**Company Overview**:

Core business Tri Alliance is the number one multisport coaching business in Australia. We are primarily a coaching service provider, developing comprehensive programs for athletes that wish to compete in various multisport events including, triathlon, duathlon, aquathon, swimming, cycling and running.
We are currently providing services for over 280 athletes with some 90 of these requiring programs to meet their goals.
It is from this labour sum task of providing an easier method of providing these sometimes complicated and details programs that we have developed a software called CoachingMate. CoachingMate is now in version 2 with development already on version 3.

CoachingMate is simply a system that coaches, personal trainers and fitness professionals can deliver training programs and instruction to their clients via a timeline planner that looks and feels much like a calendar with scheduled sessions.

The Next generation of CoachingMate is to have the wearable data to be generated on the athlete and coach dashboard and within completed sessions to compare, predict and provide accurate feedback to an athlete's progression in a meaningful way.

**= Analytics Add On to the CoachingMate Platform =**

*This project might be more suitable for the year-long project.*

CoachingMate v2 is an excellent platform to deliver what an athlete need to do day by day reach their goals but the missing link is for them to understand if they are doing these sessions as it has been asked of them and to receive feedback on how they are performing.
With wearables we now have that measurable device. Our partnership with Garmin devices allows us to track some comprehensive variables the athlete needs to gain that vital feedback.

With these activity files, developers gain access to tremendous second-by-second data for the duration of the users' recorded activities (activity type, device type, GPS route, speed, pace, heart rate, cadence, distance, intensity, cadence, power, steps, duration, etc.). We currently support over 30 activity types.

The activity duration and data is defined by specific "start" and "end" times for which the user timed their activity with their Garmin device.

This Activity or Session data from the athlete (Garmin Wearable) will need to show up on a completed athlete session showing in a clean and flat design with graphs and visual representation all the relevant data in a meaningful way.

Point 1,
Add the ability to analyse session in text box and determine the intensity, intervals and times. This will give the athletes the ability to understand what personal intensity via heart rate or power they need to sit at, what unique times the will be required to hold per interval. We will record recover levels of heart rate to determine fitness.

Point 2,
The second point is to now provide a comparison between what is prescribed in a session and what the actual data is from the athlete's device. This will be determining the athletes training score. This can be displayed as

- Underdone,
- consistent,
- overtraining,

Athlete Dashboard,
The Dashboard should show the accumulation of these individual session over time. Day, week, month, year.
A performance management chart will be provided to give athletes the ability to see progression, the PMC needs to be view with a time range, eg 7, 30, 90, 176, and 352 days, it also needs to segregate active types. Eg swim, bike, run, triathlon, all etc
Dashboard should have.
Activity list, (All the activities and athlete has completed)

- Swim stats, current and predicted,
- Bike power in layman's to give athletes meaningful data on key numbers. Eg this is your current Ironman power average. Same for Olympic and sprint. Also giving them watts per kg, another form of bike gain measurement.
- Run, we have a comprehensive set of algorithms to assist with pace, intensity and time for sessions.

Also to be included in the Dashboard we need to show predictions of athletes race goal. Starting times, current time and predicted race times. CoachingMate will work on algorithms for this.

A great repository of graph designs that the 2021 students had implemented into the data science project.
https://echarts.apache.org/examples/en/index.html

This project involves two parts of Analytics:

| | DASHBOARD (accumulative data) | SESSIONS (activity data) |
|---|---|---|
| | Performance Management Chart | Map (Interactive) 3D with heat map showing intensity |
| | Goal for times, pace and heart rate. Starting point, current and goal times. | Session data, (all relevant data for that session coming from wearable |
| | Overtrained/Undertrained | Comparison of prescribed v's actual |
| | Accumulative data for all activities | Overtrained/Undertrained |
| | Overall comparison of prescribed v's actual | |
| | Prediction/Forecast | |
| | | |

**= Garmin App =**

*An app built specifically to run on Garmin wearables.*

The goal of the app is to provide a user-friendly intuitive app where athletes can upload their sessions (workouts) from CoachingMate to their Garmin device.

