# Project Requirements:

This project was built in Python and uses several powerful libraries for data parsing, analysis, visualization, and reporting.

#Python Version-\*\*Python 3.7 or higher\*\*

# 📚 Required Python Libraries

Library Purpose

`pandas` Data manipulation, timeline generation, CSV export

`numpy` Time series support, array operations (used via pandas/matplotlib)

`matplotlib` Plotting event frequency charts (`.png`)

`plotly` Optional interactive charts (`.html`)

`fpdf` PDF report creation

> Built-in modules used: `os`, `re`, `datetime`, `argparse` — no installation needed for these.

## Input Format

- `.vlog` — Custom session logs

## Output Formats

- `.csv` — Parsed logs, timeline, anomalies

- `.html` — Styled anomaly reports

- `.png` — Event frequency charts

- `.pdf` — Forensic summary report

## 🖥 CLI Tool Usage:

python3 forensic\_parser.py <log\_folder> --summary --timeline --alerts --pdf