

Sprint 3 Planning Document

RESERVOIR PLANNING TOOL

By The Transforming Drainage Project



Sprint Overview

During this sprint we will be focused on polishing the features we have implemented thus far. Since we will be giving this project to professors for future use and development we want to make sure that everything is well put together and well documented. The areas that will be given the most attention throughout this sprint are the UI, data accuracy testing, and documenting project modules.

Meetings

- **Tuesdays at 4:30-6:30 (with Transforming Drainage Project)**
- **Fridays at 10:30**
- **Scrum master - Drew Atkinson**

Risks and Challenges

The biggest challenge that stands in our way for this sprint is building an interface that our project owners think is an appropriate fit and producing accurate data for our users. Another challenge is documenting everything appropriately so that whoever picks up the project next can be brought up to speed quickly. Our biggest risks at this stage come from making changes that would hurt the user experience and not being able to successfully pin down the algorithm to produce consistent and expected results.

Sprint Detail

User Story #1

As a user, I would like instructions on how to use the website

Task	Owner	Time
Text explaining what our tool does	Jonah	2h
Displaying text explanation	Vritant	4h
Meet with project owners to discuss layout for instructions.	All	1h
Text on graphs stating scales and type of data	Vritant	2h
Display graph explanations	Clayton	2h
Acceptance Criteria		
Users can read a description of what our tool does and what all the inputs describe.		
Users can read a description of what the outputted data shows.		

User Story #2

As a user, I would like the website to look professional.

Task	Owner	Time
Create favicon and logo	Clayton & Vritant	4h
Make the location search bar attractive	Jonah	5h
Reorganize form inputs	Vritant	3h
Increase readability on inputs and graph	Vritant	6h
Add contact information and link to project source in footer.	Clayton	3h
Add automatic scrolling	Drew	5h
Add 404 Error page	Drew	1h
Add Loading animation to graphs	Drew	5h

Improve buffer animation	Vritant	2h
Improve UI	Vritant	3h
Acceptance Criteria		
The search bar is styled and placed in an attractive way.		
Users have the ability to contact the project owners or check out the source of the project.		
Automatic scrolling exists		
There is a logo and favicon		
UI is ready for production		
If a bad route is requested, a 404 page is served.		

User Story #3

As a project owner, I would like to have documentation of the structure of the project, the server deployment, and how to make changes.

Task	Owner	Time
Detailed documentation of the server deployment strategy	Drew	3h
Update the Design Document with any changes made during Sprints 1-2	Jonah	5h
Detailed documentation on TDPAIg	Clayton	3h
Detailed documentation on graph generating functions used by the client.	Clayton	3h
Documentation on how to run database testing	Jonah	1h
Documentation on database	Jonah	2h
Acceptance Criteria		
Someone who is curious can read our documentation on any of the topics described above.		
Design document will have the current information about our project.		
A new developer will be able to pick up the project where we left off.		

User Story #4

As a user, I would like to be given accurate data. (Improving on user story from sprint 2)

Task	Owner	Time
Use project owner's expected values to improve graph outputs.	Clayton	6.5h
Meet with project owners and show them the current outputs and get their input on improvements.	Clayton	2h
Acceptance Criteria		
Graphs produce accurate data.		

User Story #5

As a user, I would like proper errors to be shown when I input bad inputs.

Task	Owner	Time
Display indication on the front end that form inputs are invalid	Vritant	4hr
Display indication of backend validation fail	Vritant	4hr
Handle general promise rejection and display an error to the user using session and AJAX call	Drew	8h
Display indication of invalid CSV upload	Jonah	4h
Add error checking in TDPAlg	Clayton	3h
Add error checking in graph generating functions.	Clayton	2.5h
Acceptance Criteria		
For invalid CSV uploads, an alert will be presented reminding the user of the appropriate format for uploads.		
Invalid inputs do not produce flawed outputs. They are handled and the user is alerted.		

User Story #6

As a user I would like my inputs to be validated before and after I submit them.

Task	Owner	Time
Validate form inputs on front end	Jonah	5h
Validate form inputs on back end	Jonah	5h
Acceptance Criteria		
Form inputs are validated on the front end and Vritant's error UI will be called when appropriate.		
Form inputs are validated on the back end and Vritant's error UI will be called when appropriate.		

User Story #7

As a user, I would like to download the results of the calculated data (Improvement on Sprint #2, Story #2)

Task	Owner	Time
Add outputs to CSV output	Drew	2.5h
Acceptance Criteria		
Extra inputs are included in the CSV download feature.		

User Story #8

As a project owner, I would like the website to be deployed. (Improvement on Sprint #2, Story #5)

Task	Owner	Time
Get HTTPS Certificate and add to Server configuration	Drew	2.5h
Serve Static Files with Nginx	Drew	3h
Change all CDNs to minified files	Vritant	1h
Acceptance Criteria		

The Website is served over HTTPS.
Static files, including Vendor CSS and JS are served properly.

Backlog

- ☐ As a user, I would like to open the website
- ☐ As a project administrator, I would like to initialize the database
- ☐ As a user, I would like to be able to use Transforming Drainage Project's data
- ☐ As a user, I would like to see graphical representations of data
- ☐ As a user, I would like my uploaded data to be calculated and shown on a graph
- ☐ As a user, I would like to have my own data interlaced with Transforming Drainage Project's data
- ☐ As a user, I would like to upload my own data to use
- ☐ As a user, I would like to download the results of the calculated data
- ☐ As a user, I would like the project to have as less bugs as possible
- ☐ As a project administrator, I would like the website to be secure
- ☐ As a user, I would like to interact with the graphs
- ☐ As a project administrator, I would like the server to be set up
- ☐ As a project owner, I would like the website to be deployed.
- ☐ As a user, I would like to switch amongst various data sets
- ☐ As a project administrator, I would like the database to be hosted on a server
- ☐ As a user, I would like the website to have good user experience
- ☐ As a user, I would like the website to be responsive and adaptive
- ☐ As a user, I would like instructions on how to use the website
- ☐ As a user, I would like the website to look professional.
- ☐ As a project owner, I would like to have documentation of the structure of the project, the server deployment, and how to make changes.
- ☐ As a user, I would like proper errors to be shown when I input bad inputs.
- ☐ As a user I would like my inputs to be validated before and after I submit them

