Team Standards

Date: 10/07/22

Team: Green AZ

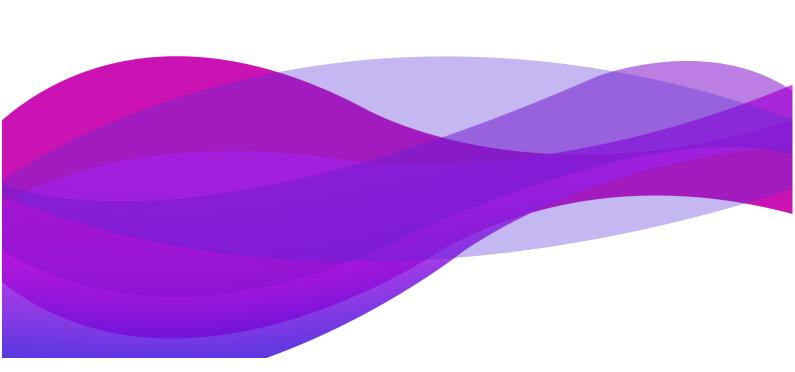**Sponsor**: Richard Rushforth

Mentor: Vahid

Members: Zack Bryant, Ryan Dembroski, Justin Eggan, Jack Gilliam

The Intro

The purpose of this document is to define the standard protocols our capstone team has agreed upon and will follow during meetings and when collaborating on project deliverables. The content outlined includes the roles each team member is expected to fulfill, expectations for conducting weekly meetings, tools our team will utilize, and the procedure our team will follow regarding self review. This document is intended to establish a common understanding of the expectations of our group, as well as promote efficient and effective communication and collaboration.

Team Membership and Roles

Team Leader - Our Team Leader will be our frontman for most things. We have agreed that the Team Leader will be the person who gets both physical and digital deliverables turned in. Ryan Demboski stepped up to this position.

Recorder - We have decided that this role will be one that switches every week. We thought that having the Recorder for the meeting switch every week would be beneficial, as it ensures meeting notes will always be taken in the event someone who might have been elected does not show up.

Client communicator - Jack Gilliam will be our primary point of contact with our Client, Dr. Rushmore. His job will be to set up the meetings with the client, be direct contact outside of meetings - such as for questions regarding the project the day after or before a meeting - and other such communications.

Architect / QA Assessment - Everyone will be doing their part with the architecture and Quality Assurance of the deliverables and the actual project itself when the time comes. By doing this, we have more eyes on the code at any given time when we push it to our github.

Release Manager - Our primary release manager will be Zack Bryant. Much like the Architect / QA Assessor, this job is flexible enough and is able to be done by the whole group. However, having a dedicated release manager means that we will have a more concrete release standard.

Backend Developer(s) - The backend developers will be responsible for the server-side development of GreenAZ's project. Currently, Zack Bryant is our first Backend Developer, but the rest of the team can step up to work on the backend development if need be.

Frontend Developer(s) - The frontend developers will be responsible for the user-side development of the GreenAZ project. Currently, we have not assigned anyone to be a Frontend Developer, as we are waiting to see more of the scope of the project before doing so.

GIS Developer(s) - Due to this project's basis on GIS development, we deemed it necessary to have specific GIS Developer(s) that are familiar with GIS software and GIS programming. Currently, Justin Eggan is the main GIS developer, but as the need arises more can come to assist.

Team Meeting Expectations

Meeting Times: Weekly meetings are scheduled for 10:15 am every Monday at the Cline Library. Meetings will be in person primarily, but can also be held on Discord if need arises. Impromptu meetings can be scheduled as needed.

Agenda Structure: Meetings will start off with each member updating the team on their progress.

Minutes: The meeting recorder will be decided before each meeting and will record topics discussed in meeting minute documents for that day. The meeting minutes will be recorded in a google docs paper and then shared with the group via the team discord.

Decision-Making Process: If a dispute arises between the group where there is no majority, the group will agree on a third party to help resolve the issue. The third party should be agreed upon by ¾'s of the team in order to try and resolve the dilemma.

