

■ EDA Tool - Quick Start Instructions

■ Getting Started

Step 1: Navigate to the Tool Directory

Open Command Prompt or Terminal and navigate to the EDA tool folder:

```
cd C:\Astreon\eda_tool
```

Step 2: Install Dependencies (First Time Only)

```
pip install -r requirements.txt
```

Step 3: Run the Application

Use any of these methods:

Method A: Python Module (Recommended)

```
python -m streamlit run app.py
```

Method B: Double-click

- Double-click on *run_app.bat* file in the folder

Method C: Python Launcher

```
python run_app.py
```

■ Accessing the Tool

1. After running, Streamlit will start a web server
2. Your browser will automatically open to: **http://localhost:8501**
3. If it doesn't open automatically, copy the URL from the terminal

■ Using the Tool

Upload Data

1. Click "Browse files" in the upload section
2. Select a CSV or Excel file (.csv, .xlsx, .xls)
3. The tool will automatically analyze your data

Navigate Sections

Use the sidebar to navigate between:

- ■ **Data Upload:** Upload and validate files
- ■ **Data Overview:** Basic statistics and preview
- ■ **Data Quality:** Comprehensive quality analysis

Test with Sample Data

Try the included Titanic dataset:

- File location: `tests\test_data\titanic.csv`
- This will demonstrate all features

■ Troubleshooting

"streamlit is not recognized"

Use: `python -m streamlit run app.py` instead

Module Import Errors

Run: `pip install -r requirements.txt`

Browser Doesn't Open

Manually navigate to: `http://localhost:8501`

Permission Errors

Run Command Prompt as Administrator

■ Understanding Results

Quality Score (0-100)

- **90-100**: Excellent ■
- **75-89**: Good ■
- **60-74**: Fair ■
- **Below 60**: Critical Issues ■

Analysis Tabs

- **Overview**: Key metrics and data types
- **Missing Data**: Completeness analysis
- **Duplicates**: Data redundancy check
- **Outliers**: Anomaly detection
- **Statistics**: Detailed column statistics

■ Stopping the Tool

Press **Ctrl+C** in the terminal to stop the application

Need Help? Check the detailed README.md file for more information.