User Manuals

Team26 Group Members:

Jia Chen(201768810), Jiageng Zhu(201770214), Junqin Cheng(201768863), Luyuan Huang(201769063), Xiankai Shi(201769457), Yifei Chen(201768854)

OVERVIEW

This user manual is designed to guide different types of users through the installation, setup, and use of the Data Processing System. Whether you are a data analyst, a researcher or an IT professional, you will find the appropriate operating instructions.

System Requirements

Before installation, please ensure that your computer meets the following system requirements:

- Operating system: Windows 10 / macOS 13.6 or later

- Python 3.6 or higher

- NumPy version required for SciPy should be between 1.185 and 1.25.0

- At least 4GB of RAM

- At least 500MB of free hard drive space

Installation Guide

Visit the GitHub link: https://github.com/JiagengZhu21/Team26, download the project file, and extract it to a specified directory.

Install Python and Dependencies

Ensure that Python 3.6 or higher is installed and install all dependencies via the command line.

Initial Setup

Configure the working environment:

Configure numpy, pandas, scikit-learn, pyqt5, qt_material packages.

Tutorial

Data import:

1. In the main interface, click the "File" button to import data.

2. Select the appropriate file format and confirm the file path.

3. Click the "Confirm" button to complete the data import.

Data preprocessing:

1. In the "Operation Selection" module, select the desired preprocessing operation.

2. For each operation, select the appropriate method.

3. After applying each operation, use the Refresh button to update the screen.

4. Repeat the above steps until all required data preprocessing is completed.

Data Analysis:

1. Select Clustering or Dimensionality Reduction for more in-depth data analysis.

2. Apply the desired analysis method.

3. When the analysis is complete, use the Refresh button to view the results.

Exporting Results:

1. Click the "Export" button.

2. Select the format and path of the exported data.

3. Confirm the export settings and wait until the data is exported.

Frequently Asked Questions

After clicking file and entering the file selection page, if you click cancel, the program will exit directly.