Group Project 3 – Website JavaScript

Group WN/H:

Name	**ID**	**Github**
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Description:

In this project stage, we were required to bring functionalities into our site, to make it user accessible and prepare to finish the whole project.

Approach:

As the HTML and basic CSS were already implemented, yet not desirable in terms of aesthetics, we kept working on them before starting the JavaScript application. In two days, we started working on JavaScript, since we can keep altering the other parts as we go. We also made a database using MySQL, to save login credentials. Updated server317.js to establish a connection between the client and server.

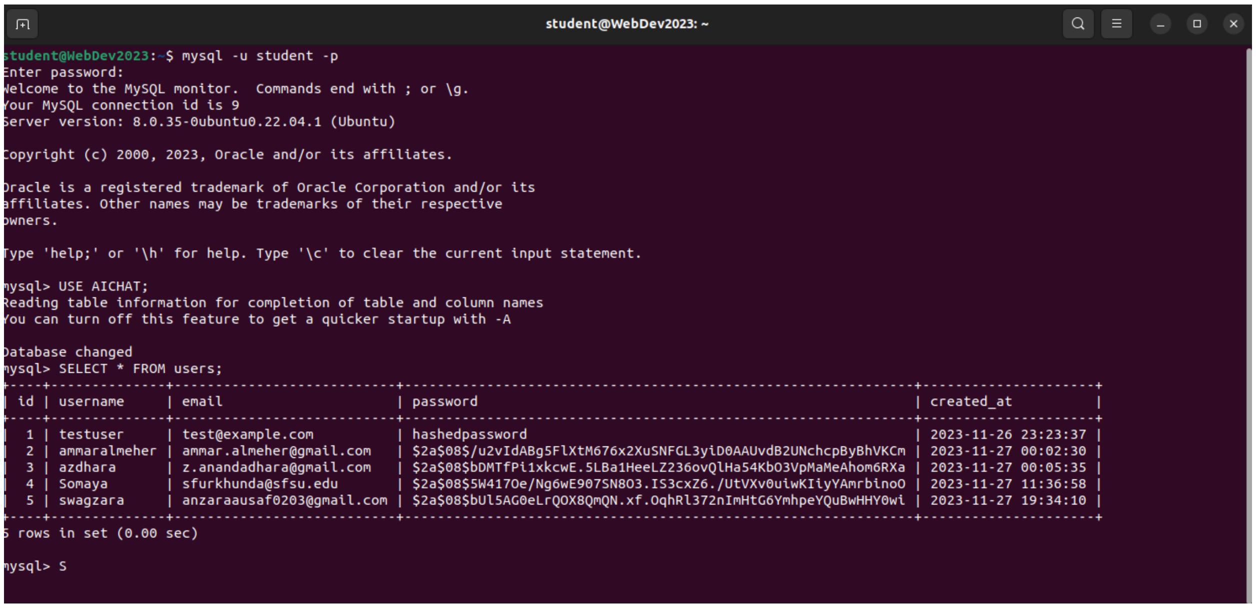
Issues and Resolutions:

For this stage of the group project, we had a lot of time and freedom to work, which was very much appreciated. However, that also was not enough to reach a satisfactory point, as working with JavaScript in addition to refining our HTML and CSS code was a very challenging task. When it came to actually adding interactive elements, there was a ton of trial and error, and we often came to a sudden halt. Communication was a very important factor in this stage, as all the pages were starting to become interconnected. We had to think of the API implementation while adding lines of script code, guessing how it would work beforehand.

Analysis:

JavaScript is a very fun part of the whole development since this is where the website starts moving on the users' command. That being said, it was the most tedious part of the process. Having to think ahead about how it would work, and coding it out was a very difficult task. It's like having an imagination of a beautiful painting, but then when you pick up the brush, you don't know how to begin. We had to refer to the class lecture slides and other sources a lot, before starting to work on it again. Ultimately, we got to a semi-polished version of the site, and we're quite happy with it. We look forward to continuing to work on this and finish the project!

