

Real Time GPS Navigation

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Project Overview

- ◆ Create a real time GPS navigation system using Python.
- ◆ Upload data to Google Maps API



Process

- ◆ Serial input
- ◆ File Ops
- ◆ Data Analysis
- ◆ Error Analysis
- ◆ GUI

Serial Input

- ◆ Scans computer for ports in use (USB).
- ◆ Finds GPS unit connected to computer.
- ◆ Collects data from GPS.



File Ops

- ◆ Takes Data from GPS and converts data to readable data
- ◆ Converts received data into KML file format



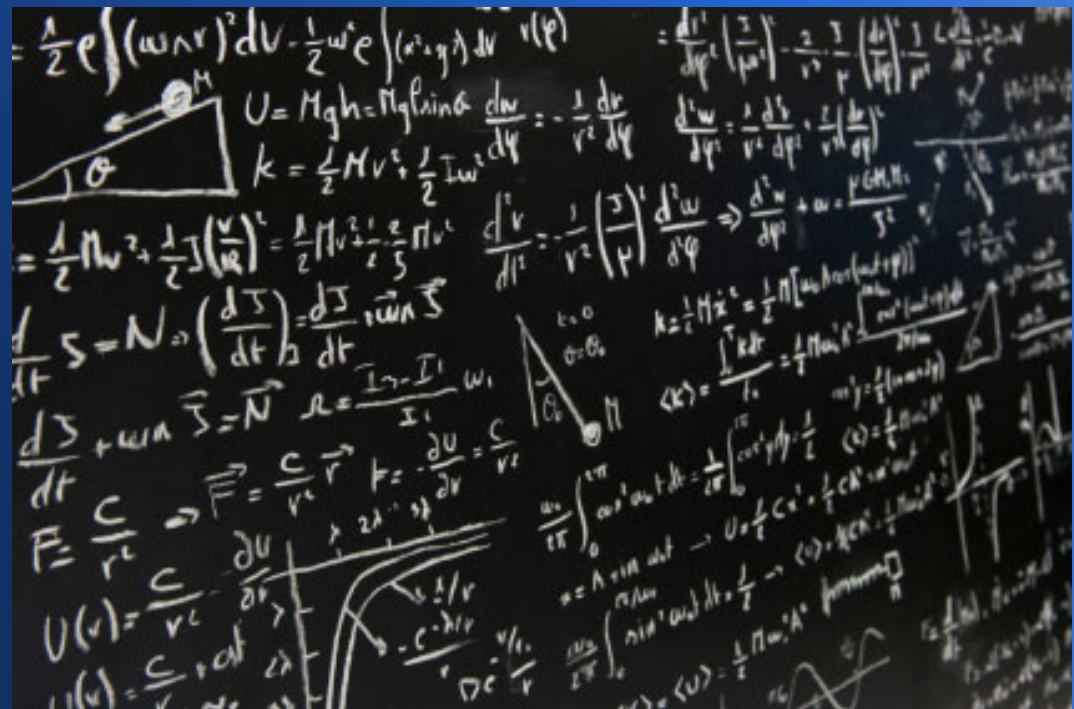
Data Analysis

- ◆ Trims data down to make recorded path smoother.



Error Analysis

- ◆ Reads recorded data to measure how accurate the data is to a USGS location.



GUI

- ◆ Central Station of the program.
- ◆ Responsible for all of the subsystems the user wants to call.

