Work Log

Mrityunjay Jha

20 - 25 May

- Refreshed web development.

26-27 May

- Suggested changes to the conference website.

28 May

Updates:

- Starting learning elm.
- Learnt about the Elm architecture
- Developed simple programs and installed npm and necessary packages needed for Elm development.

Action Items:

- Learn about Elm programming language.

Meeting:

29 May

Updates:

- Learned about the fundamental data structure provided in Elm.
- Learned about how Elm interacts with web pages.

Action Items:

- Learn about Elm programming language.

Meeting:

30 May

Updates:

- Learnt writing unit and fuzz tests for simple Elm programs.

- Learned about the model, view, and update architecture of elm.

Action Items:

- Learn about the Model-View-Update to build pages.

Meeting: (~4:00PM)

Discussion: About building a calculator and how the code is organized in elm-dagre.
Task Assigned: Make a customizable calculator in Elm programming language.

1 June

Updates:

- Started developing a calculator in Elm.
- Finished the task to add parameterized shape to buttons.
- Added parameters to calculate the length and width of the calculator with respect to the length of the buttons.
- Meeting to assign projects based on the familiarity with Elm.

Action Items:

- Was given the task to build a customizable calculator.

Meeting:

Discussion: About the problem in code written for the calculator.
Task Assigned: Complete the suggested improvement for the calculator for the program.

2 June

Updates:

- Added optional parameters to change the button attributes.
- Committed the pull request.

Action items:

- Studied chapter on test from elm beginning.

3 June

Updates:

- Started Learning about the Virtual DOM that Elm provides and its advantages in comparison to the direct modification of DOM.
- Learned about the Javascript interop function and elm-kernel functions.

Action Items:

- Studied ch-4 from Elm beginning.

Meeting:

4 June

Updates:

- Made necessary improvement in the calculator code by Archit Bhaiya
    - Change the custom type of Color to string so that the calculator application can also work with different kinds of color format.
    - Re-structured the calculator's function attribute to the preferred API design.

Action Items:

- Studied ch-4 from elm beginning.

5 June

Updates:

- Did the necessary modification in the code provided by Archit Bhaiya to the calculator program in Elm.
- Merge Request was accepted.

Action Items:

- Build a calculator program and implement features change its attributes.

Meeting:

6 June

Updates:

- Learned about the HTTPS request in Elm.
- The task to see and document the features of Elm-dagre was given.

Action Items:

- Studied elm dagre source code
- Started Documented Dagre and Render properties.

Meeting:(~4:00PM)

Discussion: Talked about the design of Elm-Dagre.

Task Assigned: Given a list of questions to answer after reading about Elm-Dagre.

7 June

Updates:

- Starting inspecting elm-dagre.
- Completed the task to explain some of the Dagre attributes

Action Items:

- Studied elm dagre source code.
- Started implementing a lift simulator.

Meeting:

8 June

Updates:

- Explained how does the optional attribute work in Render.draw function

- Explained why the Render and the Dagre attributes are separated.
- Finished the Task and gave the link to Archit Bhaiya.

Action Items:

- Studied elm-dagre source code.

Meeting:

9 June

Updates:

- Learned about Html.Styled and Html.Styled.Attributes.
- Learned about requesting an HTTP using Elm.
- Learned about Virtual Dom and built a single page application.

Action Items:

- Wrote a static webpage using Styled HTML and CSS
- Wrote a report that demonstrates the various functionality of Dagre and Render Attribute.

Meeting:

10 June

Updates:

- Build a lift simulator program.
- Added the Html view.
- Added the features to increase or decrease the number of lift.

Action Items:

- Add functionality to the calculator program.
- Make the calculator program so that it is capable of adding optional attributes.

Meeting:

13 June

Updates:

- Added frontend to the lift program
- Builded the message update system
- Added fuzz and unit test to the lift program.

Action:

- Learn SVG
- Learn ch-6 from Elm beginning.

Meeting:

14 June

Updates:

- Learnt SVG to build the view
- Learn about various units.

Action Items:

- Learned SVG.
- Read ch-5 from beginning elm.

Meeting:

15 June

Updates:

- Improved the features of the Lift Simulator
- Started adding features to the bubble sort programs.
- Learned about Opaque Types in Elm.

Action Items:

- Learn Elm type systems.
- Improve the bubble sort program.

Meeting:

Discussion: Take inspiration from bubble sort program to implement a general view.
Task Assigned: Implement an array view.

16 June

Updates:

- Added the features to add width and height to the node.
- Added the feature to add color.

Action Items:

- Build array view from dagre.
- Add property to wrap elements.

Meeting:

17 June

Updates:

- Suggested the features to be added to array View.
- Added the new approved features.

Action Items:

- Build array view from dagre.
- Add property to wrap elements.

Meeting:

18 June

Updates:

- Revised the CSS for improving array view.
- Added Margin and padding to the array view port.
- Added the merge request.

Action Items:

- Suggest new properties that can be added to the array view.

Meeting:

19 June

Updates:

- Some improvements related to types. Fixed them.
- Added a wrap feature that takes a number of elements and wraps the rest of them.
- Learn the difference between the viewPort and viewBox.

Action Item:

- Implement new properties that can be added to the array view.

Meeting:

21 June

Updates:

- Added the Attribute to the wrap after a certain number of elements.
- Discussed the Functionality of Drawers.
- Separated the layout and render attributes of the array View.

Action items:

- Build an array view.

Meeting:

24 June

Updates:

- Added a layer of indirection to dagre view of array.
- Refactored the code and wrote a simple example to demonstrate its array view.

Action items:

- Build an array view.
- Make the drawer extensible to accommodate new drawer for building elements.

Meeting (~ 12:00 PM):

- **Discussion :** The overall layout of the array-view code was explained in a detailed manner.

- **Task Assigned :** To make a custom drawer for drawing the array along with a module to take in the attributes added by the user.

27th June - Monday

Updates:

Created a custom array drawer for array visualization code.

Meeting (~ 2:00 PM):

Discussion : Progress reports of interns were reviewed by our supervisor.

Task Assigned : Asked to create an internship report by the 30th of this month.

28th June

Updates:

Start documentation of the package Action items:
Completed the documentation of the package Meetings