10/12/2023

P2: Summary Report

Group - 19

Submitted to : Dr Kalyani Selvarajah

Instructions
This report is to summarize your work for the first two weeks and the meeting with the business. Consider the period between November 22 and October 6.

PART A

1. Sprint Goals and Scope (10)
    a. Sprint Goals: Clearly state the goals and objectives set for the first sprint.
    b. Scope: Define the scope of work that was planned for this sprint.

Sprint Goals:-

- Understanding the project document to have the high level overview of the project expectations.
- We had project kickoff meeting with the Kyle Bassitt for understanding the project requirements titled "Climate Neutral."
- Setting up the environment on system to start with the project work.
- Based on that we designed sprint 1 for learning so that we have basics ready for the project development.
- Key focus was on primarily learning concepts and correlation with the project requirements.
- Team must be able to effectively know the usage of basic collaboration, task tracking and communication tools like Microsoft Teams, Microsoft Outlook, One Drive, GitHub, Jira
- Outline the tasks list for sprint 1 to kickstart the work.
- Defined basic goal and scope to start with the basics of HTML, CSS, JavaScript.
- Analyzing team core skills for effectively utilization.
- Designing sprint tasks, priorty, issue type, objectives, assignee, task due date for successfully achieve deadlines as per requirements.

Sprint Scope:-

- Generate an HTML document containing headings and paragraphs.
- Generate an HTML document containing a table.
- Generate an HTML document containing a list and an empty div element.
- Establish hyperlinks for seamless navigation between various pages.
- Enhance the appearance of your previous HTML document by modifying the background color and font.
- Explore the impact of various CSS properties such as padding and margin on the layout.
- Craft JavaScript code to define variables with various data types (e.g., string, number, Boolean).
- Construct a basic if statement to execute a condition-based action.
- Employ a loop (e.g., for loop) to traverse an array of elements.
- Generate an HTML form containing text inputs, radio buttons, and checkboxes.
- Include labels for every form element and grasp the purpose of the for attribute.
- Investigate various input types such as password and email.
- Construct a fundamental webpage layout using HTML and CSS.
- Get values from an HTML form and display them.
- Get values from an HTML form and perform a simple mathematical operation and display the result.

These task work can be verified from our Team GitHub Repository and were presented to GA (Ms. Nahid Abdolrahmanpour Holagh) on October 6, 2023.
GitHub Link - https://github.com/Manjinder-Singh/COMP8967-1-R-2023F-Internship-Project-I

Jira tool is used to create and update the progress.
Jira Board Link - https://ip19.atlassian.net/jira/software/projects/SCRUM/boards/1

2. Sprint Progress (25)
    a. Work Completed: Provide a detailed list of tasks, activities, or features that were completed during the sprint.
    b. Work In Progress: Mention any tasks or items that are still in progress or pending.
    c. Work Not Completed: If there are tasks that were not completed, explain the reasons and any mitigation strategies.
    d. Contribution by each member.

a)

Sprint 1 – 09/25/2023 to 10/01/2023
Primary Focus – Learning and starting with HTML, CSS, Javascript
Backlog – NA

