CS490 Senior Design

Sprint 1 Retrospective

MyMapper

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1. What went well

Overall, this sprint went very well. Our main goal for sprint 1 was to implement the basic infrastructure of our product, including the web server, backing data store, and a functioning web UI. All of this and more was accomplished in this sprint. By the end we had a usable website that the user could interact with and use to search for a limited set of static locations within West Lafayette. The full list of tasks that were accomplished in this sprint are below:

- Set up the web server, ran it on sslab01.
- Set up the spark database, ran database master on sslab02, slave works are added based on works.
- Successful connect multiple workers from sslab other machines to database master.
- Saved and partitioned map data from OpenStreetMap into Spark.
- Created Basic outlook for UI, with OpenStreetMap interface embedded.
- Connected web service with spark database.
- Enabled search function on the web application. So far the application can search static point of interests within a specified range of a given location point.

More precisely, below is the list of all user stories we have achieved:

- As a developer, I want to learn how to implement SPARK and set up database as well as how to get SPARK talking with web server.
- As a developer, I want to learn how to interact with Tomcat and set up our web server.
- As a developer, I will use github for source control, and rely on it to store finalized versions of all iterations of our design documents, in addition to source code. (Setup github for source control)
- As a user (such as drivers, travelers etc), I want to visualize my query results in a web based map interface.

2. What did not go well

Though we may have achieved all of our tasks for this sprint, there were a few areas that could use some improvement. First, not only were our meetings few and far between, but attendance at the meetings that we did have was sparse at best. Rarely were all members of the team present at a single meeting. Second, communication between team mates was similarly lacking. Other than when we managed to see each other during meetings, we would often have no knowledge of how any of the others are performing at their task. We would often have no indication if a member hadn't started their work, already finished, or were struggling with their task until they showed up at a meeting. Additionally, the git repository we're using to collect our source files saw limited use during this sprint.

3. Room for improvement

For the future tasks in the next two sprints, we are considering extending our web application into mobile browsers, which will bring us additional tasks for improvement listed below:

- Recognize if the user is viewing from a laptop/desktop or mobile device
- Design and redesign UI layout for mobile screen size, such as get rid of the top search bar but add all search options into slide menu.
- Adjust some functionalities according to mobile features, such as get user's current location from directly from mobile device GPS service instead of guess from the user's ip address.

Speaking of teamwork, the team would definitely benefit from having more meetings with higher attendance. If a team member can not make it, they should alert the team in advance as soon as possible and send an email updating the others with his progress.

Additionally, more communication between team members would ease the development process. Regular updates on the status of each member's tasks would keep everyone up to date and would help prevent any task from not reaching completion by the end of the sprint.