

Project 11: FIT File Handling and Data Pipeline

Overview, Goals, and Objectives

The FIT File Handling and Data Pipeline project aims to handle FIT files from the Wahoo KICKR Live, convert them to CSV format, and upload the data to a database. It will aim to provide real-time performance metrics through a rudimentary user interface using basic JS, HTML, and CSS as an MVP (only data points). The project will offer guidance to the web/application team on integrating the data within the game experience. A Python script will communicate with the KICKR, download, and convert FIT files to CSV, and integrate the data into the data warehouse project for storage. The project will provide a comprehensive solution for handling KICKR Live FIT files, making the data easily accessible for analysis and real-time performance metrics.

Top of Form

Aims for Trimester

- Develop a Python script for communicating with the Wahoo KICKR Live via Bluetooth connectivity and Wahoo API, downloading, and converting FIT files to CSV, and uploading data to a database.
- Create a rudimentary user interface using basic JS, HTML, and CSS to display real-time performance metrics as an MVP.
- Provide guidance to the web team on integrating the data within the game experience.

Deliverables

Long-term Deliverables:

- A comprehensive solution for handling KICKR Live FIT files, making the data easily accessible for analysis, and providing real-time performance metrics.
- A scalable and secure data pipeline that integrates with the game experience.

Trimester Deliverables

- Completed Python script for downloading, converting, and uploading FIT file data using the Wahoo API and Bluetooth connectivity to the KICKR Live.
- Rudimentary user interface displaying real-time performance metrics as an MVP.
- Documentation on Python script usage and deployment.
- Guidance for the web team on integrating data within the game experience, including instructions on how to access the data through the data pipeline.

Project Members

- Mark Telley – Product Owner
- Prastut – Stakeholder (Data warehouse)