Students are ***suggested*** to prepare the following objectives before attending the mentor session in Week 1:

* Computer / Laptop
* Download Anaconda ([link](https://docs.anaconda.com/anaconda/install/index.html)) with Python3.7, PyCharm ([link](https://www.jetbrains.com/pycharm/download/#section=mac)), Yelp datasets ([link](https://drive.google.com/drive/folders/1RujYyngrAqf-Ri2q5a9_yGpc4uwJAs8A))

Course Plan (Please fill out the blank)

|  |  |  |
| --- | --- | --- |
| Week | Mentor Session Topic | Mentor Session Details |
| 1 | Introduction to Spark (Part I) | * Quiz: Review the lecture content (MapReduce) with several questions and discussion. * Assignment: Review Assignments 1. * Lecture Snapshot: Introduce Spark (Part I); Introduce Assignment 1 and Yelp datasets; Write code for Assignment 1 Task 1. * Tutorial: Set up Anaconda & Python environment; Install and config Spark env. * Materials: Assignment 1 description (doc); Spark Tutorial (pdf); In-class PPT; Github. |
| 2 | Introduction to Spark (Part II) | * Quiz: Review the lecture content (MapReduce) with several questions and discussion. * Assignment: Continue Assignment 1 (submission). * Lecture Snapshot: Introduce Spark (Part II); Write code for Assignment 1 Task 2 & 3. * Materials: Assignment 1 description (doc); Spark Tutorial (pdf); In-class PPT; Github. |
| 3 | Building a Recommendation System (Part I) | * Quiz: Review the lecture content (Recommendation System) with several questions and discussion. * Assignment: Review Assignments 2. * Lecture Snapshot: Introduce Assignment 2; Review Collaborative Filtering algorithm with pseudocode and examples; Write code for Assignment 2-part I. * Small Group Activity: Group discussion on the pseudocode and examples; Convert pseudocode to python code. * Materials: Assignment 2 description (doc); Spark Tutorial (pdf); In-class PPT; Github. |
| 4 | Building a Recommendation System (Part II) | * Quiz: Review the lecture content (Recommendation System and Clustering) with several questions and discussion. * Assignment: Continue Assignment 2. (Optional Assignment 3) * Lecture Snapshot: Continue Collaborative Filtering algorithm with pseudocode and examples; Write code for Assignment 2-part II. * Small Group Activity: Explore and discuss potential research topics for the final project. * Materials: Assignment 2 description (doc); Spark Tutorial (pdf); In-class PPT; Github. |
| 5 | Final Project Discussion | * Assignment: (Optional discuss Assignment 3) * Lecture Snapshot: Introduce how to do a research presentation with a demo project. * Student group meetings: The groups will need to list the action items and task distribution for the next week; TA would offer help on coding, task objectives, presentation, and writing. * Materials: In-class PPT. |
| 6 | Final Project Discussion | * Lecture Snapshot: Introduce how to write a research paper with a demo project. * Student group meetings: The groups will need to list the action items and task distribution for the next week; TA would offer help on coding, task objectives, presentation, and writing. * Materials: In-class PPT. |

Students are required to meet the following objectives before attending the mentor session in Week 5:

* Students should have a research topic for the final project.
* Students should have conducted some exploration on the datasets.
* Students should generate an action item list following their meeting with the professor; what areas do they need to clarify and improve according to the professor and how do they plan to follow the professor’s advice? I can then go over that with them and ensure they are addressing the correct concerns and in a reasonable fashion.

Students are required to meet the following objectives before attending the mentor session in Week 6:

* Students should have a research topic, desired datasets, preliminary results for the final project.
* Students should generate an action item list following their meeting with the professor

Questions from GEC:

1. How are you going to arrange the time based on the current student number?

I plan to spend about 15 minutes to review the lecture content, and ~ 60 minutes to talk about the assignment. I will leave 10 minutes for Q&A.

1. What kind of roles you need course coordinators or TA to take? Any support or help you need?

NA

1. If all groups had a chance to present or discuss in the professor’s sessions, what topics can be covered in the mentor sessions (e.g. how to make a good presentation?)

I will show a sample presentation and written manuscript during the mentor sessions. I can also give suggestions to students regarding their presentations.