SNo	Course Name	Course Link	Total hours
		Statistics	
1	Intro to Descriptive Statistics	https://in.udacity.com/course/intro-to-descriptive-statistics--ud827	26
2	Intro to Inferential Statistics	https://in.udacity.com/course/intro-to-inferential-statistics--ud201	32
		Python	
3	Introduction to Python	https://in.udacity.com/course/introduction-to-python--ud1110	16
4	Intro to Data Analysis	https://in.udacity.com/course/intro-to-data-analysis--ud170	16
5	Using Python for Research	https://www.edx.org/course/using-python-research-harvardx-ph526x-0	20
		Machine learning	
6	Machine Learning	https://in.udacity.com/course/machine-learning--ud262	35
7	Machine Learning	https://in.udacity.com/course/intro-to-machine-learning--ud120	20
		Total	**165**
	Coding Resources:	https://drive.google.com/drive/folders/1qxj8Drmml9vH-6Hp_dC0pNmNH_E-h-Iw?usp=sharing	
	Other References:	https://www.coursera.org/learn/machine-learning	
		https://software.intel.com/en-us/ai/courses/machine-learning	
		https://scikit-learn.org/stable/	

S No	Project	Language	Topics Covered	Submission files
1	Titanic Survival Exploration	Python2 or Python3	**Making Predictions:** Basic python, data cleaning, data exploration, decision making from visuals	1. titanic_survival_exploration.ipynb 2.report.html
2	Boston House Pricing	Python2 or Python3	**Model Evaluation and Validation:** Statistical Analysis(Mean,median,mode,standard deviation) Split the data into training and testing Metrics: Accuracy,recall,precision,F1_score,r2_score Learning curves,cross validation,Gridserach CV	1. boston_housing.ipynb 2. report.html
3	Finding Donors	Python2 or Python3	**Supervised Learning:** Data preproceesing : Exploration,Normalize the numerical,One hot encoding of no numerical data Split the data as tarining and Testing Evaluation of Model : calculating metrics for basic model Selection of three suitable algorithms for classification Choosing the best model and optimize it by tuning Hyperparameters Effect of feature selection	1.finding_donors.ipynb 2.report.html
4	Customer segments	Python2 or Python3	**Unsupervised Learning:** Feature Relevance Correlation between features using scatter matrix Normalize the data,Finout outliers using interquartile range PCA , dimensionality reduction,biplot Clustering Agorithms: K-Means,Gaussian Mixture Model A/B Testing	1. customer_segments.ipynb 2. report.html
5	Smartcab	Python2	**Reinforcement Learning:** Q Learning,Train the Basic Driving Agent with out leraning, Q Table creation and Q Table Upadation with Learning For each case calculate safety and reliability rating	1. agent.py 2. logs folder with 5 log files 3. smartcab.ipynb 4. report.html
6	Dog breed Classifier	Python 3	**Deep Learning:** OpenCV library for images Human Face Detector Dog Detectror Creating Own Neural Network for Dog Breed classifier (133 Breeds) Use Transfer Learning for above Model	1.dog_app.ipynb 2. report.html 3. Addtinal Images you have used
	Capstone Proposal		Select your own dataset try to take a dataset with atleast 500 instances You can take your dataset from UCI or Kaggle Take the dataset from your own mobile App or college data.(Real time data)	
7	Capstone Project	Python 2 or Python 3	You need to do the project from scratch and preapare documentation as well.	
		Projects Link:	https://github.com/udacity/machine-learning/tree/master	
			https://github.com/udacity/dog-project	