Screenshots:



```
student@WebDev2023: ~
student@WebDev2023:~$ mysql -u student -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 9
Server version: 8.0.35-0ubuntu0.22.04.1 (Ubuntu)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> USE AICHAT;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> SELECT * FROM users;
+----+--------------+---------------------------+--------------------------------------------------------------+---------------------+
| id | username     | email                     | password                                                     | created_at          |
+----+--------------+---------------------------+--------------------------------------------------------------+---------------------+
|  1 | testuser     | test@example.com          | hashedpassword                                               | 2023-11-26 23:23:37 |
|  2 | ammaralmeher | ammar.almeher@gmail.com   | $2a$08$/u2vIdABg5FlXtM676x2XuSNFGL3yiD0AAUvdB2UNchcpByBhVKCm | 2023-11-27 00:02:30 |
|  3 | azdhara      | z.anandadhara@gmail.com   | $2a$08$bDMTfPi1xkcwE.5LBa1HeeLZ236ovQlHa54KbO3VpMaMeAhom6RXa | 2023-11-27 00:05:35 |
|  4 | Somaya       | sfurkhunda@sfsu.edu       | $2a$08$5W417Oe/Ng6wE907SN8O3.IS3cxZ6./UtVXv0uiwKIiyYAmrbinoO | 2023-11-27 11:36:58 |
|  5 | swagzara     | anzaraausaf0203@gmail.com | $2a$08$bUl5AG0eLrQOX8QmQN.xf.OqhRl372nImHtG6YmhpeYQuBwHHY0wi | 2023-11-27 19:34:10 |
+----+--------------+---------------------------+--------------------------------------------------------------+---------------------+
5 rows in set (0.00 sec)

mysql> S
```
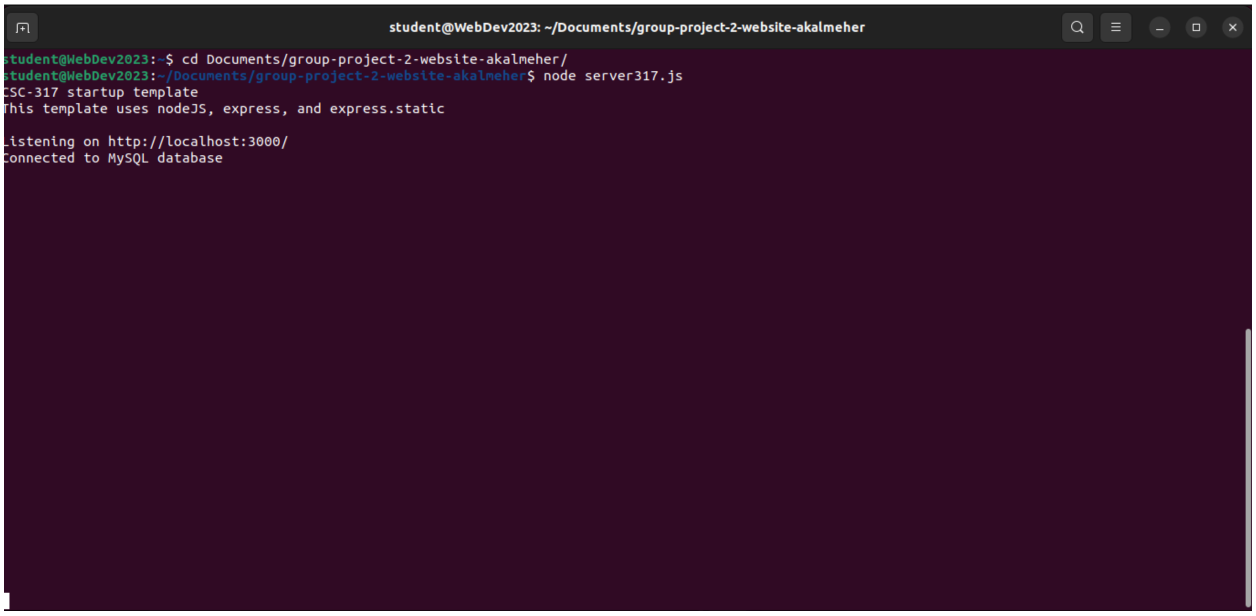
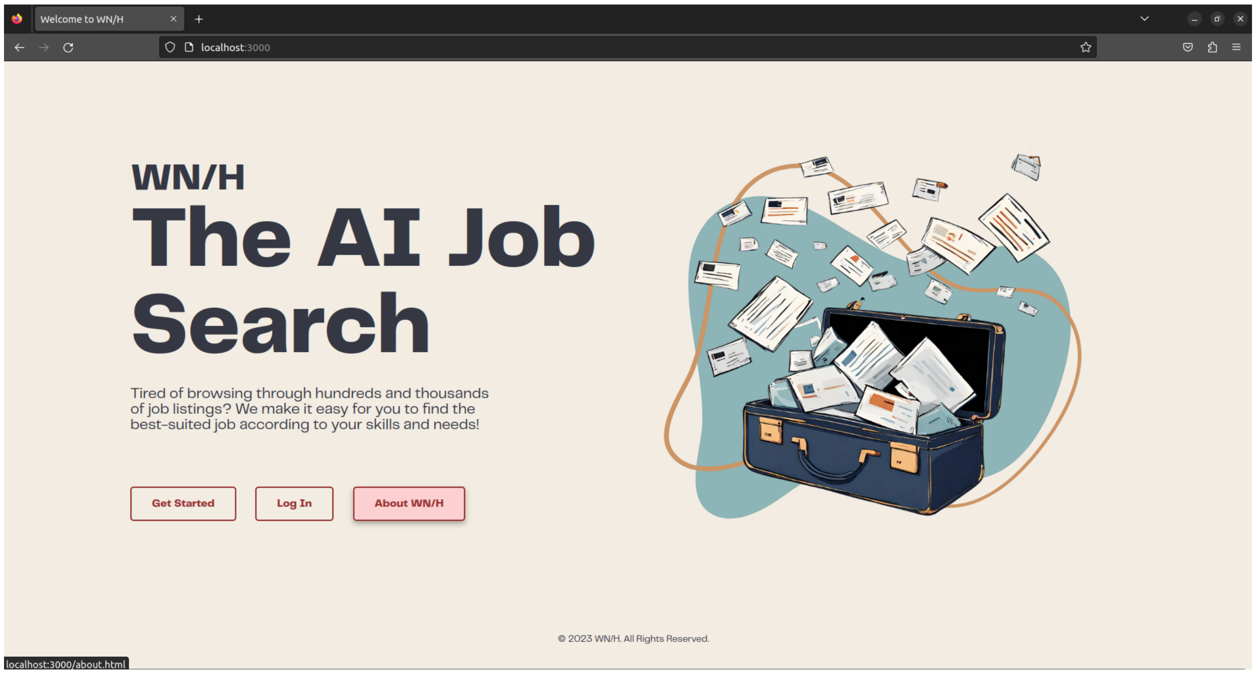



```
student@WebDev2023: ~/Documents/group-project-2-website-akalmeher
student@WebDev2023:~$ cd Documents/group-project-2-website-akalmeher/
student@WebDev2023:~/Documents/group-project-2-website-akalmeher$ node server317.js
CSC-317 startup template
This template uses nodeJS, express, and express.static

Listening on http://localhost:3000/
Connected to MySQL database
```

