

# 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

Linux/Unix		Windows	
<b>\$3.50</b> USD/mo	<b>\$5</b> USD/mo	<b>\$10</b> USD/mo	<b>\$20</b> USD/mo
512 MB Memory 1 Core Processor 20 GB SSD Disk 1 TB Transfer*	1 GB Memory 1 Core Processor 40 GB SSD Disk 2 TB Transfer*	2 GB Memory 1 Core Processor 60 GB SSD Disk 3 TB Transfer*	4 GB Memory 2 Core Processor 80 GB SSD Disk 4 TB Transfer*
<b>\$40</b> USD/mo	<b>\$80</b> USD/mo	<b>\$160</b> USD/mo	
8 GB Memory 2 Core Processor 160 GB SSD Disk 5 TB Transfer*	16 GB Memory 4 Core Processor 320 GB SSD Disk 6 TB Transfer*	32 GB Memory 8 Core Processor 640 GB SSD Disk 7 TB Transfer*	

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