

## Model Development Phase Template

Date	10 July 2024
Team ID	739648
Project Title	Smartwatch Price Prediction
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.

Feature	Description	Selected (Yes/No)	Reasoning
<b>Brand</b>	The manufacturer Of the smartwatch.	Yes	Brand reputation significantly influences the price. High-end brands typically command higher prices.
<b>Model</b>	The specific version or name of the smartwatch,affecting its features and price	Yes	Specific models have different features and price points. It's essential to distinguish between them.

<b>Operating system</b>	The software platform the smartwatch runs on, influencing its features, compatibility, and price.	Yes	The OS (e.g., WatchOS, Tizen, Wear OS) affects functionality and compatibility, impacting price.
<b>Connectivity</b>	The available options such as Bluetooth, Wi-Fi, and LTE, impacting the smartwatch's functionality and price.	Yes	Features like Bluetooth, Wi-Fi, LTE increase the utility and, therefore, the price.
<b>Display Type</b>	The technology used in the smartwatch display, such as OLED, LCD, or AMOLED, affecting its quality and price.	Yes	OLED, LCD, AMOLED displays vary in cost and quality, influencing the price.
<b>Display Size</b>	The diagonal measurement of the smartwatch screen, typically in inches, influencing user experience and price	Yes	Larger displays usually cost more and offer better user experience.
<b>Resolution</b>	The pixel density of the smartwatch display, impacting visual clarity and price.	Yes	Higher resolution displays are more expensive and provide better visuals.
<b>Water Resistance</b>	The smartwatch's ability to withstand water exposure, a feature influencing durability and price.	Yes	Water-resistant designs add to manufacturing costs and are a valued feature.
<b>Battrey Life</b>	The duration a smartwatch can operate on a single charge, crucial for user convenience and price consideration	Yes	Water-resistant designs add to manufacturing costs and are a valued feature.

<b>Heart Rate Monitor</b>	A feature in smartwatches that tracks heart rate, influencing health tracking capabilities and price.	Yes	An important health feature that adds to the overall cost.
<b>GPS</b>	Built-in global positioning system (GPS) enhances smartwatch functionality for location tracking and impacts pricing.	Yes	Adds to the functionality and price, especially for fitness enthusiasts.
<b>NFC</b>	Near Field Communication (NFC) enables contactless payments and impacts smartwatch pricing due to added functionality.	Yes	Enables contactless payments, a valued feature that impacts the price.
<b>Price</b>	The monetary value assigned to a smartwatch, serving as the target variable in price prediction models.	Yes	The target variable we aim to predict. The manufacturer of the smartwatch, which significantly influences its price and perceived quality.