TEAM CONSTITUTION

Course: PROJ 354 Capstone Project

Instructor: Ali Moussa

Project: Home Pro

Client: AK Computers Inc.

Team: Dynamic Developers

Gao Liu | Scott Normore | Saksham Ohri | Madhu Madhavan | Eze Adiele | Liam MacDiarmid

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Statement of Goals

Our overall objective of working as a team is to master the material related to this project, for example MERN stack (MongoDB, Express, React, Node) web development and demonstrate that mastery through our final report and presentation. We are committed to working effectively as a team, by monitoring our process effectiveness, following through on commitments, and helping one another to learn. As per our discussion throughout the process of initial stages of our project we have derived some following group goals and performance objectives.

- We will take on leadership positions in different stages of our project to challenge ourselves and use our combined group strengths to improve our individual weaknesses in the subject matter.
- A promise to achieve all levels of productivity when working on this project
- We collectively agree that we will work efficiently and proactively to maximize our limited time in this semester.

We wish to accomplish two things with this project; learn more about full stack development and to create something neat to show off in our code portfolios.

While we have learned a lot about web development through older web development frameworks, we have not delved into the more modern web development frameworks. We plan on using this project to learn more about the MERN stack (MongoDB, Express, React, and Node; web development technologies).

In addition, while we did a lot of programming in this course, we currently do not have a whole lot to show for it. By working together, we hope to have a working full stack application that we can show off to other companies so that we can get jobs developing software in the future.

Intellectual Property

We have an NDA document signed with our client. It provides security to client and our team. After the completion of the project, the project will belong to our client and the members of our team is not permitted to reproduce, sell, or provide the code for re-using to anyone/in any other application. All the terms and conditions are stated in the NDA and all the members of our team, and our client are aware of that.

As per SAIT's endeavour to recognize a student's intellectual property right in work created by him/her, they have clearly stated in AC.3.10.1 Ownership of Student Produced Work that the student holds title to and all the intellectual property rights in any original work that he/she submits or creates as part of course work at SAIT.

Link to SAIT Policies and Procedures: AC.2.11 Intellectual Property Policy

https://www.sait.ca/business-and-industry/advisory-committees/policies-and-procedures

Roles

Leader:

We plan to take turns to lead in this project. Each of us has opted a development stage that we would be leading to experience project management skills. This person will also play the role of a **peace maker** in the project to resolve personnel conflicts and maintain an undeterred flow of the project.

Scribe:

The designated team member would not just document some minutes of meetings but would also be responsible to draft deliverable document for the stage that they play this role.

Standards Person:

Schedules the meetings and leads possible discussions. Plays a moderator/facilitator kind of a role. Reviews the coding standards of all the team members every week.

Critical Evaluator:

Again, as a team we all have planned to be the critical evaluators of the work that is being submitted by other group members. Comparative analysis will be performed using our feasibility study results and other benchmarks during the project implementation.

Mediator:

Takes responsibility of resolving any disputes between team members. Mediator will follow different ways of resolving a conflict depending upon the type of conflict. This person will also work with leader in resolving conflicts and avoiding them.

Roles	Requirement Gathering	Design Stage	Implementation	Testing
Leader/PM	Madhu/Gao	Saksham/Eze	Scott/Madhu	Liam/Scott
Scribe	Gao	Saksham	Scott	Liam
Standards Person	Eze	Scott	Madhu	Liam
Critical Evaluator	Scott	Liam	Gao	Saksham
Mediator	Saksham	Madhu	Eze	Gao

Division of Labor

Scott	Liam	Gao	Eze	Madhu	Saksham
Requirement gathering		Requirement gathering	Requirement gathering	Requirement gathering	Requirement gathering
Design Stage	Design Stage	Design Stage	Design Stage	Design Stage	Design Stage
Back End Dev	Front-End/Back-End Dev	Front-End Dev	Front-End Dev	Database/Back-End Dev	Front End Dev

While each team member will take ownership over a specific portion of the app, each team member is expected to be familiar with the entirety of the stack. This means that each team member should make use of the of the following learning materials as minimum:

- React Beginners Guide: https://www.freecodecamp.org/news/react-beginners-guide
- The MongoDB manual: https://www.mongodb.com/docs/manual
- NodeJS Guide: https://nodejs.dev/learn
- ExpressJS: https://expressjs.com/

Attendance Policy

- Every team member is expected to attend meetings on days schedule and agreed to. Our current schedule is Wednesday evenings from 6-8pm via teams scheduled meetings.
- Members that cannot attend a meeting must notify the team in advance.
- In case someone is missing meetings and work sessions, the team lead for that stage will initially contact the team member and find out the reasons for continued absence.
- When this becomes persistent, then we bring the matter to the instructor to address the matter appropriately by either replacing the team member or just to keep a note about the contributions/presence in the project and effectively decide on what grades will be assigned based on the team members presence to meetings.

