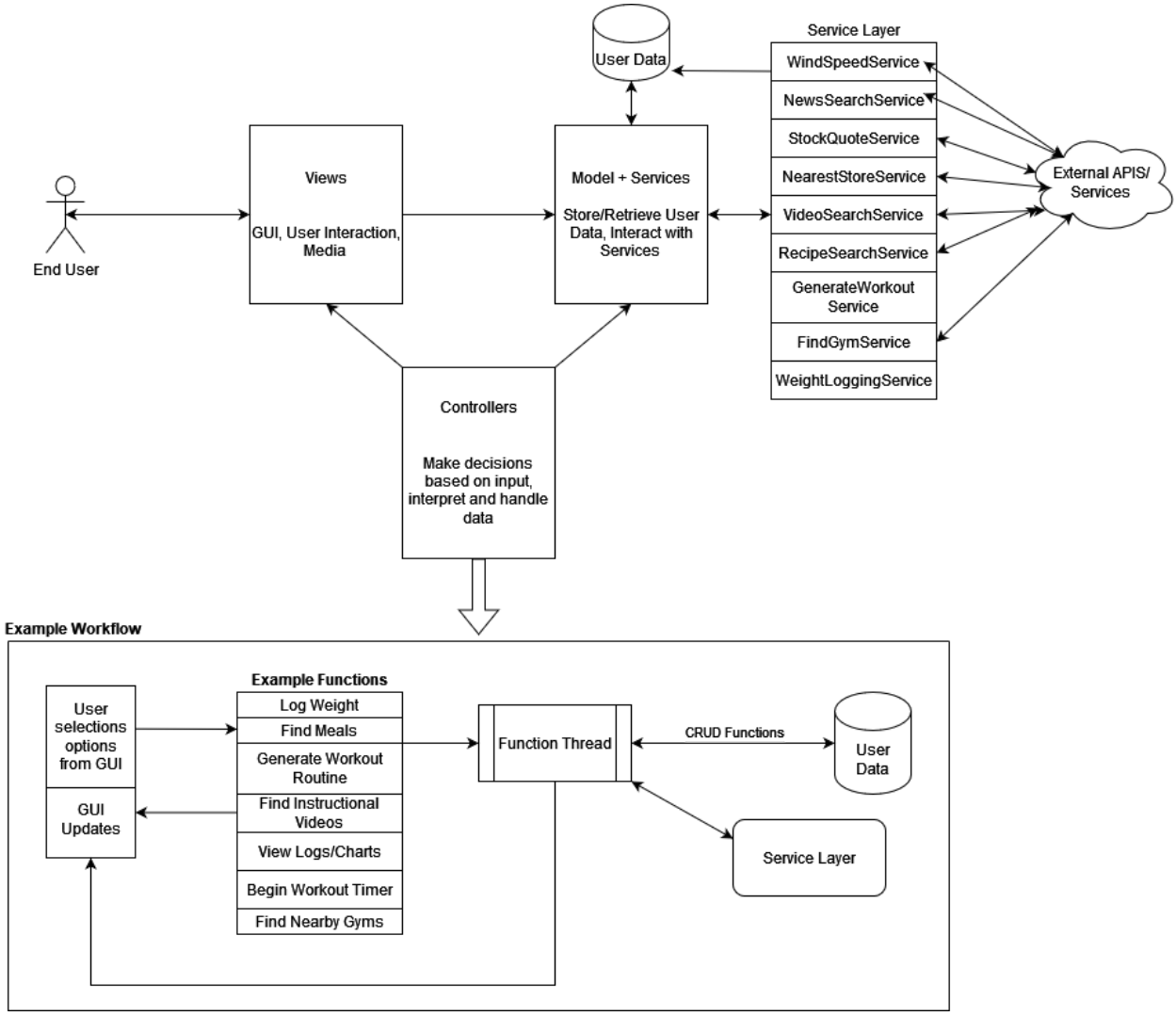
Project 3 Assignment 3

Group 87- Kaylem Brown-Malone & Sherwin Wang

The service-oriented computing system our team plans to develop is a fitness application. There is a presentation layer, where users can interact with interfaces on their devices. This layer should be intuitive and visually appealing, making sure to incorporate all our provided services. Beneath is the application logic layer, which includes controllers that access to user input and data, in order to update the presentation data responsively. The service layer is where all our service components lie. Useful services, like logging meals, finding instructional videos, checking the weather, and creating routines are handy for the user to be able to access at all times. In addition, workout timers and music services would be handy during the actual workout. Adding services like a maps finder, stock quote generator, or a news searcher would add even more functionally and make our app an all in one. These services would utilize existing databases or API's to streamline the process and make sure users have complete access to what they require.



	This service director will be deployed at this address: (Not required yet)*					
	Team Name/Number: 87					
Provider Name	Service Name, Input, Output	Required ?	Difficulty Level	TryIt link	Service Description	Planned Resources
Sherwin Wang	GetStockOpen(string symbol, int, year, int month, int day)	Yes (6)	Easy	https://localhost:44378/	This API returns the open price of a stock given the ticker (“AAPL”) and the date (“2023-01-09”).	Uses the polygon.io API

Sherwin Wang	FindClosestStor (string zipCode, string storeName)	Yes (21)	Medium	https://localhost:44378/	This API finds the closest store within 20 miles of the given zip code, or returns a message if no store was found.	Uses the google places API and the google geoplaces API.
Kaylem Brown-Malone	GetNewsOnTopics(string[] topics) : returns string[]	yes	Easy		This API can return up to 5 URLs for news stories related to given topics. Topics are provided in a “topics” query, comma-seperated.	Uses the NewsAPI API, and the provided NewsAPI package.
Kaylem Brown-Malone	GetAnnWindSpeeds(double latitude, double longitude) : returns double	yes	Easy		This API can return the Annual wind speed (in m/s at 10m) for any given latitude and longitude point.	Uses the NASA POWER API, climatology W10MS endpoint.
	VideoSearchService(string topic) : returns string	no	Easy		This API should return a link to single top, relevant video to a search term - in the context of the application, this should be a tutorial for an exercise or other fitness-related topic.	Uses Youtube or Google APIs to implement search
	RecipeSearchService(string topic) : returns string[]	no	Easy		This API should return links to healthy recipes related to the search term. In the context of the application, this should	Should source recipes from sites with a focus on healthy living, using search APIs.

					provide the user with meaningful ideas for a healthy diet.	
	GenerateWorkoutService(string difficulty, string focus) : returns Workout object	no	Easy		This service should return a Workout object that is core to the application, with a full set of exercises and links.	A set of workouts should be classified and called upon from within the application's data. The workouts themselves may be sourced from other websites.
	FindGymService(string zipcode, string type): returns object with names and locations	no	Easy		This service should find the nearest gyms to the provided zipcode. In the context of the application, this will help the user quickly find nearby gyms relevant to their routine.	Should source Google places API, similar to FindClosestStore
	WeightLoggingService(string user, string auth, int weight) : returns confirmation/rejection	no	Easy		This service is used to log the user's weight remotely with a day timestamp. This can provide tracking from several sources, not necessarily the app, such as smart devices.	Authentication schemes or account systems should be sourced from reliable, secure libraries.