
- 1. For training model
- 2. Maybe Web App

## Training:

1. Free dataset provided by TensorFlow

#### **Problem**

- 1. Zero experience both of us
- 2. Not sure we can make it or not
- 3. Seems that Amazon LightSail doesn't provide GPU support (need to upgrade the service)
  - a) Hardware problem Only CPU, should be enough for training model



- b) Develop environment Should be Linux
- 4. Any recommend material / guide?