CIS598

Plan Ver 2.0

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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

Schedule

Workable before late March (Around 3/22)

3/22 – Early May: Try to build our own model (See Below)

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:

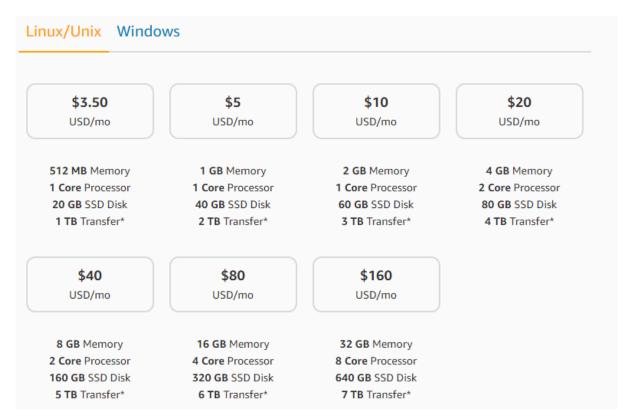
1. Free dataset provided by TensorFlow

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?