When hovering over button, button changes style



WN/H

The AI Job Search

Tired of browsing through hundreds and thousands of job listings? We make it easy for you to find the best-suited job according to your skills and needs!

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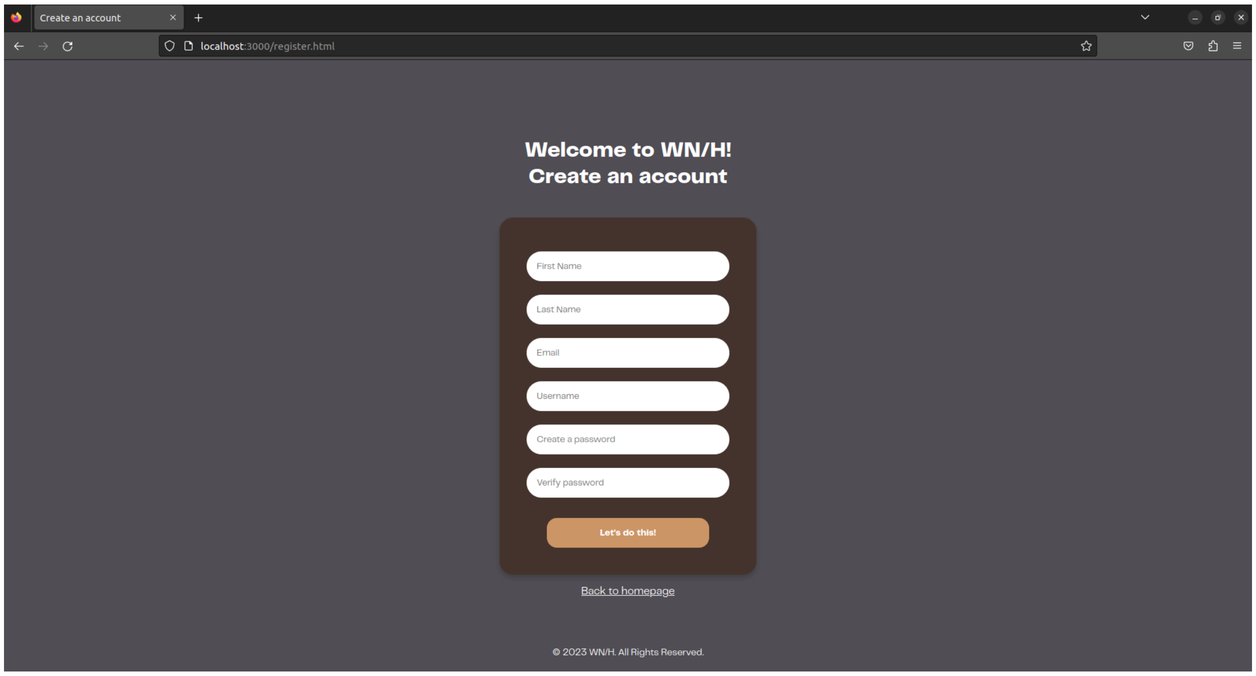
When data is entered here, it is sent to the database created in MySQL (database: AICHAT; table: users)



