

# Milestone 7 - SkateSpots (Team 22)

## Reflection:

### Development Methodology (Agile):

To build our software solution, we used agile development methodology. Our group participated in two stand-up meetings per week and a bi-weekly retrospective meeting. All of our standup meetings took place in person and the main purpose of these meetings was to keep all members up to date on the progress of the other members. It was also a chance to voice any problems or obstacles a member was experiencing. These meetings were by far the most productive because it was a chance for members to voice any concerns or problems in front of all group members. In most obstacles, at least one other member had experienced it before and was able to assist with his/her experience.

Every two weeks our team met for an extended period of time (one to two hours) to perform a retrospective on the development that was done during the past two weeks. This was a chance for us to take a step back and look at the group as a whole. We evaluated what we were doing well, what wasn't going well, and how to improve what wasn't going well. For example, for one of our retrospective meetings we decided to meet in a different location. That meeting turned out to be the most productive one we had as a group to that point because it was a significantly quieter setting and thus easier to focus. So one of our group members brought up during the retrospective that we should continue to have all of our meetings there which resulted in much more productive meetings beyond that point. We were very happy with our choice of an agile approach because a bi-weekly retrospective allowed us to quickly change course before the ship ran aground.

### Communication Tool (Slack):

We used Slack to get in contact with all the team members. Slack was efficient because it was available on anything with browser capabilities and also available on IOS and Android mobile phones. With everyone on Slack we could determine when meetings were and where meetings happened with ease. We also shared links crucial to our project and whenever there was a merge conflict or error in the github code we used Slack to address it immediately so that all the members of the group were aware of what was happening.

### Code Repository and Issue Tracker (GitHub):

We used GitHub as our version control, and also as a way to manage our teams work. All of our team members when they finished work on the code could commit their changes and keep the code base working. We also used issues as a form of assigning work within our group. We would open an issue for large changes that needed to be addressed in the project and team members could pick up the issue when they had time for it.

**Project Management (Trello):**

We used Trello the most when brainstorming. It allowed us to record and organize our ideas for features as we came up with them, eliminate the things we thought were unnecessary for our final project, as well as eliminate features that would take too much time. Then we could use it to organize our ideas and chose what to prioritize and what order to implement features.

**Project Report:**

We came close to meeting most of our goals and objectives for our project. Our projects GUI progressed to the point where it handled the most of the user interaction our application required. We managed to develop pages for each of the various actions the user needs to perform as well as account information they need to use the app. We did not meet our goal of full database hookup, even though by the end of the project it would only require setting some variables to values returned by functions from our WebRequest class which handles the communication with the database.

I think our group did an excellent job of setting up a database that stores a large amount of app data and permits us to expand the user experience immensely in the future should we want to. The database is setup to store enough relevant information so an algorithm can be written later on to rank users based on their spot contributions. One of our outstanding issues is a scene specifically for the market place. This would require mostly work at setting up a new user scene for the marketplace that incorporated details like sorting for spots based on their feature type, and rewarding highly ranked users with highly rated spots.

**Original Goals:**

When we started this project our aim was to help skateboarders and BMXers find new skate spots within their geographic proximity. Another problem we discovered was when skaters are in unfamiliar cities and want to skate, they have no knowledge of what is around them. Thus spawned our solution, SkateSpots. We wanted to allow skaters to upload their spots to our database with information about the spot such as, feature (rail, stair, etc), difficulty, and security. By uploading spots we would reward them with tokens. They could then cash in their tokens at any time to receive a random spot nearby their current location. This would then result in a massive user populated map of skate spots worldwide.

**Current Functionality:**

Currently our implementation has the following functionality. Users can create spots by dropping a pin at their current location and filling out the various attributes about the spot. This saves the spot to their list of skate spots. They can then choose to submit the spot to our database and receive a token that can be used to redeem a new random spot within their geographic proximity. The user can always view his/her list of spots as well as their current token count. The last feature we implemented was to get a random spot. When the user chose this option, they would spend one token and receive a new spot that they didn't already have

from our database. One of the outstanding issues we have is to return a random spot to the user that is within their geographic proximity. This would mean only returning spots to the user that are within a 2 square mile box with the user's current location as the center.

**Future Goals:**

In the future we plan to give our users more reasons to use SkateSpots for a variety of reasons. First, we plan on improving the security of their accounts and information. Encrypting their username, password and email address in our database to make sure no one without permission gets access to it. We also plan on making a recovery system that asks users to fill out some basic recovery questions that they can answer if they do forget their password, email, or username. Second, we plan on creating a spot album for users to easily access all the spots that they have acquired. This spot album will also include a picture upload option so that the spots can have a picture so that the user can easily identify that specific spot. Third, we plan on monetizing the application so that it can generate revenue so that we can keep SkateSpots "free" for all users to enjoy. To do this we plan on displaying in app advertisements that will help us generate money for every user. We will also offer token-bundles for the users who do not want to spend their time and earn tokens, and just want to unlock more spots wherever they go. This will still keep the application free because purchasing the token-bundles is not mandatory to use the app, it will just help us generate more revenue. Lastly, we plan on implementing a ranking algorithm to rank the user. This ranking algorithm will check how often the user uploads spots, ranks other spots, and participates in the application and then assign them a rank they deserve automatically. In the near future all these improvements will be integrated into the application to make the users experience a better one.