	A	B	C	D	E	F	G	H	I	J
1	**Issue Type**	**Key**	**Summary**	**Assignee**	**Priority**	**Status**	**Resolution**	**Created**	**Updated**	**Due date**
2	Task	SCRUM-6	1. Generate an HTML document containing headings and paragraphs	Harbhajan Singh	Medium	Done	Done	9/26/2023 12:30	9/30/2023 10:11	10/1/2023 23:59
3	Task	SCRUM-7	2. Generate an HTML document containing table.	Harbhajan Singh	Medium	Done	Done	9/26/2023 12:31	9/30/2023 10:11	10/1/2023 23:59
4	Task	SCRUM-8	3. Generate an HTML document containing a list and empty div element	Harbhajan Singh	Medium	Done	Done	9/26/2023 12:31	9/30/2023 10:12	10/1/2023 23:59
5	Task	SCRUM-9	4. Establish hyperlinks for seamless navigation between various pages	Manjinder Singh	Medium	Done	Done	9/26/2023 12:32	9/30/2023 10:24	10/1/2023 23:59
6	Task	SCRUM-10	5. Enhance the appearance of your previous HTML document by modifying the background color and font.	Manjinder Singh	Medium	Done	Done	9/26/2023 12:33	9/30/2023 10:33	10/1/2023 23:59
7	Task	SCRUM-11	6. Explore the impact of various CSS properties such as padding and margin on the layout.	Manjinder Singh	Medium	Done	Done	9/26/2023 12:34	9/30/2023 10:37	10/1/2023 23:59
8	Task	SCRUM-12	7. Craft JavaScript code to define variables with various data types (e.g., string, number, Boolean).	Karan Vishavjit	Medium	Done	Done	9/26/2023 12:34	9/30/2023 23:24	10/1/2023 23:59
9	Task	SCRUM-13	8. Construct a basic if statement to execute a condition-based action.	Karan Vishavjit	Medium	Done	Done	9/26/2023 12:35	9/30/2023 23:34	10/1/2023 23:59
10	Task	SCRUM-14	9. Employ a loop (e.g., for loop) to traverse an array of elements.	Karan Vishavjit	Medium	Done	Done	9/26/2023 12:35	9/30/2023 23:50	10/1/2023 23:59
11	Task	SCRUM-15	10. Generate an HTML form containing text inputs, radio buttons, and checkboxes.	Ajwad Maahi	Medium	Done	Done	9/26/2023 12:36	9/30/2023 23:58	10/1/2023 23:59
12	Task	SCRUM-16	11. Include labels for every form element and grasp the purpose of the for attribute.	Ajwad Maahi	Medium	Done	Done	9/26/2023 12:36	9/30/2023 23:58	10/1/2023 23:59
13	Task	SCRUM-17	12. Investigate various input types such as password and email.	Ajwad Maahi	Medium	Done	Done	9/26/2023 12:37	9/30/2023 23:59	10/1/2023 23:59
14	Task	SCRUM-18	13. Construct a fundamental webpage layout using HTML and CSS	dhrumillimbad	Medium	Done	Done	9/26/2023 12:37	9/30/2023 14:15	10/1/2023 23:59
15	Task	SCRUM-19	14. Get values from HTML form and display it.	dhrumillimbad	Medium	Done	Done	9/26/2023 12:38	9/30/2023 14:16	10/1/2023 23:59
16	Task	SCRUM-20	15. Get values from HTML form and perform a simple mathematical operation and display.	dhrumillimbad	Medium	Done	Done	9/26/2023 12:38	9/30/2023 14:16	10/1/2023 23:59