Attendance: Attendance is crucial to run effective meetings. If a member has to miss a meeting, they must communicate this to the group as soon as possible. No set limit of how many meetings a member can miss are in place but if the member starts to miss multiple meetings in a month even with giving a warning then a discussion should be held between one of the members and the absent member to discuss the situation and hopefully resolve the issue. If a team member misses a meeting and does not warn that they will be missing then a conversation will be had to discuss the cause of the absence. If it is believed that the member missed the meeting by unfortunate circumstances then the absent will be excused. But if it is believed that the member missed the meeting due to negligence then the absent will not be excused. If a team member misses three or more meetings with no warnings, attention should be brought to the mentors and course advisors' attention and disciplinary actions from the "[Formal policy and process](#) for dealing with non-performing team members" will take place. These rules are also in place for If a member is late to meetings by more then ten minutes more then three times.

Conduct: The group must conduct themselves professionally and communicate with the group effectively. If a situation arises which may affect a member's contribution to the group, they must inform the group as to not hinder progress. If any divides between the members start to occur the noticing party should ideally try to resolve the issue with the other member. If a member notices friction between other members they should seek to bring attention to the stituition in hopes to have a civil discussion with the parties involved and find a peaceful resolution. For

other issues with the team any actions deemed as undesirable by an individual teammate should be brought up one on one with another member to try and resolve the issue. If the issue pertains at the next team meeting then there will be a group discussion about the actions of the member and what should take place to resolve them. If the issues still pertains the group will have to bring attention to the mentor and course advisors and disciplinary actions from the "[Formal policy and process](#) for dealing with non-performing team members" will take place.

Tools and Document Standards

For version control, we have agreed on using Git and we will keep a master copy of our project on GitHub. When we start development, each team member will create their own branch and work in that branch at all times, and then submit a pull request when the code is ready to be merged to master. The team member most knowledgeable in the specific topic of that pull request should be the one to review and approve/deny. In that sense everyone is a QA for the areas they know the best.

GitHub has issue tracking built in, so we will be using that because it makes it easy to assign tasks to team members, link issues to the team member that has the best chance to solve it, and keep all our communications in one place. It's also a lot easier this way to show what commits are the problem, and highlight areas that need to be addressed in a pull request before merging into master, because it's all integrated nicely into our repository.

We've decided on using the tools from Google Drive for sharing documents with each other and creating deliverables. Some of these include Google Docs and Google Slides. Both of these are great because the whole team can work on them at the same time, and it's easy to export into a pdf once finished. For creating the graphs that our project requires, we will use a software called LucidChart, because it allows us to work at the same time and create high quality graphs together. Lastly, we will use Gimp or Microsoft Paint for image processing, depending on what we need to make.

Lastly, when we need to work on deliverables, the editor will create a document and lay out each section that needs to be done. Our team will then discuss which sections each member should work on. Then once each section is finished, the editor will review the document, making adjustments and small changes to the formatting as needed. We haven't established strict deadlines for getting our sections done, but it's preferred to be finished a day before the due date.

Team Self Review

The first meeting of every month, the group will set aside some time to discuss how each member feels they have been performing. The group will give insight on the individuals' take and whether they are in agreement with members' self review. If any of the team is not in

agreement a discussion will be held to further discuss why they think the members review is not accurate. A discussion should take place between the team here to find out if other members share the same opinion. If the other members do not share the same opinion the conversation should be left between the self reviewer and the team member that does not agree with the self reviewer. However if it is found that a majority of the team doesn't find the self reviewers review to be accurate then a conversation should take place at the current meeting discussing the other members point of views. This doesn't also mean that a reviewer will overestimate their contribution but possibly under estimate their contribution. Ideally the team should work together to find solutions to get the teammate to an average contribution level where they are not over working or under working themselves. The team should ideally try to find solutions to help their team members such as, assigning them different tasks, being available to help, or having better communication between members.