Project Design Phase-I
Solution Architecture

Date	3rd November 3, 2023
Team ID	PNT2022TMID- 591758
Project Name	Horology 2.0: Forecasting The Future of Smartwatch Prices
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

Model:

Horology 2.0 envisions a future where smartwatch prices are intelligently forecasted using machine learning models. Leveraging historical sales data, user preferences, market trends, and economic indicators, these models will employ advanced predictive analytics to offer dynamic pricing strategies. By continuously monitoring supply and demand fluctuations, user reviews, and technological advancements, smartwatch manufacturers can optimize their pricing, ensuring competitive and fair rates. Additionally, personalized pricing models can be developed, tailoring offers to individual consumers based on their preferences and usage patterns. Machine learning algorithms will empower the industry to strike a balance between affordability and cutting-edge technology, ensuring that smartwatches remain accessible and appealing to a broad audience while adapting to the ever-evolving wearables market.

1. Data Collection

2.Data Preprocessing

3. Feature Extraction

4. Machine Learning Algorithms

5. Model Evaluation

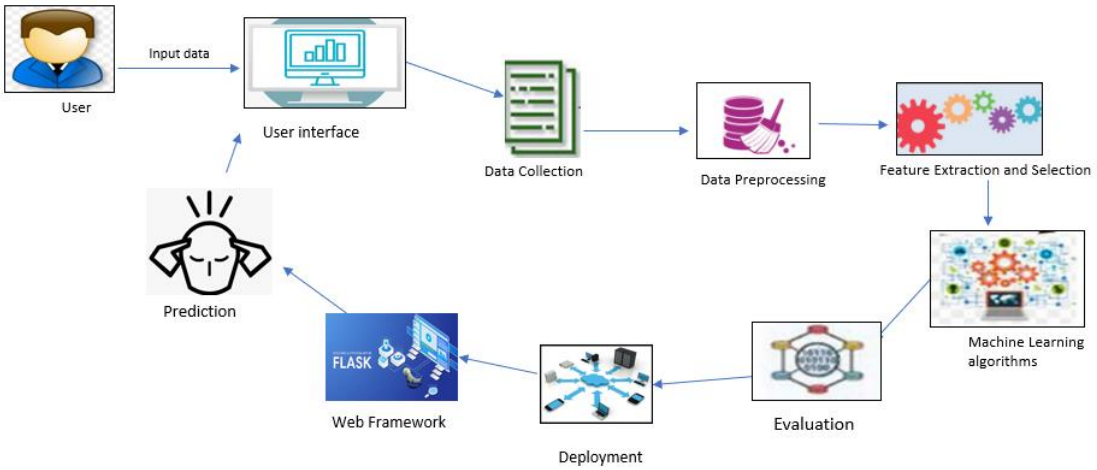
6. Deployment

7. Monitoring and Maintenance

8. Insights and Reporting

9. Security and Compliance

10. Scalability


User
Input data
User interface
Data Collection
Data Preprocessing
Feature Extraction and Selection
Machine Learning algorithms
Evaluation
Deployment
FLASK
Web Framework
Prediction