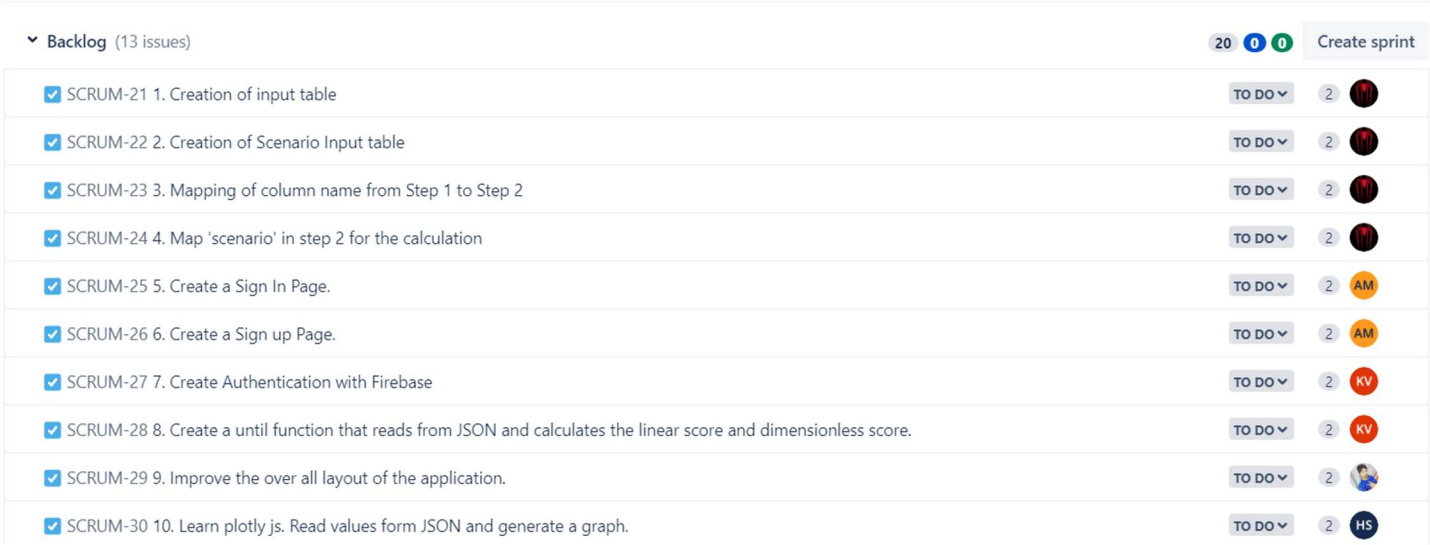
Table 1: Sprint 1 - Task List

1	Issue Type	Key	Summary	Priority	Status	Resolution	Created	Updated	Due date
2	Story	SCRUM-5	5. Learn comprehensive CSS layout techniques	Medium	Done	Done	9/26/2023 12:27	9/30/2023 23:58	10/1/2023 23:59
3	Story	SCRUM-4	4. Learn how to create HTML forms and understand different form elements	Medium	Done	Done	9/26/2023 12:26	9/30/2023 23:59	10/1/2023 23:59
4	Story	SCRUM-3	3. Learn fundamental concepts of JavaScript	Medium	Done	Done	9/26/2023 12:24	9/30/2023 14:15	10/1/2023 23:59
5	Story	SCRUM-2	2. Learn process of applying basic CSS styles to HTML elements	Medium	Done	Done	9/26/2023 12:22	9/30/2023 14:16	10/1/2023 23:59
6	Story	SCRUM-1	1. Learn HTML fundamentals and its structure	Medium	Done	Done	9/26/2023 12:19	9/30/2023 14:16	10/1/2023 23:59

Table 2: Sprint 1 – Story List

b)

Sprint 2 – 10/06/2023 to 10/22/2023[As call was not scheduled for business 2 so sprint was rescheduled to future date.]
Primary Focus – Start with the web page design for implementing project requirements.
Status – In Progress



Screenshot: Sprint 2 Tasks on Jira Tool

c) All the tasks assigned for the sprint were completed and there are no tasks added to the backlog for the next sprint.
d) Equal tasks were assigned to each member as seen in the table 1 and everyone equally contributed to complete the tasks given for the sprint.

3. Challenges and Issues (10)
- a. **Challenges Faced: Discuss any challenges, roadblocks, or unexpected issues encountered during the sprint.**
- b. **Mitigation Strategies: Explain how challenges were addressed or mitigated to keep the project on track.**

Challenges Faced:
- There was main challenge related to the gathering requirements as document manual for project "Climate Neutral" was not elaborative.
- The first call was ended abruptly due to unforeseen circumstances, so the requirements gathered were not enough.
- Team members are not having prior experience in the front-end development so designing the roadmap for learning was hectic.
- Team members have different Operating System installed so it was hard to setup environment consistently with all team members.

Mitigation Strategies:

- Based on the recording session and document manual for project were used as a reference to set sprint goals and tasks assignment.
- Online resources were referred for learning and few YouTube channels were used for effective learning.
- Learning Path was prepared based on level of knowledge about skills.
- Stack Overflow was referred to handle issues related to the setup of environment.

4. Lessons Learned (10)

a. Best Practices: Share any best practices or lessons learned from the first sprint.

b. **Improvement Areas: Identify areas where processes or strategies could be improved for subsequent sprints**

This part is mainly about the **sprint retrospective summary** which is crucial after the sprint completion:
Below is the summary of sprint retrospective:

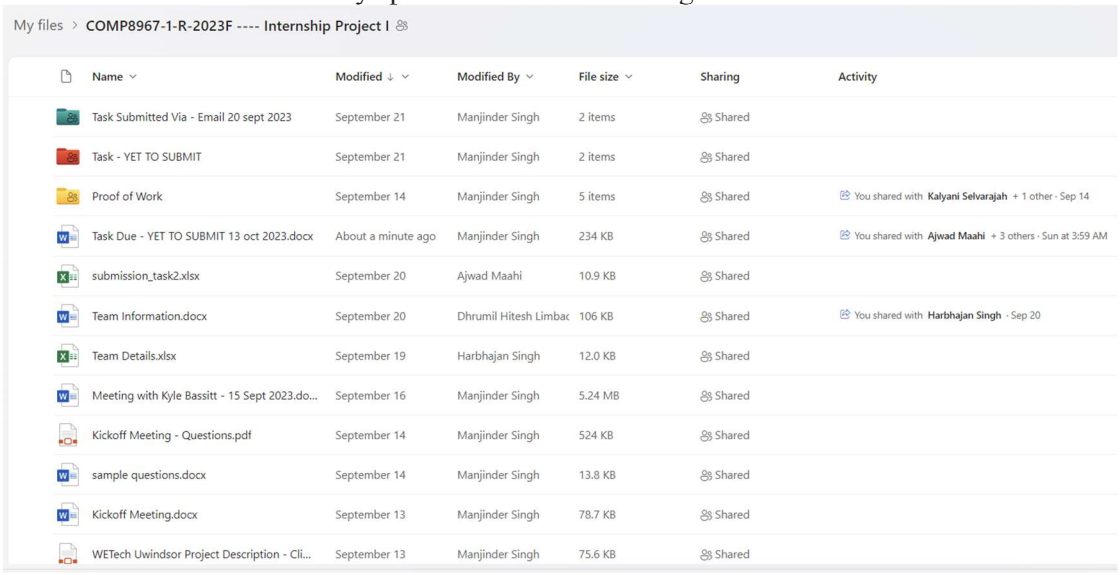
During sprint - 1, our team successfully completed various tasks related to web development basics and JavaScript programming. Here is a summary of our achievements and areas for improvement:

What Went Well:

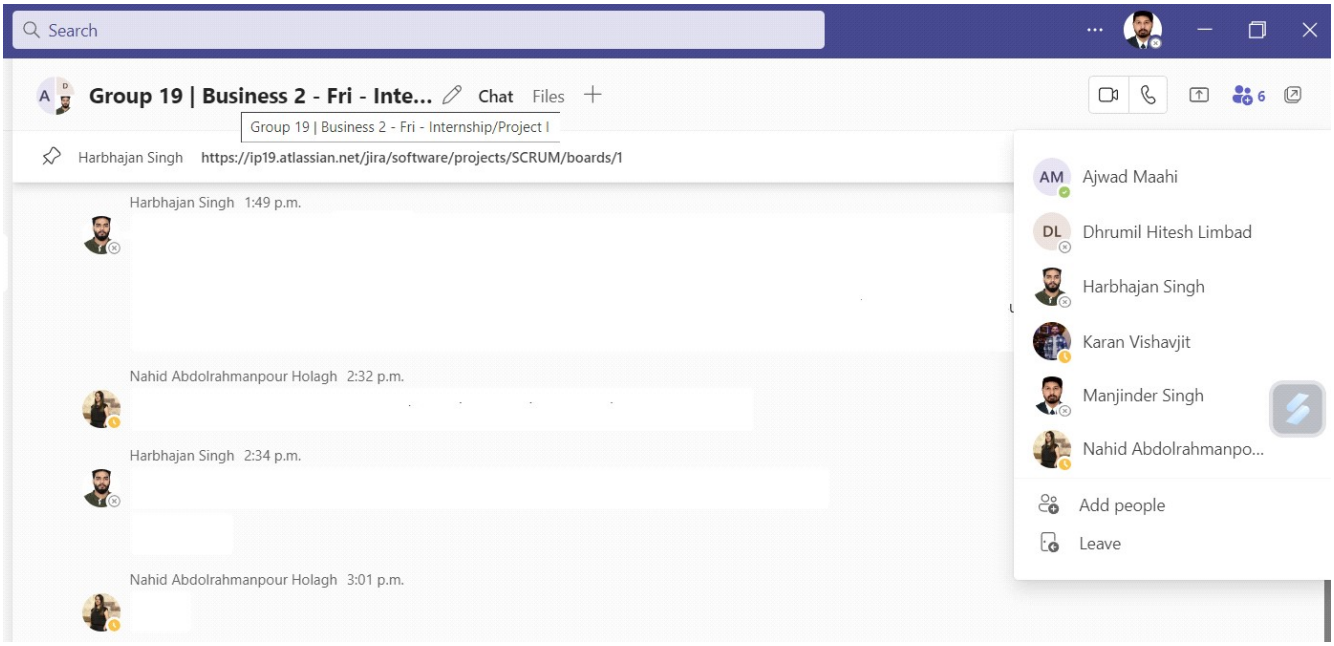
- **Task Completion:** We successfully completed all the tasks assigned during this sprint but in real life projects, it may not be the same as backlogs can be there which is not a bad sign, but it means that we worked on things but due to few constraints, things were not aligned with the project scope
- **Diverse Skill Sets:** Our team demonstrated a wide range of skills, including HTML, CSS, JavaScript, and programming. As first sprint was mainly learning so we will implement the learnt concepts in sprint 2 to design some web pages.
- **Timely Delivery:** All tasks were finished on schedule, meeting the sprint's deadline. However, as it is mentioned earlier it may not be the case in real-life projects which team will be working on from scratch until the final delivery of the product.
- **Task Distribution:** Tasks were efficiently distributed among team members, ensuring a balanced workload.

