**Model Development Phase Template**

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| Date | 24 April 2024 |
| Team ID | team-739906 |
| Project Title | Identifying Airline Passenger Satisfaction Using Machine Learning |
| Maximum Marks | 5 Marks |

**Feature Selection Report Template**

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

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| --- | --- | --- | --- | --- |
| **Feature** | **Description** | | **Selected (Yes/No)** | **Reasoning** |
| Unnamed:0 | Undefined column | | No | Feature name is not mentioned |
| id | Passenger id | | No | Passenger id is not necessary to identify whether passenger satisfied with airlines or not |
| Gender | Passenger’s gender | | Yes | Ensure the comfort and safety of all passengers and crew members |
| Age | Passenger’s age | | Yes | the process of analyzing or understanding behavior, preferences, capabilities, or needs based on a person's age group |
| Type of Travel | Purpose of travel undertaken by the passenger. | | No | Categorised based on the purpose and nature of the journey |
| Class | service class that the passenger booked for their flight. | | Yes | Different catagories and levels of service provided to passengers |
| Flight  Distance | The total distance of the flight. | | Yes | involves analyzing how the length of a flight impacts various aspects of the passenger experience and airline operations |
| Inflight  Wifi  Services | Internet connectivity provided to passengers during a flight journey. | | Yes | Allow passenger to stay connected to the internet for work, entertainment, or communication |
| Departure/  Arrival  Time  Convenient | Rating provided by passengers regarding the convenience of the departure and arrival times of their flight. | | Yes | Impacts passenger travel planning, efficiency and overall experience |
| Ease of Online Booking | How easy and convenient it was to book flight tickets through the airline's website or mobile app | | Yes | Refers to the process of reserving and purchasing airline tickets through the internet |
| Gate Location | satisfaction with the location of the departure gate within the airport terminal. | | Yes | Specific area where passengers board their flight |
| Food and Drink | passengers' satisfaction with the quality, variety | | Yes | Consumption of meals, snacks and beverages by passengers during flights |
| Online Boarding | passengers' satisfaction with the ease and convenience of checking in for their flight via the airline's website or mobile app. | | Yes | Passengers use their mobile devices or computers to check in for a flight ,receive a digital boarding pass |
| Seat comfort | passengers' satisfaction with the comfort and ergonomics of their seating arrangements during the flight.  Top of Form  Bottom of Form | | Yes | Evaluating various factors that contribute to the comfort and satisfaction of airline passengers with their seating arrangements. |
| Inflight Entertainment | Entertainment options available to passengers during a flight, such as movies, TV shows, music. | | Yes | Enhance the travel experience and provide passengers with the variety of choices to pass the time |
| On Board Service | Quality and level of service provided to passengers by the cabin crew during a flight. | | Yes | Range of services and amenities provided to passengers during a flight |
| Leg room service | Passengers to stretch their legs while seated onboard an aircraft. | | Yes | The amount of space between seats in terms of seat pitch and seat width |
| Baggage Handling | Airlines manage passengers' checked baggage from check-in to its delivery at the destination airport | | Yes | Process of managing passengers luggage from check in to arrival at the destination |
| Check in Service | | The process and experience of checking in for a flight, either at the airport or online. | Yes | passengers' satisfaction with the check-in process, whether it's done at the airport or online. |
| Inflight Service | | The services provided to passengers during a flight on an airplane | Yes | Enhance the overall service experience and meet the expectations of their passengers |
| Cleanliness | | Ensures passengers comfort health and safety | Yes | Airlines can enhance the overall passenger experience, promote health and safety, and contribute to positive perceptions of their brand and service quality |
| Departure Delay in Minutes | | The amount of time beyond the scheduled departure time | Yes | Each situation is unique ,airlines work to minimize these delays whenever possible to ensure smooth operations |
| Arrival Delay in Minutes | | The amount of time by which a flight arrives later than its scheduled arrival time. | Yes | Airlines and airports work to manage these situations to minimize in convinience to passengers and ensure safety and efficiency in operations |
| Satisfaction | | Contribute overall comfort, experience, convenience during a flight | Yes | analyzing the factors that contribute to passenger satisfaction in the context of airline services. |