PROJECT DEVELOPMENT PHASE

Date	20 october2023
Team id	NM2023TMID02226
Project name	CLIMATE TRACK SMART USING BLOCK CHAIN
Maximum marks	4 Marks

NO. OF FUNTIONAL FEATURES INCLUDED IN THE SOLUTION

The number of functional features included in a climate tracking smart solution using blockchain can vary depending on the complexity and specific requirements of the project. However, a comprehensive climate tracking system often incorporates a wide range of functional features to address its goals effectively. Here is a list of functional features commonly included in such a solution:

1.Data Collection and Integration:

Real-time data collection from various climate monitoring sources.

Integration of diverse climate data types (e.g., temperature, humidity, air quality, carbon emissions) from sensors, satellites, weather stations, and more.

2.Data Validation and Quality Assurance:

Automated data validation to ensure data accuracy and reliability.

Anomaly detection mechanisms to identify and address erroneous data.

3.Blockchain-Based Data Storage:

Storing climate data in a secure and immutable blockchain ledger.

Utilizing smart contracts to record, verify, and manage data transactions.

4.User Access Control and Authentication:

User registration and authentication mechanisms.

Role-based access control to manage data access and user permissions.

5.Real-time Data Visualization:

Data visualization tools and dashboards to display real-time climate information.

Graphs, charts, and maps for easy data interpretation.

6.Historical Data Analysis:

Data analytics features to analyze historical climate data trends.

Generation of insights and reports based on historical data.

7.Alerts and Notifications:

Alerting mechanisms for critical climate events, anomalies, or user-defined triggers.

Real-time notifications via email, SMS, or in-app alerts.

8.Smart Contracts for Climate Events:

Smart contracts for automating actions based on predefined climate conditions.

Integration with oracles for real-world data inputs.