Rights

- Every team member has the right to be involved in every aspect of the project.
- Every team member has the right to be treated with respect and to have their ideas considered.
- Every team member has the right to provide sensitive, constructive feedback on the project and on other member's contributions
- Every team member is expected to contribute to the project, documents, and discussions.
- Every team member can critique thoroughly the project design and objectively point out areas of improvements.
- Every team member can make changes to the project, as long as it fits to over-all project plan and purpose.

Methods for Conflict Resolution

Our primary method for conflict resolution will be to confront issues and find a workable solution. If a conflict arises, the group must deal with the issue through mature and respectful discussion that should include all group members. The aim of this conflict resolution process should be to find a solution that works for everyone and that fully resolves the conflict.

During conflict, the leader will be responsible for being the peace maker; making sure the conflict does not arise into a heated argument. In addition, the leader should remain impartial so he/she can act as the mediator if the mediator in involved in the conflict. If both the leader and mediator are involved, un-involved parties should assume the roles of peacemaker and mediator. If the conflict cannot be resolved, then the relevant parties must come to a compromise that is acceptable to the group. Finally, if no resolution or compromise can be made and the situation becomes untenable, the group may need to escalate the situation towards instructor intervention.

Standards

To keep technologies consistent between group members, we will be enforcing the use of certain technologies as follows:

- MS Word will be used as the word processor.
- Visual Studio Code is used as the coding editor.
- MERN stack is the technology that we will use to develop the web application.
- Technical (class, use case, activity, etc…) diagrams for the project will be created using Software Ideas Modeller. Other diagrams can use other software to best suite the diagram being created.
- GitHub will be the collaboration tool we use to share our code.

Our project will have many classes, functions, and variables. Thus, to keep our code readable, we plan on enforcing the following rules:

1. All Class Names will be using **UpperCamelCase**
2. All variables and methods will be using **lowerCamelCase**
3. In addition to 2, all methods will follow a **verbNoun** naming convention examples include: getUser, calculateCost, authorizeLogin
4. In addition to the above, **all methods in our code should be documented** in some capacity. This will include a brief description of the method, what it expected to be passed in, and what is expected to be passed out.
5. Lastly, **a comment header for all classes** that have a brief description of the class, and an author tag to indicate who wrote the code.

In addition, our non-code documents will follow the following standards when possible:

1. For professional documents to be given to the client, we will use Times New Roman is used as the primary font. In addition, for these documents, font sizes of 12 will be used for the content and tables, 16 for the main headers, and 14 for the sub headers
2. Page margins will consist of the default margins (2.54 cm from all sides) in our word documents

Documents, Assignments, Working Files

All working files will be stored in MS Teams channel, ***Group 1 Dynamic Developers***, under specific folders. Every member will have access to view and edit files. For backup, we prefer to use another cloud service, such as Google Drive, to store additional copies of all files.

Files and assignments that are not code related but are to be submitted for marks will be looked over by the group. After the group has added their input, **Scott Normore/Gao Liu** will then do one final read over, then submit the document to d2l.

In addition to Google Drive, all application related code and files will be stored on GitHub. On GitHub, the main branch will be maintained by **Scott Normore**. When working on the project, members should create their own working branches using the name_working_branch naming convention (ex: Scott_Working_Branch, Gao_Working_Branch, etc..). When group members have completed a particular component of the project in their working branch, they will create a pull request to merge their working branch to the main code. Code that has conflicts will be looked over by **Scott Normore** before merging.

When we get to the deployment phase, we will create a branch called Latest_Deployed_Code, which will be the snapshot of the code currently being deployed on whatever hosting service we end up using. This should be done immediately after successful deployment by the person who is deploying the code.

If any troubles are encountered using GitHub, contact **Scott Normore** for technical assistance.

Change of Constitution

We are open to making any changes to our team constitution considering it is fair and protects our team members rights. We will conduct a group meeting and decide together whether the change is needed or not. One of the major criteria to making any changes to this would be if there are any changes related to documenting, accessing files or backup procedures.

Communication

We currently have a designated MS Teams channel created for our project and are currently having weekly meetings (every Wednesday from 6pm to 8pm) hosted in that channel. We upload all the project related files and folders to the channel, so it is accessible to all members of the project.

This semester, since we plan on spending time on the campus during the allotted capstone course time, additional meetings will take place at 6pm on two weekdays where we have the least number of scheduled classes. Since we have multiple members working on the weekend, we will avoid scheduling meeting on these days.

For communicating with our client, we are currently receiving emails. In addition, we meet through conference calls on MS Teams when we have a lot to discuss.

We will set up meetings with the client when we have something to show (prototype, use case, etc..) or when we have a question that is hard to convey through email. These meeting with the client will most likely happen on their schedule, so the group members who are able to attend the meeting must act as scribes for the duration of the meeting for the members who cannot make it.

During the implementation phase of the project, we will have work periods in the campus where we get the chance to work together in person. Apart from that, we will still be connected on MS Teams, SAIT email for any communication needed out of the class.

Signatures

Eze Adiele	
Saksham Ohri	
Scott Normore	
Gao Liu	
Liam MacDiarmid	
Madhu Madhavan	