Find My Fitness

By candidate number: 106, 117 and 141

Find my Fitness is an application where a user can find workout classes based on their input. If there is no workout that fits the description, the program can also show similar suggestions *(example: search for pilates, gives yoga. Search for taekwondo, gives karate)*.

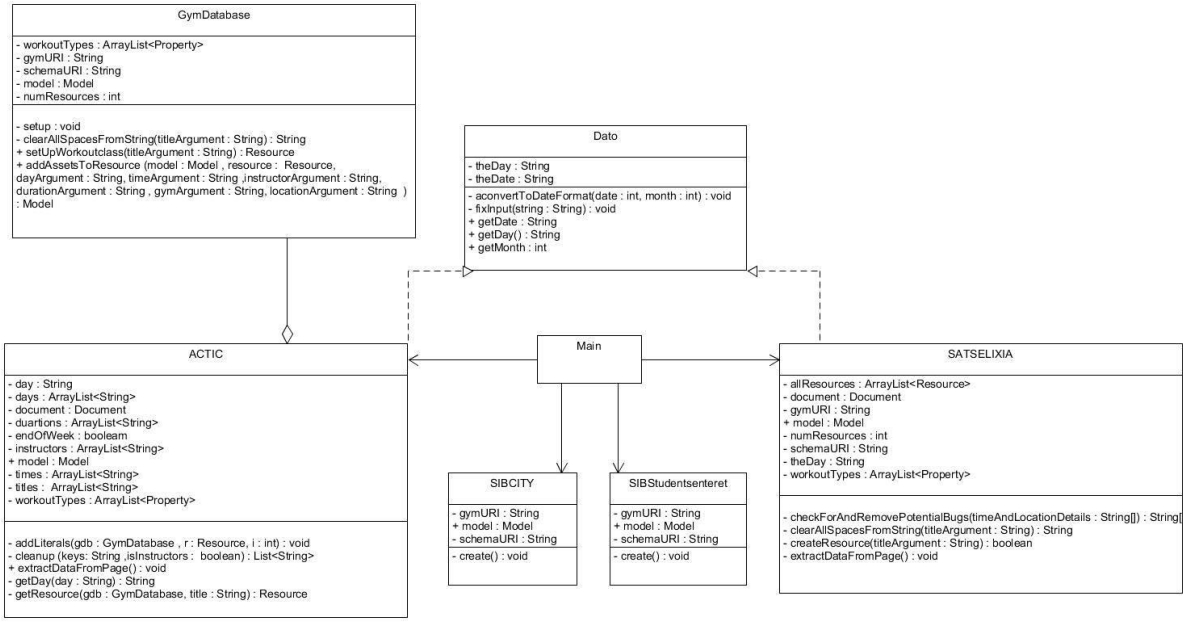
We wanted to create a webpage instead of a mobile app because this is not something the user needs to search for daily. We wanted to create this program for those who are new to a city and therefor want to see what the different centres has to offer. It can be challenging and time consuming to search for classes on many different gym websites, so we wanted to make this process faster and easier.

In our case, it is a good idea to use semantic technologies so that the user does not need to do the research on their own, instead of searching and reading about all the different centres, one only needs to use our program and get information about the newest classes.

With our program, it is now possible to search across different websites and intertwine all the data. The user will get information about where, when and what kind of classes is best suited for them and if their search is not what they are looking for, we have another option to show similar workouts.

The main programs we used was Eclipse, fuseki and a text-editing program. We are familiar with Eclipse, so we used it to scrape the websites and created a database we could use in fuseki. The vocabulary that we used was schema from the apache jena package, but it was lacking some information we needed, so we created our own vocabulary as well. For our webpage, we used JavaScript for the functionality aspect. We were considering using a java servlet for our project, but it was easier for us to use Ajax and corporate the code to our project. With Ajax, we only needed some few lines of code to connect to fuseki and have our query results show on the webpage.

The picture below is a class diagram of our system.



Our biggest problems were how to connect our site with fuseki without having to copy and paste our query to the localhost:3030 but rather have the result on our page and also that the data from the different centres was very different. We used most of our time trying to align the data. Since the data varied, we found a bug in the GymDatabase data. The program saves one of the resources on top of another instead of creating a new one. This means that if a user searches for classes on Tuesday, some classes from Actic on other days will appear. We could not find a solution to this problem within the deadline. We also did not have time to connect java to fuseki so it could automatically submits the text file/database. Now the file has to be manually uploaded into fuseki.

For the future, we want to gather more data from different cities, centres and niche studios who only specialises in one type of class (martial art, dance, yoga). We want to include Google maps APIs so the user will get information about the nearest workout place and a map to help guide them. We also want to improve our user interface to make it easier for the users. One way of improving would be to have an option to sort the results by using descending/ascending in our queries.

Candidate 117 scraped the websites and worked with the java code and mostly the back end of the project, whilst candidates' 141 and 106 mostly worked on the front end and with JavaScript code. There are two README files for this project, one for the scraping and one for using the webpage.