Design Pattern	Type	Description	Use In Project
Factory Method	Creational	Define an interface for creating a single object, but let subclasses decide which class to instantiate. Factory Method lets a class defer instantiation to subclasses.	The data consolidator will take in all activity data and normalize it. This will act as the factory to create objects based on data the classes and subclasses defined.
Module	Structural	Group several related elements, such as classes, singletons, methods, globally used, into a single conceptual entity.	The application will be split into two seperate larger modules, the repository where the data will be collected, normalized, and stored, and the front end where the user will interact and interperet that data. Any user specific data will also be entered in the front end such as credetials and prefrences.
Fluent Interface	Behavioral	Design an API to be method chained so that it reads like a DSL. Each method call returns a context through which the next logical method call(s) are made available.	The alication will be recieving updates from the fitness APIs and will need a fluent interface to handle the data transfromation between them.
Thread-Pool	Concurrency	Maintains multiple threads waiting for tasks to be allocated for concurrent execution by the supervising program.	If a user wants to manueally sync data, that could create the need for many tasks to be completed conccurently. A thread pool will manage all of these tasks so it doesn't overload the system but also will have the process run faster than if all the tasks were run linerally.