Welcome to WN/H!
Create an account

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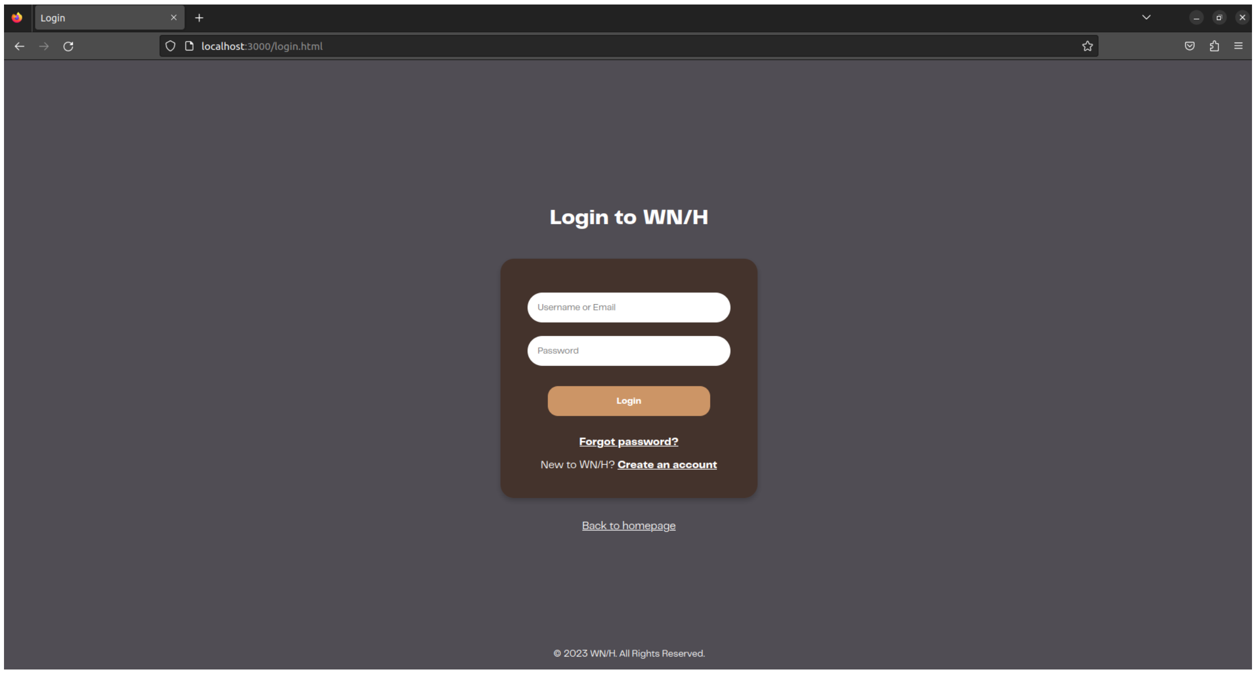
Checks if the username/email and password matches any in the database.



Login to WN/H

Forgot password?

New to WN/H? Create an account

Back to homepage

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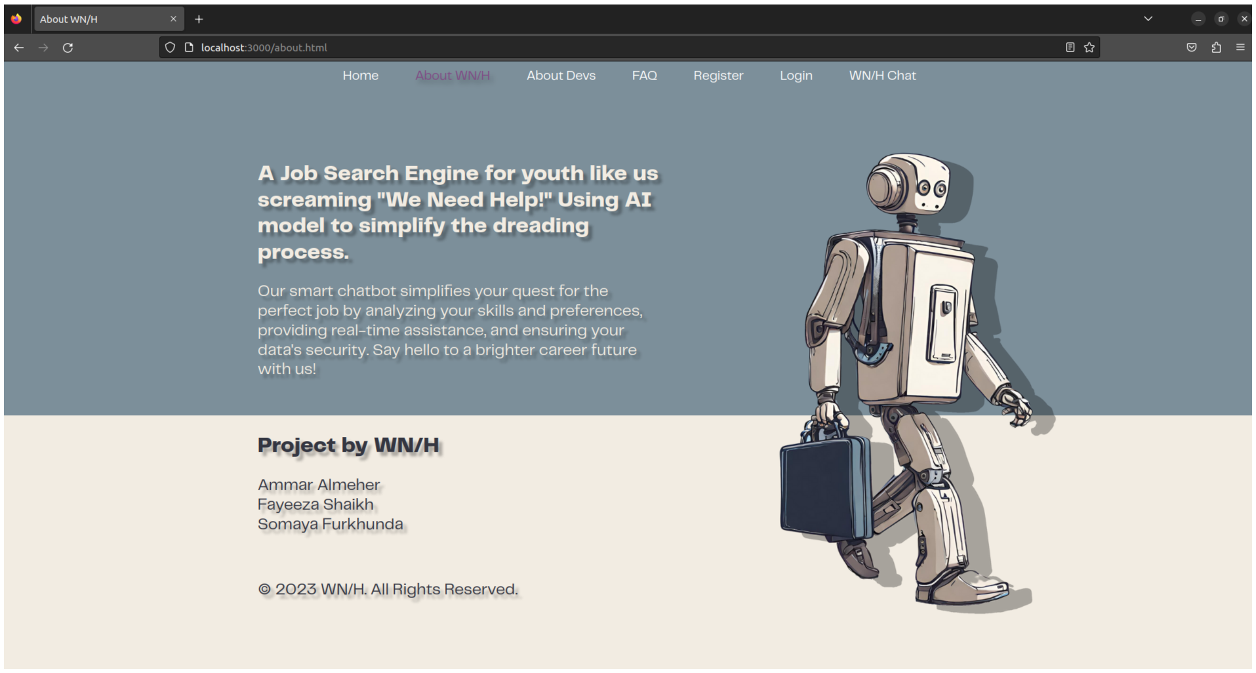

