

**Sprint 2 Retrospective**  
**Team 21 - Transforming Drainage Project**  
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What went well?

- We successfully completed our user stories and while testing, discovered ways to improve load times across the application, which is something we will fully implement in our final sprint.
- As a team, we coordinated much better than we had for sprint 1 in that we collectively solved problems and followed a consistent meeting schedule while continuously engaging in the GroupMe conversation.
- We were able write more effective javascript code than we had in sprint 1 because of the experience gained in sprint 1.

The following are the user stories that were completed:

- As a user, I would like to be able to download the results of the mass data calculation and comparison year data and graphs
- As a project owner, I would like to be able to easily and efficiently update the files that contain mapping data.
- As a project owner, I would like all the code and data structures to be properly documented and optimized for reusability.
- As a project owner, I want to be able to reduce the amount of data that must be transferred to the user.
- As a user, I would like to have a responsive and intuitive experience while using the application.
- As a user, I would like to view the map data in a graph.
- As a stakeholder, I would like to improve the functionality of the maps on the regional map tab.

What did not go well?

- Our planning of time was not as well thought out which was mainly due to several midterm exams and other large projects that were also taking place at the start of the sprint.
- We did not put much emphasis on Unit Tests. Most of the unit tests that we made did not really meet the definitions of a unit test and several user stories that had unit tests listed ended up not having unit tests made with them
- We did not communicate with the stakeholders well enough to get our user stories properly defined before the beginning of the sprint.

How should you improve?

- One of the concerns our grader had was that our tests were more verifications than tests. Moving forward we need to code actual test cases in order to test for a wider range of circumstances that we can visually verify.
- We should also consider being less conservative with some of our time estimates. I know there were some elements that we listed as 6 hours but in reality it took around 12 due to the complexity being harder than we anticipated.
- We need to improve communication with our stakeholders. Before the second sprint really started we weren't able to meet with the stakeholders to go through the user stories and make sure they were defined correctly. We had a general knowledge with what they wanted but some small things changed when we were able to go over everything with them. This caused what we had developed to not perfectly align with our sprint two document.