Ai based diabetes prediction system

Development part 1

Certainly, for Part 1 of developing a diabetic prediction system in Python, you can focus on setting up your environment, loading the data, and performing some initial data analysis. Here's a simplified example:

```python
# Import necessary libraries
import pandas as pd

# Load the diabetes dataset (replace 'diabetes.csv' with your dataset)
data = pd.read_csv('diabetes.csv')

# Display basic information about the dataset
print("Dataset Information:")
print(data.info())

# Display the first few rows of the dataset
print("\nFirst Few Rows of the Dataset:")
print(data.head())

# Check for missing values in the dataset
missing_values = data.isnull().sum()
print("\nMissing Values:")
print(missing_values)

# Basic statistics of the dataset
```

```
print("\nSummary Statistics:")

print(data.describe())


# Visualize the data (you can use libraries like Matplotlib and Seaborn)

# For example, to create a histogram of glucose levels:

import matplotlib.pyplot as plt

plt.hist(data['Glucose'])

plt.xlabel('Glucose Level')

plt.ylabel('Count')

plt.title('Distribution of Glucose Levels')

plt.show()
```

Remember to replace `'diabetes.csv'` with the path to your dataset. This code covers loading data, checking basic statistics, and visualizing a feature. In a real project, you'd perform more in-depth data analysis and preprocessing.

Part 1 serves as the foundation for the development of your diabetic prediction system. In subsequent parts, you would proceed with data preprocessing, model selection, training, and evaluation, among other tasks.