


CSE/CPEG Final Year Project/Thesis

Monthly-Report Submission Guideline

Objective: To track the progress of the Final Year Project/Thesis (FYP/FYT).

- There are 3 monthly reports which account for **5%** of the final grade.
- There are 3 monthly reports due in the Fall, i.e. Oct, Nov and Dec/Jan. The monthly reports in Oct and Nov are due by 11:59pm on the last day of each month. The monthly report in Dec/Jan is due by 11:59pm on 15 Jan.
- We recommend the meetings with project advisor(s) to take place in the middle of the month in Oct, Nov and Dec.
- It is the responsibility of the student to submit the completed report to the FYPMS.

Monthly Report for CSE FYP/FYT

Project Code:	DL3	Supervisor(s):	Professor Dik-Lun LEE
Project Title:	A system for predicting stock price and offering financial advice		
Group Member(s) and Student ID(s):	Aadhar Agarwal (20386840), Luk Yin Chai, Leung Ka Wing (20341943), Jose Luis Amador Jaime (20391429)		
Reporting Period: • Scan report and submit via the FYPMS	Report #1 <input checked="" type="checkbox"/> Oct Report #2 <input type="checkbox"/> Nov Report #3 <input type="checkbox"/> Dec/Jan		
Progress: • List the work completed in this reporting period. • Identify the major difficulties encountered. • Comment on the overall progress.	<ol style="list-style-type: none"> 1. Set up the database on the UST provided server 2. Set up simple frontend and backend using Django 3. Implement sign in page for the users 4. Evaluated different APIs for stock market data, including: Yahoo Finance, Google Finance, IEX Cloud, AlphaVantage, and World trading data 5. Created a basic data crawler to gather and store information from Yahoo Finance API 6. Identified key features of the stocks for preliminary feature selection <ul style="list-style-type: none"> • At this stage in the process, there have not been many major difficulties. Due to all of our software selections being open source and python based, it has been relatively simple to integrate the modules. The key difficulty so far was choosing an API that was effective and easy to implement but also free. Yahoo finance was chosen because it provided a reasonable number of accesses even at the free tier • The overall progress of the FYP is satisfactory to our planned schedule and we believe we will finish the project effectively and on time. 		
Future Plan: • Write down the working plan	<ol style="list-style-type: none"> 1. Begin implementation and integration of the machine learning algorithms for data analysis and stock price prediction 2. Research further into which open source python-based web scraper to use: Scrapy, MechanicalSoup, PySpider, etc 3. Choose and implement NLP ML algorithm to process real time information from reliable news sites 		
Supervisor's Comments:	I am glad that the group has set up the system infrastructure for downloading data. The group should be entering the difficult part which deals with what data sources to use (in addition to stock data, do you consider investment reports and financial reports), the financial indicators to use for price prediction and risk assessment, and the machine learning algorithms (so many are available!). The group should ensure works are distributed to each member, as this is a fairly large project group.		
Supervisor's Overall Evaluation:	<div style="display: flex; justify-content: space-between;"> (please circle) (letter grade) </div> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">F</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">D</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">C-</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">C</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">C+</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">B-</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">B</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">B+</div> <div style="border: 2px solid red; padding: 2px 5px; margin: 0 2px;">A-</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">A</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">A+</div> </div>		
Meeting Date & Time:	24 th Oct 2020		
Group Representative's Signature:		Supervisor's Signature:	