

Team/Instructor scrum #3

Team member & project (re)introductions

We are team rubber duck solutions and our project F.L.O.A.T. (Facilitating Level Objectives Assessment Technology) is an automated system that identifies litter through a live feed and collects water parameters.

Carter Brezinski: AI and Back-end Lead

Jonathan Vargas: Front end Lead and Project manager

Scrum dates

Oct.8, 2021 - Oct.22, 2021

Status description

Overall, we feel that we are on track, but for this specific scrum, we feel yellow. We had many conversations on refining the direction of our project and expanding our scope to include collecting water parameters.

Some comments that came up during this scrum came from Ben. He had trouble conceptualizing our initial project idea. His main argument was if a person were to actively ride out on a boat to supervise our system to collect data on litter, it would just be easier to cut our project and just clean up the litter by hand. This comment led us to hone into a new golden circle and expand our project scope

Individual contributions

Jon: Scope outlining and refining, Team Wiki upkeep, GitHub upkeep, peer reviewed documents, Wrote- Business Case, Project Charter

Carter: Peer-reviewed documents, Wrote- Project Requirements, Project Scope Statement, Project roles and Responsibilities. Worked on developing real-time image recognition within Google Colab.

Project issues

Google Colab Runtime Error: There is an issue currently being encountered within Google Colab which is posing a threat to the future of this project. Google Colab is meant for short tutorials and minimal use, with only a maximum runtime of 12 hours per execution and 1.5 hours on a minimized tab or mobile application. For long term use this will become a difficulty for this project and for future iterations we will need to look into the use of Azure, AWS, GCP, or Tensorpad and pay a fee to be able to house our project and its information.

Project changes

Refined our golden circle: Desire to improve the recreational water quality in Saskatchewan and hopefully make a product or a stepping stone for the creation of a product that will continue to maintain the water for the long term.

New project scope: A fully automated vehicle that traverses through waters to detect litter and collect water parameters based on the Guidelines for Canadian Recreational Water Quality.

Documentation overview and/or project demo

Our GitHub structure has been reworked. Each section of our documentation folders has a 'raw files' folder to view source files. We have implemented a naming convention for ease of searching. The naming scheme follows this format *Project_DocumentName_DateCreated*

For the project demo please see Hi-Fidelity prototype pdf on our GitHub.

Next up

Carter: I aim to work hard on developing and finalizing a working prototype that can perform litter recognition and detection in real-time that will be working in time for MVP-1.

Jon: Create and set up the front end and back-end stack (Server-side tech)

Team reflection

Discuss:

- Does the team feel "on track"? (reiterate the above colour status)

Jon: I feel like we've gotten some good work done this week, but we still feel a tad behind. We feel as though we now have a lot going on and we may not be at the level we should be currently.

Carter: This week we really aimed to focus on getting our foundation all leveled out in terms of getting our documentation solid for where we're currently at, and continuing on developing code. For myself, as I mentioned above, I've hit a few speed bumps in regards to google colab, but other than that my development while currently slow is still looking promising.

- What progress does the team particularly feel good (great) about?

For this sprint, we feel really good about our finalization of what we want out of our capstone project. We finalized that we want it to be not just functional but to have a meaningful purpose.

- What barriers (if any) does the team feel are a current impediment to success?

As previously mentioned, now there is the potential that we may need to begin paying for other services to house our software and project information. This is something we will have to budget for and undergo in the near future. Additionally, for future testing & data retrieval, we may need to speak to our contacts in regards to testing water quality.

- What help (if any) does the team require to move positively forward?

Any insight or guidance in regards to potential sensors capable of water quality testing would be greatly appreciated.

- What questions or concerns does the team have (if any)?

No serious concerns at this current time for us.