The goal of this app is once the appropriate training session with instructions are uploaded an athlete can then be instructed to perform a session as requested both by text instruction, visual aids on the device and auditable ques.

These is an SDK to use via Garmin's Developer Portal which provides the tools to develop.
http://developer.garmin.com/connect-iq

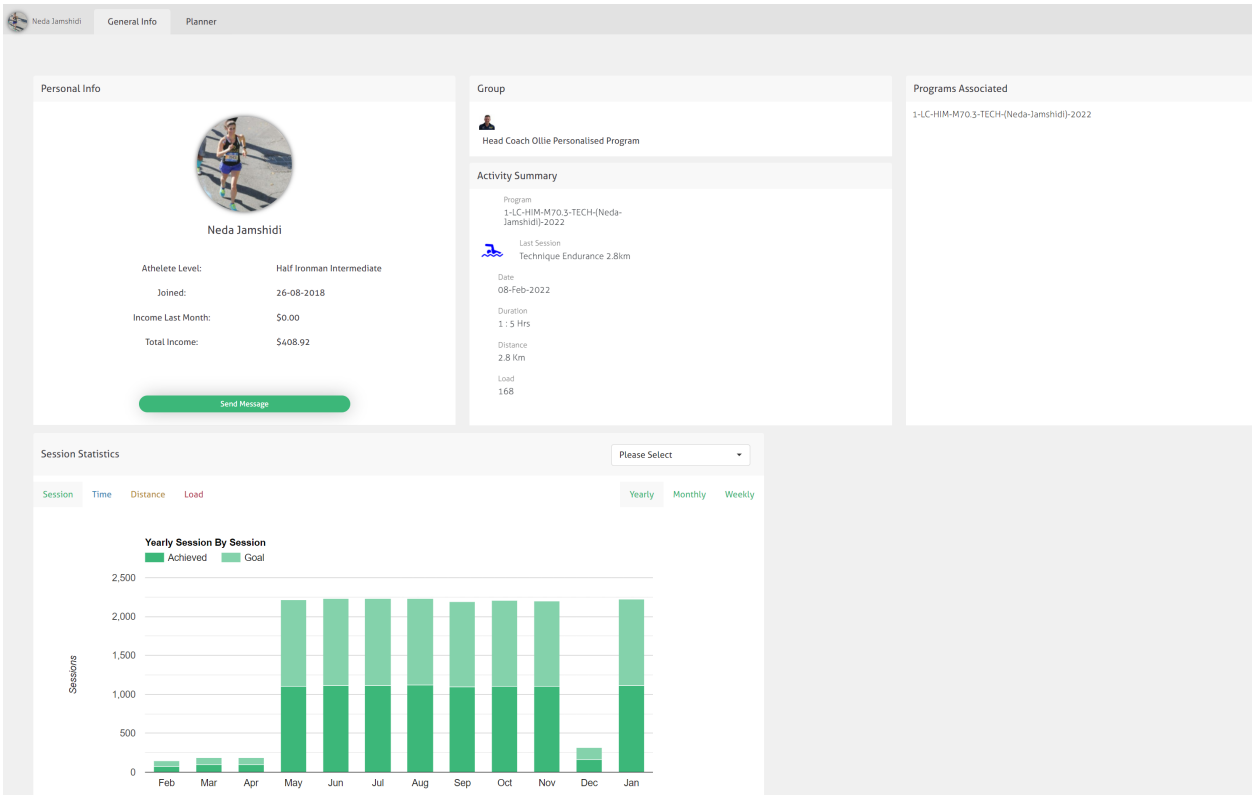
TrainingPeaks a competitor has an example app for this in the Garmin app environment to learn from.

**= Website Design and Development to go to Market =**

We are looking for a team to develop the launching website for Coachingmate, The team will be involved in analysing the current market environment, conducting a S.W.O.T analysis, looking at price point and of course the design and feel of the CoachingMate web site.

Current CoachingMate athlete dashboard.

