AI Documentation – Team 6

NEW: Summary of our ChatGPT/copilot or genAI usage (MUST do if you used it. max 2 pages). If not used say so :
-> List what exact genAI tools and versions you used
-> List tasks for which you used genAI, and for each task <u>rate how helpful it was overall</u> (low, medium, high)
-> Provide some key comments and examples of how it helped e.g., prompts or how it was not helpful
Then add any extra information you think is necessary.

How Mohammed used AI

- **Server boilerplate**

Chatgpt is really helpful for creating fast boilerplate code. In this case I asked it to create a quick express server for me.

```
const express = require('express');
const app = express();

app.set('view engine', 'ejs');
app.use(express.static('public'));

app.get('/', (req, res) => {
    res.render('index');
});

const PORT = process.env.PORT || 3000;
app.listen(PORT, () => {
    console.log(`Server is running on port ${PORT}`);
});
```

- **Bootstrap cards and styling**

Chatgpt was really helpful for creating the bootstrap cards that were used in the about and member pages.
If I didn't like the style of a particular card I would ask it to make different versions. The more specific the request was the better card it would make.

Example:

```html
<div class="row justify-content-center p-3">
    <% teamInfo.forEach(member => { %>
    <div class="col-lg-2 col-md-3 col-sm-6 mb-4">
        <a href="/about/<%= member.id %>" target="_blank">
            <div id="<%= member.id %>" class="card h-100 shadow">
                <!-- Use src attribute instead of href for the img tag -->
                <img src="../public/img/3.jpg" class="card-img-top" alt="...">
                <div class="card-body">
                    <h5 id="name" class="card-title fs-4"><%=member.name %></h5>
                    <p class="card-text fs-6"><%= member.role %></p>
                </div>
            </div>
        </a>
    </div>
    <% }); %>
</div>
```

- **Folder layout for frontend**

When figuring out how to layout the folder I asked chat gpt what was good practice and it gave me a nice looking layout that I was familiar with from older projects. This gave me a good idea on how to set up the project on the frontend.

Example:

```
my-project/
├── public/
│   ├── css/
│   │   └── styles.css
│   ├── js/
│   └── img/
├── views/
│   └── index.ejs
├── node_modules/
├── package.json
├── server.js
```

```
└── .gitignore
```

Ejs logic and templates

I haven't used Ejs in a long time and I didn't feel like reading the docs so I just asked chat gpt to fix my syntax issues. It also helped me create a loop that can print all the cards. This helped make the code easier to read and understand. Using chat gpt also helped me create reusable components known as partials that I could use on multiple pages.

example1

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>My Project</title>
    <link rel="stylesheet" href="/css/styles.css">
    <link rel="stylesheet"
href="/node_modules/bootstrap/dist/css/bootstrap.min.css">
</head>
<body>
    <h1>Welcome to My Project</h1>
    <!-- Common navigation, header, or other elements can go here -->
    <%- body %> <!-- This is where the content of individual views will
be
```

Example2:

```html
<%- include('layout.ejs') %> <!-- Include the layout file -->
<!-- Content specific to the index page -->
<h2>About Us</h2>
<p>This is the about page content.</p>
```
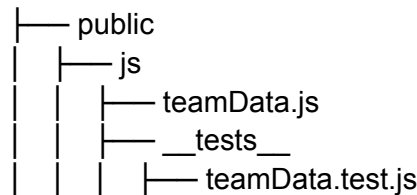
How Utku Tarhan used AI:

- CI/CD over Github Actions and Auto-deploy build over SSH
  https://chat.openai.com/share/187dbaa2-0b59-499f-be83-f40a6f194823
  ChatGPT helped to implement automatic deployment after build testing.
  ChatGPT 3.5
  Usefulness: High

- Node.js server deployment and making sure the script executes after deployment.
  https://chat.openai.com/c/71744051-fabc-48ce-bfc1-e42e16e0026e
  ChatGPT showed me techniques to keep the node.js process running after logout. And
  showed some tools that could be used as an alternative. However at the final
  deployment the syntax suggested was incorrect so it kinda hallucinated.
  ChatGPT 3.5
  Usefulness: Medium

How Cesar H used AI (Chat GPT 3.5/4):

- Database Troubleshooting: Resolve access issues to the database via MySQLWorkbench.
  (High)
- Data Storage Strategy: Advise on methods for storing data used for template page
  population. (High)
- Code Blocks Explanation: Provide explanations for specific code blocks. (High)
- Communication Improvement: Enhance written communication with team members. (High)
- About Page Revision: Revise biography on the about page. (High)

How Akram used AI (co-pilot)

- Mainly used in configuring the bugs with using the correct MySQLWOrkbench. Did not prove helpful due to inputting the wrong prompt on my part.
- Reviewing how .ejs cards are laid out and finding how images could be shrunken to an appropriate size
- Used copilot to know the correct hierarchy of test cases. e.g

.

```
├── public
│   ├── js
│   │   ├── teamData.js
│   │   ├── __tests__
│   │   │   ├── teamData.test.js
```

- Understanding how test cases are run using npm.
- Asking it how to properly install express.js to the local repo
- Finding out the tools and VScode extensions to install for the team project according to the stack we decided to use.

How Eliza used AI (ChatGPT 3.5)
- Used ChatGPT to resolve issues connecting to database in MySQL Workbench
- Was helpful in troubleshooting the possible issues I ran into (medium)
- It wasn't able to pinpoint the exact resolution for my issue, but I thought it was helpful to see all the possible things I could do to fix it.

How Jacob used AI

- Used Gemini 1.0 Ultra from Google
- I consulted Gemini when our group had to decide the web server that would host our website. Between AWS and DigitalOcean, I had more experience with the former. I went to Gemini and asked it to "compare and contrast aws and digitalocean".
    - Gemini proved to be a big help because it gave me a simple, broken down list about advantages and considerations for each platform. I was able to come to a decision because of the use of Gemini.
- I also used it to research testing frameworks. I've never installed any testing libraries, so I went to Gemini to learn about testing and how to script them. I typed in the prompt: "What are some testing libraries best used on Node.js infrastructure".
    - Between Jest and Mocha Chai, it detailed the best case to use for each one. It even considered Jest because it is beginner friendly, citing that Mocha Chai involves more installation steps and has a steeper learning curve. The answer even had documentation links for both libraries which made this already helpful answer even better.

- Overall, Google's Gemini is a very good AI chatbot if used efficiently. It broke down concepts into its basic parts, offered links to better my understanding, and used context from previous exchanges to form answers. My only issue is that sometimes links will be broken, but I think it helped with productivity and learning a lot.