Areas for Improvement:

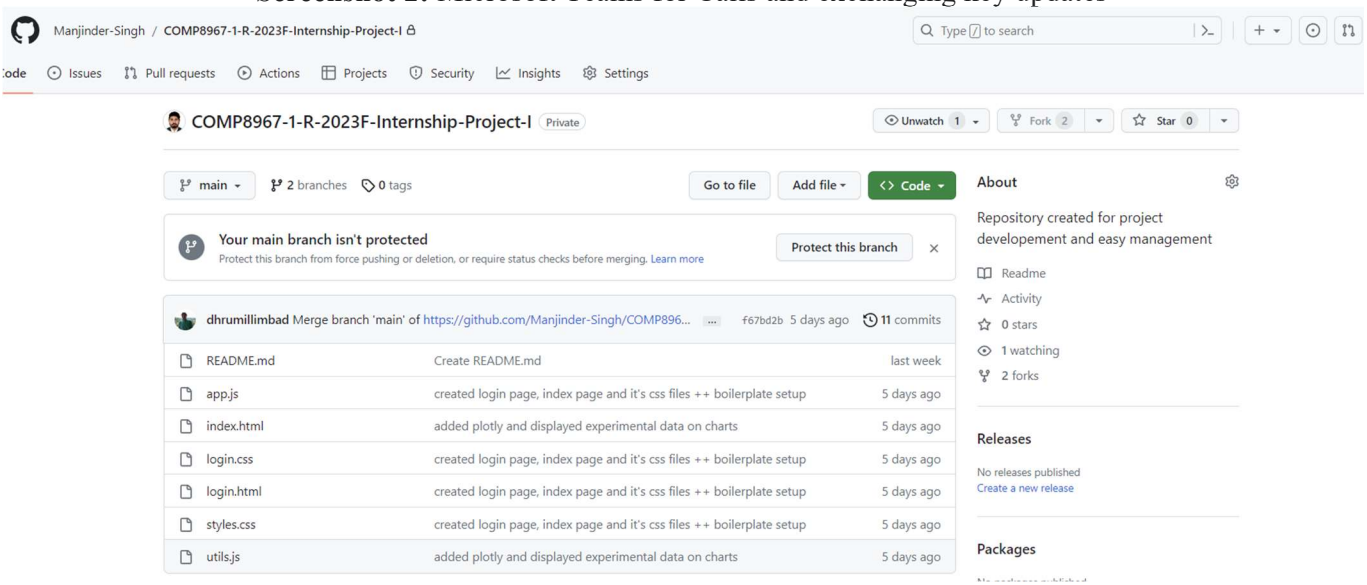
- **Documentation:** While the tasks were completed, there's room for improvement in documentation and comments within the code. But we firmly believe that the sprint was mainly focused on learning few core concepts to start with the Climate Neutral project, so the progress donw during sprint will be reviewed from Kyle for his feedback.
- **Collaboration:** We can enhance collaboration between team members by sharing knowledge and skills. It handles this we can schedule more daily sprint calls for connecting and share content over the One Drive.



Screenshot 1: One Drive folder for effectively sharing files within team.



