

		Timeline		Effort
Milestone	Tasks	Start	Stop	Hoang Dao
Research	Research current stock prediction apps on the market and look into the technology stack being used to evaluate its pros and cons	1/14	1/20	100%
	Research different external APIs to determine which reliable sources to collect stock information for the data set used by the application (Google Finance, ...)	1/14	1/20	100%
	Research different libraries for the LSTM Neural Networks (Keras, Tensorflow, Pandas, Numpy, Matplotlib)	1/14	1/20	100%
Set Up Infrastructure	Set up the infrastructure, organize the entire project in a git repository	1/21	1/28	100%
Prepare Dataset	Import and collect stock price dataset for the neural network from the APIs	1/29	2/6	100%
	Process the data into the Pandas Dataframe	2/7	2/14	100%
Develop LSTM Model	Develop functions for normalizing the datasets	2/15	2/22	100%
	Design and develop the Recurrent Neural Network model prototype for the stock prediction application	2/7	2/14	100%
	Develop the machine learning algorithm used to predict changes in stock price and constantly make changes, improvements to the algorithm	2/18	3/3	100%
	Construct the basic Linear Regression model and the LSTM Neural Network model to capture and analyze daily stock prices	3/4	3/17	100%
Improve LSTM Model	Improve the basic LSTM model by training, documenting and comparing past performances using a set of benchmarks and evaluation metrics	3/4	3/17	100%
Document and Display Results	Visualize and display results by plotting actual predicted values against real-time values on the stock market per time series	1/29	2/8	100%
Develop the iOS Application	Built an iOS mobile application with a user-friendly interface to capture all the data and reports for the users to use	2/15	3/18	100%
Test and Validate	Distribute the application to other people to test and validate for any bugs, feedbacks with its usabilities	3/19	4/21	100%