A Job Search Engine for youth like us screaming "We Need Help!" Using AI model to simplify the dreading process.

Our smart chatbot simplifies your quest for the perfect job by analyzing your skills and preferences, providing real-time assistance, and ensuring your data's security. Say hello to a brighter career future with us!

Project by WN/H

Ammar Almeher
Fayeeza Shaikh
Somaya Furkhunda

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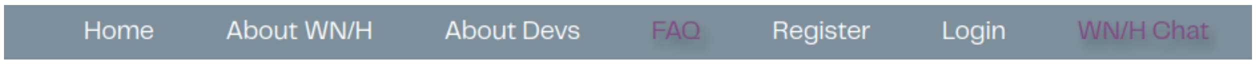
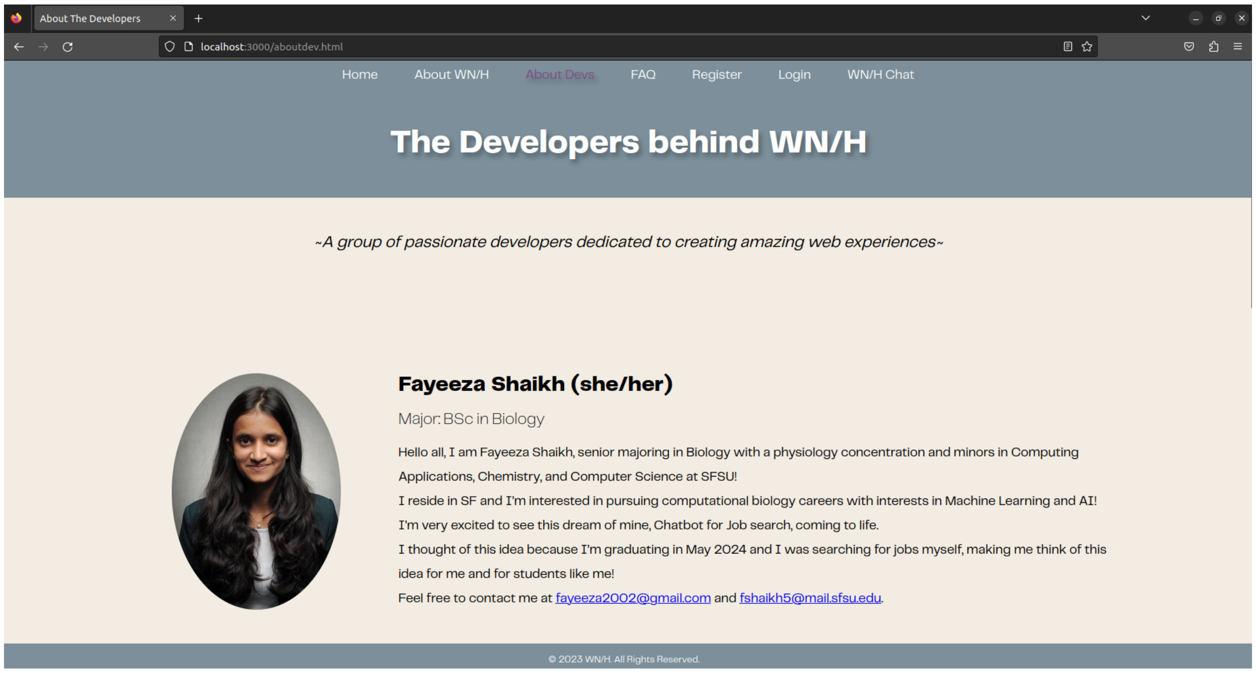
Navigation Bar: Active pages and Links hovered over changes text styles