Screenshot 2: Microsoft Teams for Calls and exchanging key updates



Screenshot 3: Git Hub for Code Sharing

- **Testing:** Performing testing, especially for complex coding tasks, can help ensure code quality. But as we did some beginner level tasks, it was not required but if we did that as well, it will work as a base for the future tasks scheduled in future sprints.
- **Consistency:** Ensuring consistency in coding styles and practices will lead to more maintainable code. As every individual member in team is having different coding style and practices. So if all team members follow same coding practices then it will be beneficial to maintain consistency on GitHub Repository (https://github.com/Manjinder-Singh/COMP8967-1-R-2023F-Internship-Project-I)

Future Focus in Sprint 2 and Sprint 3:

- As we move forward, we will be focusing on maintaining high coding standards, more collaborative work and enhance the quality of our documentation. The skills and knowledge gained during this sprint will continue to benefit the team in future projects.

- We appreciate the hard work and dedication of all team members during this sprint, and we look forward to more successful sprints ahead.

5. **Next Steps (15)**
    a. **Immediate Next Steps: Outline the tasks and objectives for the next sprint or phase of the project.**

- Generate columns and rows of the step 2 of application based on the input given in the first step of modal window.
- Integrate JavaScript to calculate dimensionless score of each category.
- Calculate total dimensionless score of each scenario and generate chart based on recommended scenario.
- Granularize the charts to include visualization of each category and scenario score.
- Integrate firebase with the home page of the application so that user can land on modal window after successful login.
- Integrate the functionality to store the results to local storage of the web browser.
- Implement functionality to download the results in the txt or json format.
- Overall improvement and smooth transitioning of the UI.
- Handling of error conditions so that flow of application does not break even if invalid input is provided by the user.
- Implement functionality to read from local storage and populate data in the modal to give the feel of data base connectivity to the application.
- Implement functionality to upload json or text file to populate data in the modal window.

PART B

Summary of first business meeting: List down all the questions your group asked and associated answers by the business. (30)

Ques.1: Brief about the categories and scenarios to get clarity for pop up model information.
Ans.1: First Login => User Auth (username and password) => Modal Window on Top of background => Fill in Category Details => Submit Button/Next Button => Next Modal Window is for Values for categories and scenarios => Text input or drop-down menu => Validate and Check => Change DOM based on I/P => Visualize results.

Ques. 2: What is the relationship of different formulas and related to various steps and how text values handle in formula?
Ans. 2: Kyle showed JavaScript code to map different levels (low, low-mid, mid, mid-high, high)
If number apply Linear Score directly
If descriptive then first covert it into number with the JavaScript, then apply it to the linear score.

Ques. 3: Based on which value how to decide the level?
Ans. 3: User Input values in all cells, these are considered to decide the levels.

Ques. 4: How Down and Up value is decided?
Ans. 4: Based on the calculated Linear Score then get results after adding each of the categories i.e., across the row. If optimization upwards ([+] positive number), it is added else if it is optimization down it's [-] negative and is subtracted.

Important Note – Previous step is building the DOM of the next.

Ques. 5: How the weight of each category going to impact the sum of linear scores?
Ans. 5: The weight must be multiplied with the value of each category and each category linear score is then added up. If the category value is descriptive, we must convert it to numeric value first then multiply with the value of each category.

Ques. 6: How many plots are expected? category level or generalized/overall?
Ans. 6: It's up to you. It would be good to have an overall plot and each category plot below it. But I recommend table level view i.e., granular level for better insights.

Ques. 7: Are we giving Import functionality?
Ans. 7: Yes, application must support import of .txt file and it must populate step 1 and step 2 with all the data inputs.

Ques. 8: File results must be saved in which file format?
Ans. 8: Text file format is recommended to have data of format in 1 file and values in second. TSV or CSV or any other file can be utilized. Team recommended Json file format as its lightweight and it can be directly dumped for plottly functionality. CRUD operations can be performed better with JSON file with Vanilla Javascript.

Local storage is not cross-domain persistent. The database will only include the user authentication credentials, according to the client's specification. Additionally, because the application is not session-based, we are forced to use local storage. The client affirmed that because the application does not yet have cross-domain scope, the use of local storage won't cause any issues.

Ques. 9: Does this application is supposed to be friendly on laptop, smartphone or other devices as well?
Ans. 9: For simplicity, just desktop application is recommended.