Project Design Phase-II

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Project Name	Airline Review Classification Using Machine Learning

Technology Stack (Architecture & Stack)

S.No.	Component	Description	Technology
1.	User interface	The user interacts with the application through the website in which they give their name, country and airline information and then give their review of the flight.	HTML, CSS and Flask framework.
2.	Loading the dataset	Downloading the csv file and then reading it in python file	Pandas library
3	Visualizing the data	Plotting several graphs which gives key insights into the data.	Pandas library
4.	Dealing with NULL values	We replace the null values with either mode or median depending on weather the column is numerical or categorical	Pandas library
5.	One-hot encoding	We create separate features for categorical columns	Pandas library
6.	Dealing with review column	We create a function which converts each review into sentiment score which determines how positive or negative it is	Tensorflow

7.	Machine learning model	We use multiple algorthims such as KNN classifier, Logistic regression and Random Forest. It is used	SKlearn

Table-2: Application Characteristics:

S.No.	Component	Description	Technology
1.	Open-Source Frameworks	Flask which is an open source web framework for Python is used to deploy the model	Python