About The Developers

localhost:3000/aboutdev.html

The Developers behind WN/H

~A group of passionate developers dedicated to creating amazing web experiences~

Fayeeza Shaikh (she/her)

Major: BSc in Biology

Hello all, I am Fayeeza Shaikh, senior majoring in Biology with a physiology concentration and minors in Computing Applications, Chemistry, and Computer Science at SFSU!
I reside in SF and I'm interested in pursuing computational biology careers with interests in Machine Learning and AI!
I'm very excited to see this dream of mine, Chatbot for Job search, coming to life.
I thought of this idea because I'm graduating in May 2024 and I was searching for jobs myself, making me think of this idea for me and for students like me!
Feel free to contact me at fayeeza2002@gmail.com and fshaikh5@mail.sfsu.edu.

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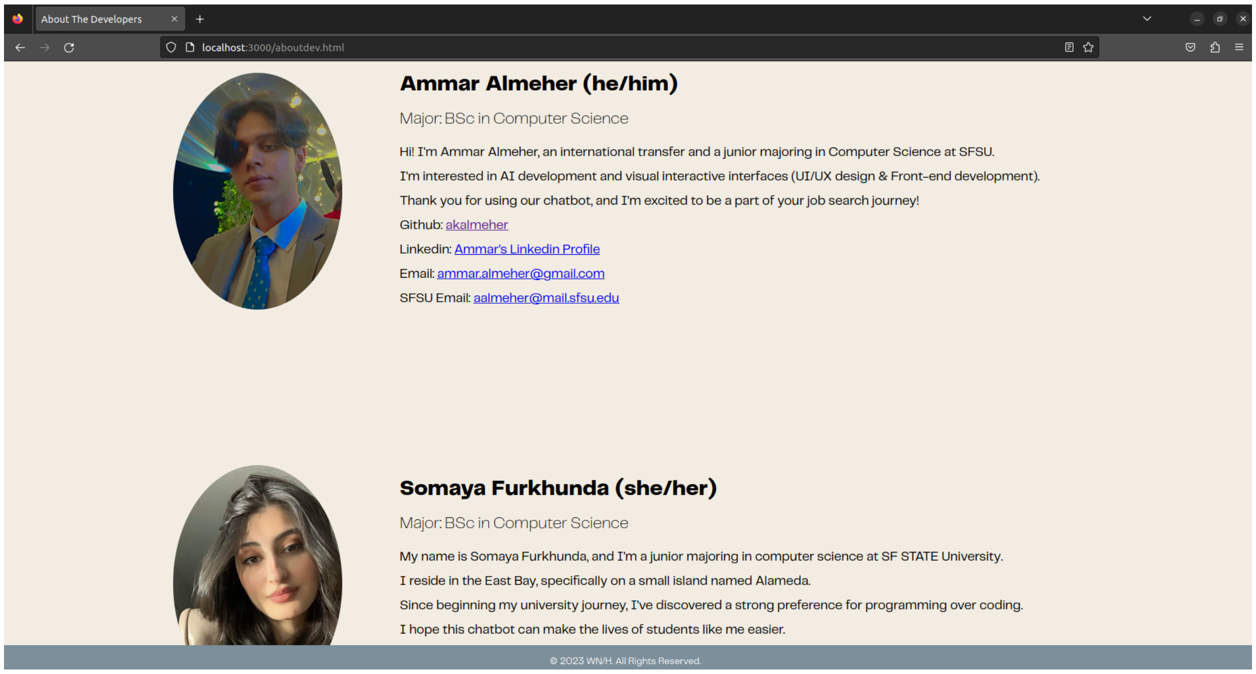
About The Developers

localhost:3000/aboutdev.html

Ammar Almeher (he/him)

Major: BSc in Computer Science

Hi! I'm Ammar Almeher, an international transfer and a junior majoring in Computer Science at SFSU.
I'm interested in AI development and visual interactive interfaces (UI/UX design & Front-end development).
Thank you for using our chatbot, and I'm excited to be a part of your job search journey!
Github: akalmeher
Linkedin: Ammar's Linkedin Profile
Email: ammar.almeher@gmail.com
SFSU Email: aalmeher@mail.sfsu.edu

Somaya Furkhunda (she/her)

Major: BSc in Computer Science

My name is Somaya Furkhunda, and I'm a junior majoring in computer science at SF STATE University.
I reside in the East Bay, specifically on a small island named Alameda.
Since beginning my university journey, I've discovered a strong preference for programming over coding.
I hope this chatbot can make the lives of students like me easier.