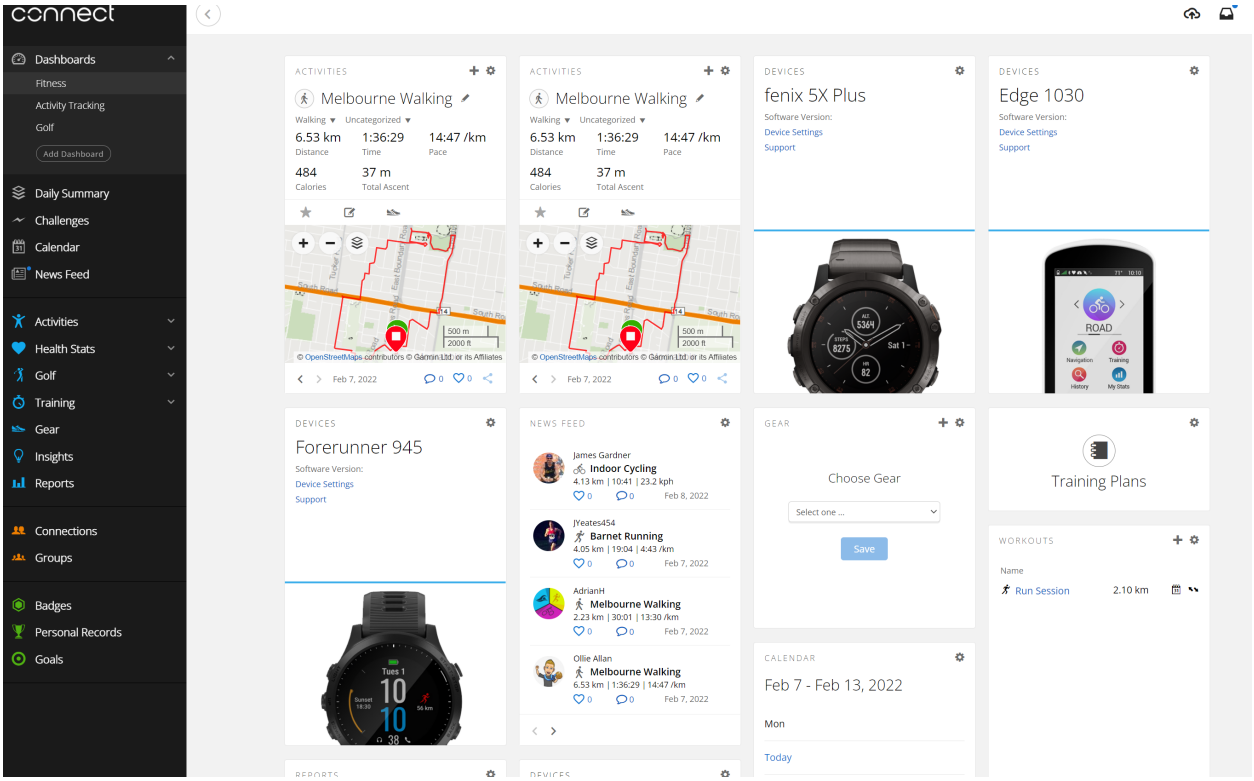
As you can see this is a tile concept however there is no incoming data from any device to view.  The below graph is an attendance to sessions.



