Retrospective Document
Sprint 2

Work & Test Progress

This sprint, we found out that the department database given to us does not meet our project requirements. We could not listen client connections through given address. Hence, we decided to use Digitalocean's cloud infrastructure provider for our server development and database storage. We created a Django and Ubuntu 14.04 installed Droplet on 46.101.217.136 IP address and make necessary configurations to serve Django applications with Apache and mod_wsgi on Ubuntu 14.04. For the sake of implementation simplicity, we installed Django to our personal notebook and worked on localhost. Django use SQLite as default database engine, so we did not change these settings on our local host. We can manipulate database with received JSON objects using Django's models. We also use Django REST framework to handle HTTP requests and responses. **(90%)**

Since we managed to fix the problems with the server in this last week, we didn't have enough time to connect it with the Android part completely. However, we have started writing the code for it and will be completed very quickly. Right now we can send queries for filtering and data search but we are still facing problems with the server for retrieving data from the databases **(70%)**

From the hardware side, our sensors arrived at the beginning of the sprint. After the implementation of the sensors, we realized that these new sensors do not fulfill our requirements and we decided that it would take too much time to order new ones. Therefore, we went back to the previous sensors and decided to proceed with them. During this sprint, we have also modified and optimized our code for calibration and process, in which we managed to get proper results and data. Finally, we managed to connect the WiFi Shield for the Arduino, however, due to the server problems, we did not have enough time to connect it to the database. The system sends out the data, however, we cannot observe it through our server yet, which wasn't in the goal for this sprint. **(100%)**

We started research on the design of the scales. After deep research and exchanging ideas with experts, we realized that there is not an existing component for it. Therefore, we decided to design it and get it custom made for our system. **(15%)**

Our database is now fully usable and filled with recipes and food types that are connected through Foreign Keys. (Recipe, User, Food, List, Content Tables) **(100%)**

Team Progress

Aslihan Bener (25%)

Çağla Burcu Aloğlu (35%)
Gökhan Eskizara (15%)
Yağmur Boztürk (25%)

Left-overs (Backlog)

We have 2 different application for server right now. One of them runs on localhost and receives JSON objects and add entities to local database. Other runs on 46.101.217.136 IP address and has tutorial codes to see if we can manage server-client connections. We set up Apache virtual host properly but our Django app is slightly different from the tutorials. Hence, we hope a small modification of the default virtual host file called 000-default.conf will be enough.

This sprint, we did not manage to finalize the connection between the server and Android application.

The data from the hardware side will be added to the database once the server is completely usable and reachable from outside.

Next Sprint

In the next sprint, our system will be completely connected. Due to the delay that we had on server setup, we will be able to have all components communicating with each other at the end of the next sprint instead of the previous one.

We will also be able to observe weight differences from the database and the Android application itself.

Other than that, we will mostly work on recommendation system as we accomplish observing our recipe database from the Android device. We will implement necessary algorithms accordingly with the filtering categories that we decided to use in this sprint. Recipe page of the Android application will also be updated to apply the changes.

Comments

We finally managed to solve our problems with the server side. In the next sprint, we will accelerate our work process and have a lot more deliverables and results.

Assistant's Evaluation

Assistant's (Team Leader's) comments regarding to this completed sprint.

Supervisors's Evaluation

Supervisor's (Team Leader's) comments regarding to this completed sprint.