BLUEPRINT

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Reinforcement Learning for Flight Ticket Pricing

The blueprint file structure follows the following pattern:

Data → Data Processing→EDA→Training Model→Test Model & Evaluation→Model Prediction→Model Deployment

Data	Data Mining [Google Flight Pricing Data] https://matrix.itasoftware.com/
	Collect the RAW data from API . [DATA Limit –> upto 5 months or more]
	File Format : .JSON
Data Processing	Data Cleaning : remove blanks ,null value and duplicates if any , remove outlier
	Constructed label (of buy versus wait) for each (flight, date-time) pair-> use statistical techniques
	Standardizing the data
EDA	check Skewness –> if found try to Normalise it
	Understand the data pattern with respect to target variable
	Feature Selection –> remove unecceasry columns
Traning Model	Training Data : 586 flights,97,848 data points (65%) Dev Data: 103 flights,30,451 data points (10%)
	Hyperparameter Tunning : Apply various ML /DL Techniques
	Select Best Model
Test Model & Evaluation	Test Data: 149 flights, 51,945 data points (25% of flights)
	Data : Pricing Data for privious 4 hrs | check Accurecy , Precision , Recall ,Confusion Matrix and other parameters if any
Model Prediction	Crosscheck our model prediction with live API : Next 4 hrs
	Found Major difference : rectify the model performance techniques
Model Deployment	Deploy Model
	Check functionality