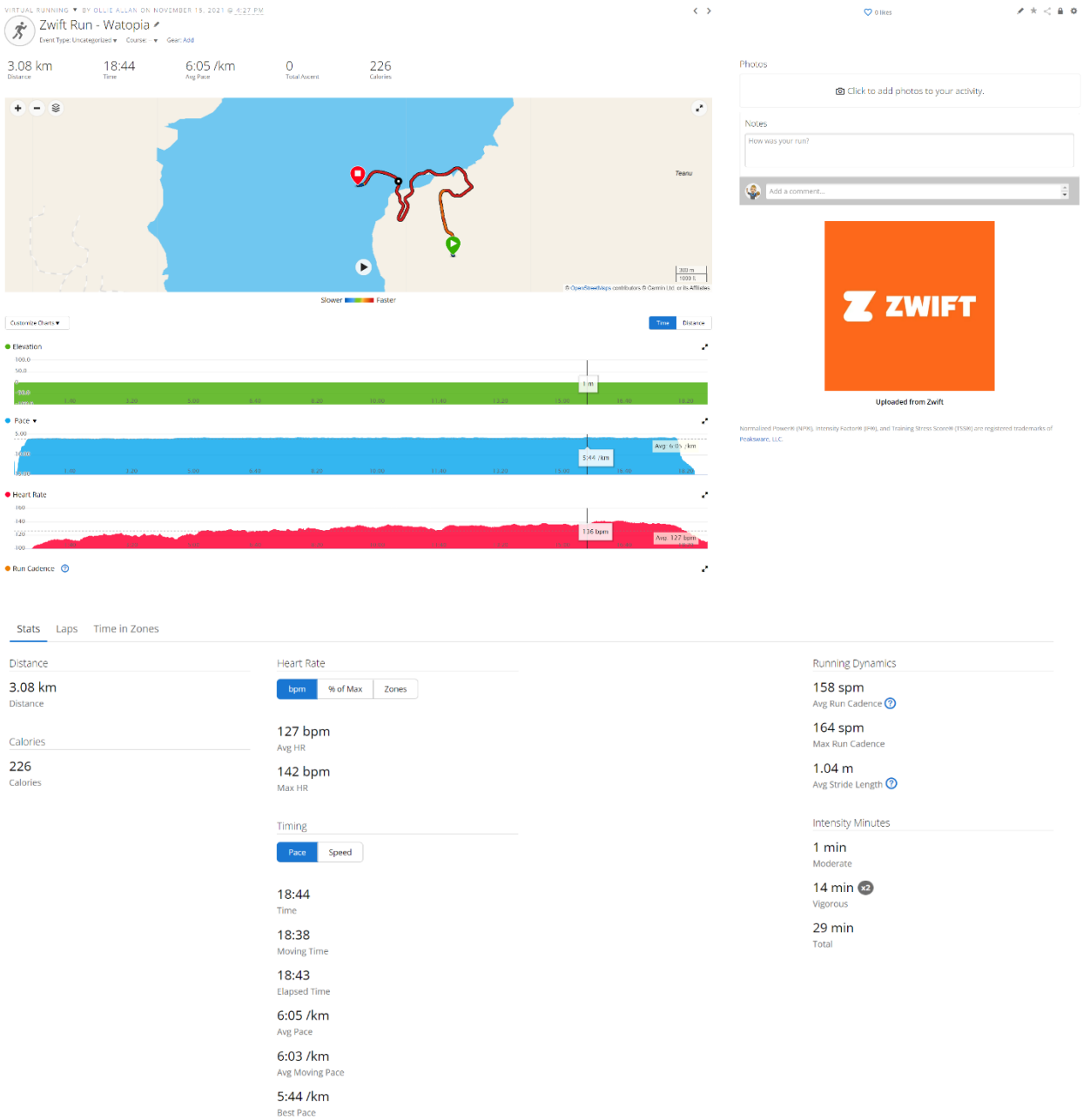
Examples of competitors dashboards,

Garmin,

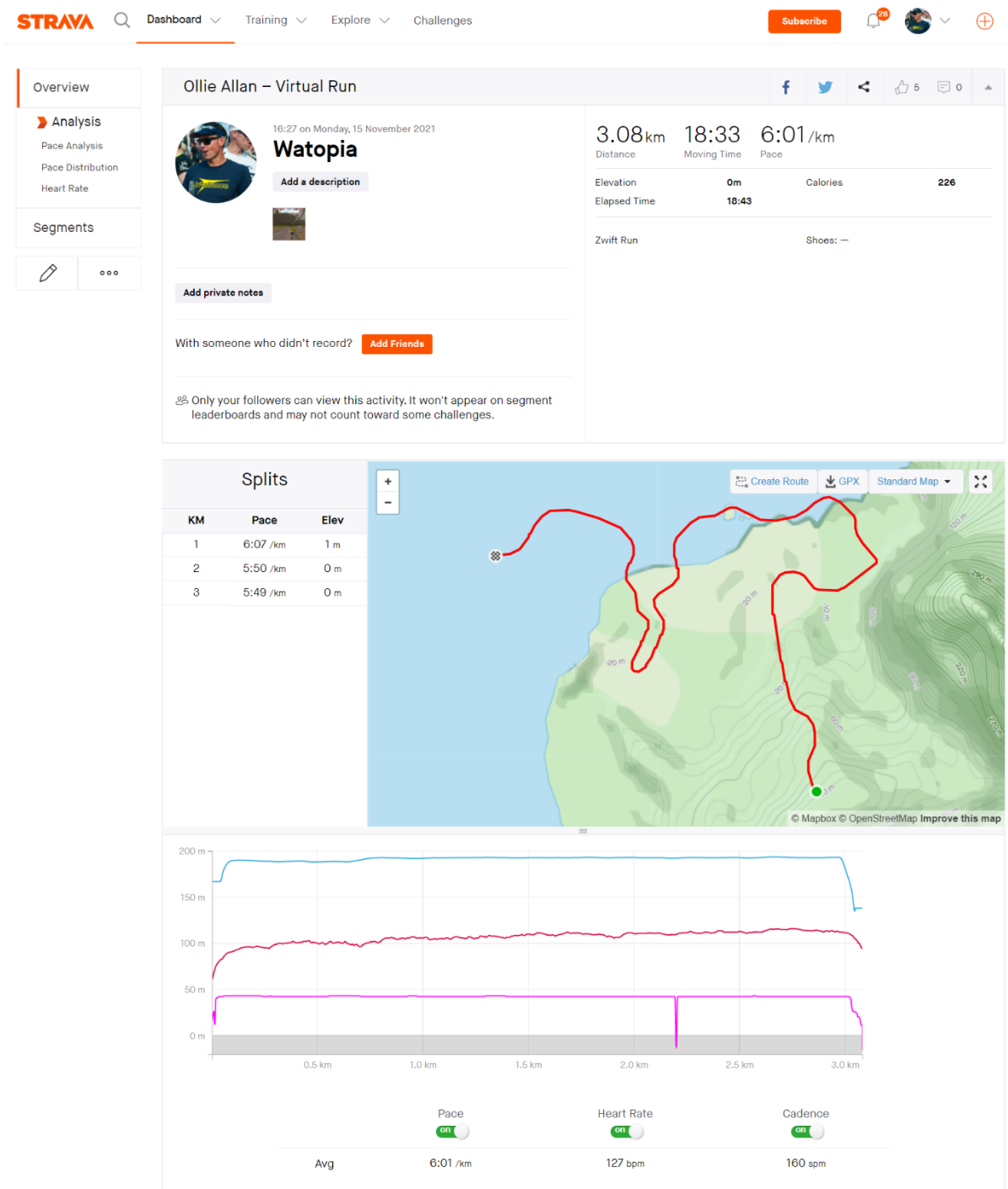
Below is Garmin's landing dashboard with connected devices, activities and various other relevant information.  The choice of including and arranging certain tiles is preferred.



