

Task	Sub Task	Dependency	Owner	Status	Due date	Notes/Issues
Capstone Schedule	Task List		Thung	Done		10/4 Ongoing updates
	https://docs.google.com/spreadsheets/d/1CvUgDm2wUwEP-ml8dCk/edit#gid=0		Thung	Ongoing		Ongoing updates
Weekly Meeting Notes	https://docs.google.com/document/d/1vUvG8d8dK0Pmawd0/edit#		Thung	Done		
Workshop 1	Scope		Thung	Done	10/3	
	Schedule		Sarah	Done	10/3	
Presentation 1	Draft Outline - slide 1-3		Sarah	Done		Suggested Division of slides: Sarah (1-3)
	Slides 4-6		Zhongqiao	Done		
	Slides 7-8		Shenkar	Done		
	Slides 9-10		Thung	Done		
	Get images and beauty		Thung	Done		
	Post 4		Thung	Done		
Project Description to post on wall	First Draft		Sarah	Done	10/10	
	Edits		Thung, Shenkar, Zhongqiao	Done		
	Post		Thung	Done		
Presentation 2	Presentation Outline		Sarah	Done	11/9	
	First Draft		All	Done		
	Get images and beauty		Thung	Done		
	Post		Thung	Done		
1) Read ticker data for S&P stocks from Yahoo Finance			Thung	Done on 10/8	10/8	
	Full data dump (start date = 2000-01-01)			100%		
	Incremental data dump			100%		
	Unit test			100%		
	Check-in code, data			100%		
2) Read data from Twitter			Sarah	Done	10/8	Not very useful because not historical; can work on building in for real time updates
	Current and historical data?			100%		
	Unit test			100%		
	Check-in code, data			100%		
3) Read historical news			Zhongqiao	Done	10/8	Only got data since 2010. Will try google API
	Full data dump (start date = 2015?)			90%		Google api can get back as far as 2015
	Incremental data dump			90%		
	Flag C1 ... C4, FY		Zhongqiao, Sarah		11/12	Not feasible because news data don't always contain quarterly info
4) Read revenue data about a company			Shenkar	Done	10/8	
	static data dump: company size, employees			10/12		Comprehensive Data available via API from Datayze or FullContact. But only 100 API calls per month
	300 stocks		Shenkar	Done	10/7	
	Dividend, PE ratio (not historical), revenues (historical?)		Shenkar, Thung	Done	10/8	Revenue and Dividends done, searching for FREE historical PE ratio.
				10/12		complete for 8 Data: Open, High, Low, Close, Volume, Dividend, S&P, Adj. Close, Adj. High, Adj. Low, Adj. Close, Adj. Volume? based upon stock symbol
	Historical data - Full (start date = 2008)			10/8		Thung: where is the api200 data? No free data available. We can try to get data for \$40 - \$50 per month
						Have not found any free sites that offer Historical data
				10/8		Basic client committed, works on specific ticker symbol, more development will happen in coming weeks
5) NLP on news				Done	11/6	Must be done sooner than 11/10 to unlock baseline, final model
	sample output data		Zhongqiao	Done		
	Remaining data (240)		Zhongqiao	Done	11/16	
	Generate sentiment analysis scores		Zhongqiao	Done	11/16	
	Finalize feature extraction		Sarah		11/24	Basic features for MVP, better features to come for next round
6) UI (MVP)					11/10	
	Basic Wireframes		Sarah	Done	10/23	
	Review Wireframes		team	Done		
	Basic Front Apps		Sarah	Done	11/6	MVP
	Code for basic flask app up on github (with local-ly runnable html files)		Sarah	Done	11/12	
	Basic HTML pages for main page explaining what and risks		None, Zhongqiao	Done	11/8	
	Basic formatting on interactive page		Code on github: Sarah	Done	10/1	
	Connect the flask to back end		8.9 Thung	Done	11/26	
	Finalized Front Apps		Sarah/Thung	Done	12/01	
	Improving UI		Thung	50%		
	Deploy App to AWS		Sarah	Done		
	Automatic get pull from AWS		Sarah	50%		
7) Baseline Model					10/15	
	Build training and test data (just stock prices)		Thung	Done	10/15	
	basic model with just price data		1 Thung	Done	10/20	The current model is not good at prediction stock price. Will have to try others
	normalized data		1 Thung	Done	10/20	
	Unit test		Thung	Done	10/20	
	Check-in code		Thung	Done	10/20	
8) Final Model					10/6	
	LSTM model with just price data		Thung	Done		
	price + other financial + NLP news data		1,2,3, 5/7 Thung	Done		This is the most laborious step to integrate and return everything
	Identify stocks with highest returns		Thung	Done		
	train & predict with 100 stocks (30, 45, 60 days)		Thung	Done		
	Data Analysis to narrow down features to use		Thung	Done		
	Tuning for overfitting		Thung	Done		
	Unit test		Thung	Done		
	Check-in code		Thung	Done		
9) Use ML output to recommend portfolio given investor goals (given risk choice, Output: top 10 list of stocks)			7.8 Thung	Done	11/30	
11) User evaluation	Conduct survey and create MOSCOW list		Sarah	Done	12/3	
	Review final amount		Thung	Done		
	Display top 10 results		Thung	Done		
12) Finalized UI	Revamp UI for better usability		Thung	Done		
	Revs UI to serve data instead of graph		Thung	Done	4/12	
	Images of potential graphs on stock		Sarah/Shenkar	Done	2/12	
	Develop background page that communicates value proposition		Sarah	40%	3/12	
	Display labeled code to AWS		Sarah	Done	4/12	
	Get S&P500 index fund data for 30, 45, 60 day gains		Zhongqiao	Done	3/12	
	Display the fund's avg gains on the UI		Thung	Done		
	Display the fund as baseline in UI		Thung	Done		
	Implement improved graph		Sarah	Done	3/12	
						first tests of background test done, full user testing appointment scheduled weekend of 3 and 10
	Second Round of UI testing		Updated UI Sarah		10/12	
Nice to haves	Improve graphic design of main page		Other main UI changes	Shenkar/Sarah		
	Show more information about companies					