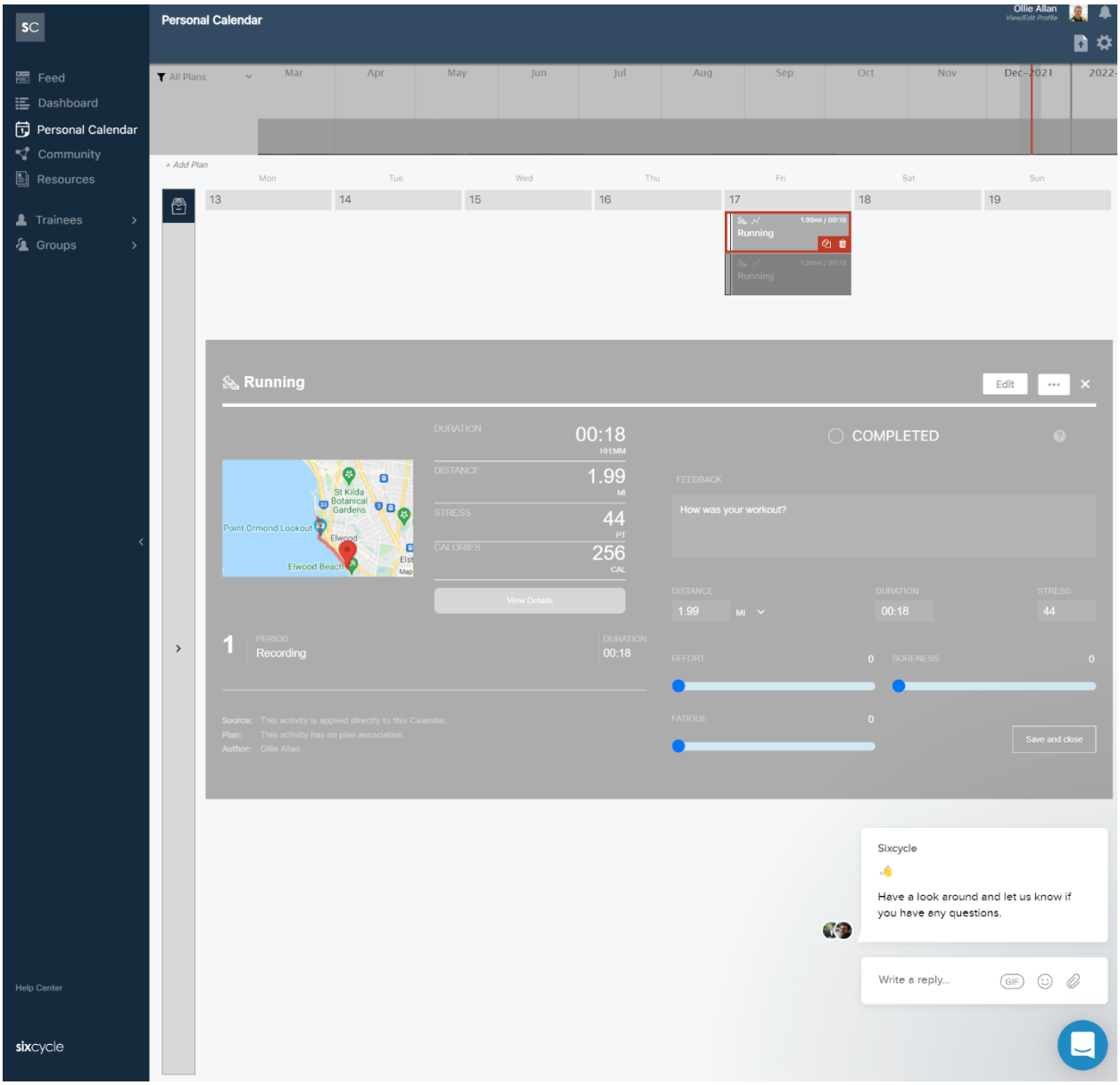
Below is sowing data from a running workout displaying an interactive map and data graphs on the dashboard. A simple layout displaying the below information is required on our workout dashboard.




Strava Dashboard Example




SixCycle Dashboard Example


SC
Personal Calendar
Ollie Allan
View/Edit Profile
Feed
Dashboard
Personal Calendar
Community
Resources
Trainees
Groups
Help Center
sixcycle
All Plans
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec-2021
2022
+ Add Plan
Mon
Tue
Wed
Thu
Fri
Sat
Sun
13
14
15
16
17
18
19
Running
Running
Edit
DURATION
00:18
HH:MM
DISTANCE
1.99
MI
STRESS
44
PT
CALORIES
256
CAL
View Details
COMPLETED
FEEDBACK
How was your workout?
DISTANCE
DURATION
STRESS
1.99
MI
00:18
44
1
PERIOD
Recording
DURATION
00:18
EFFORT
0
SORENESS
0
FATIGUE
0
Source: This activity is applied directly to this Calendar.
Plan: This activity has no plan association.
Author: Ollie Allan
Save and close
St Kilda Botanical Gardens
Point Ormond Lookout
Elwood
Elwood Beach
Sixcycle
Have a look around and let us know if you have any questions.
Write a reply...
GIF