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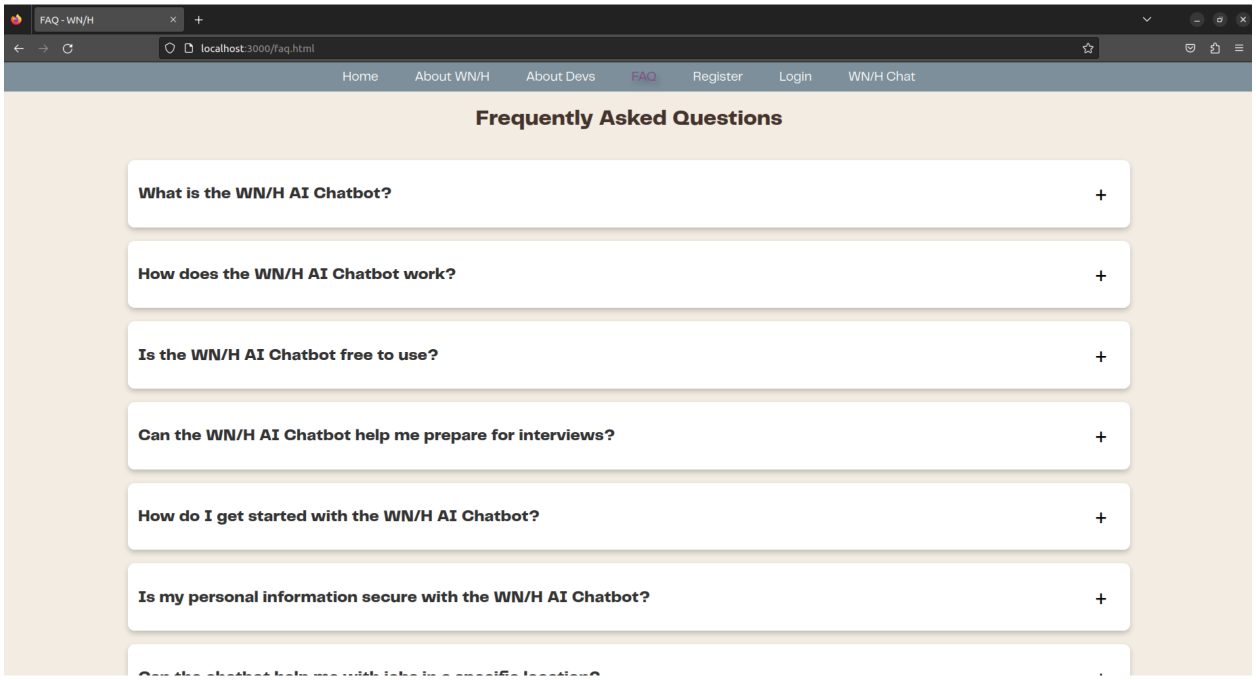
Collapsing FAQ cards:



Frequently Asked Questions

What is the WN/H AI Chatbot? +

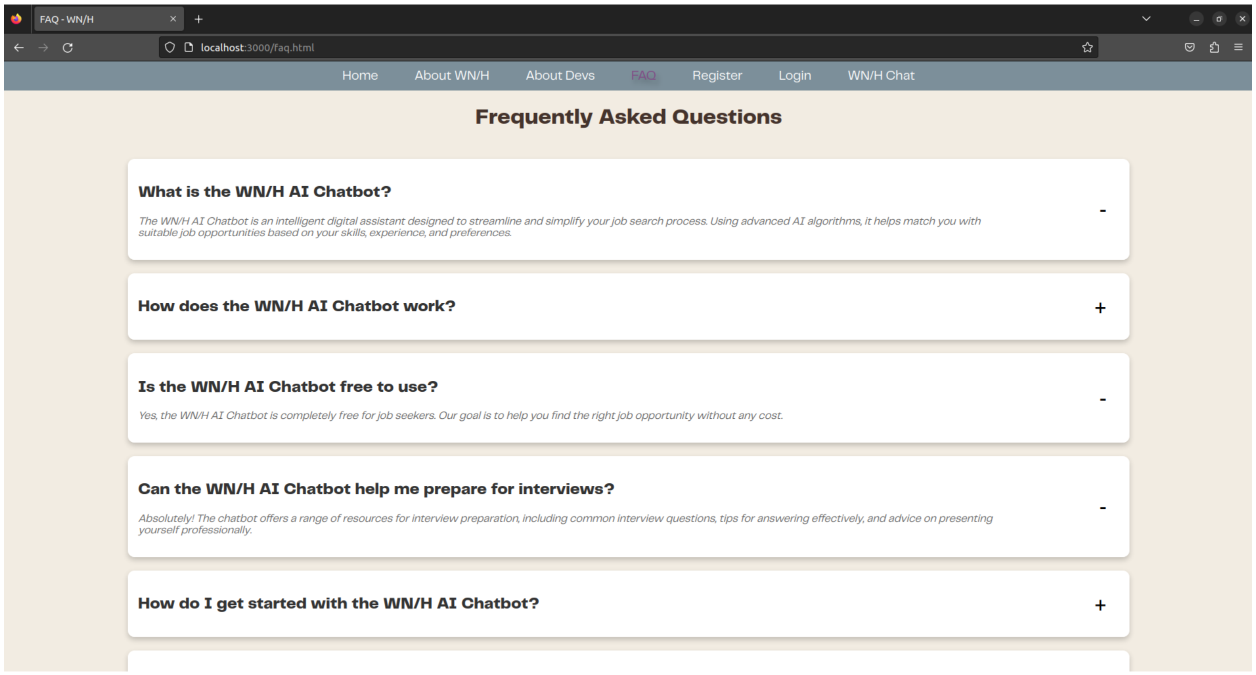
How does the WN/H AI Chatbot work? +

Is the WN/H AI Chatbot free to use? +

Can the WN/H AI Chatbot help me prepare for interviews? +

How do I get started with the WN/H AI Chatbot? +

Is my personal information secure with the WN/H AI Chatbot? +



Frequently Asked Questions

What is the WN/H AI Chatbot? -

The WN/H AI Chatbot is an intelligent digital assistant designed to streamline and simplify your job search process. Using advanced AI algorithms, it helps match you with suitable job opportunities based on your skills, experience, and preferences.

How does the WN/H AI Chatbot work? +

Is the WN/H AI Chatbot free to use? -

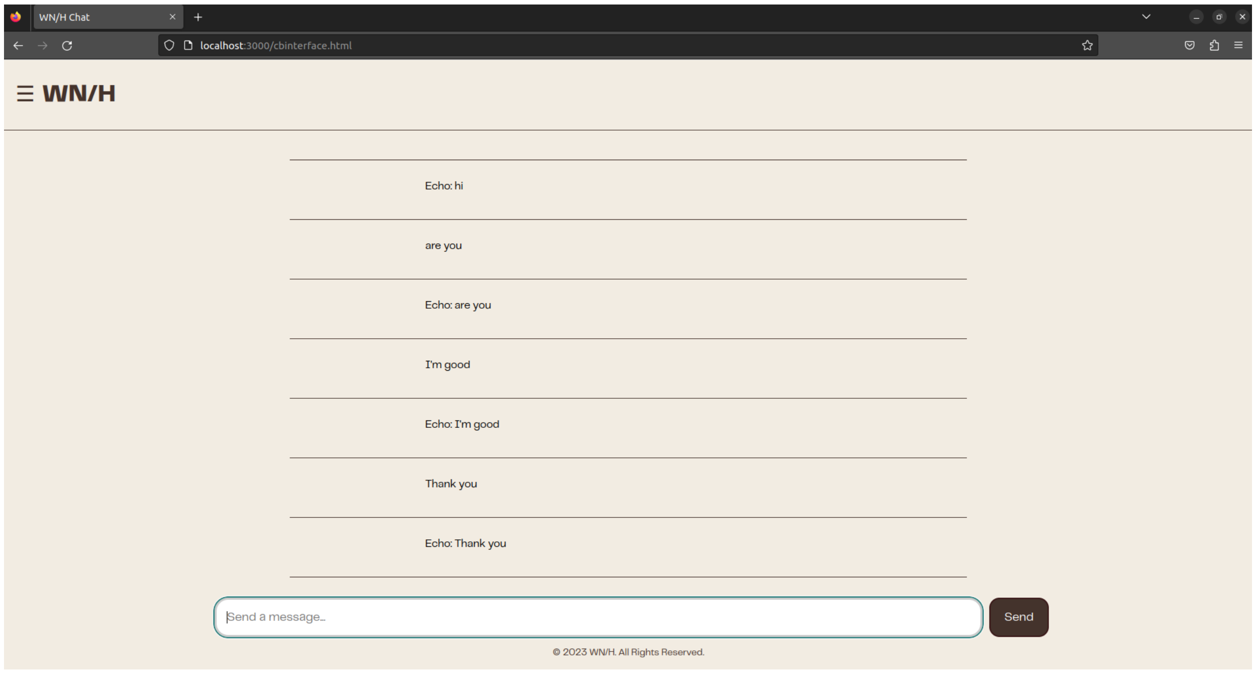
Yes, the WN/H AI Chatbot is completely free for job seekers. Our goal is to help you find the right job opportunity without any cost.

Can the WN/H AI Chatbot help me prepare for interviews? -

Absolutely! The chatbot offers a range of resources for interview preparation, including common interview questions, tips for answering effectively, and advice on presenting yourself professionally.

How do I get started with the WN/H AI Chatbot? +

Functional Chat box: as of now, it only echoes what the user sends


WN/H Chat
localhost:3000/cbinterface.html
☰ WN/H

Echo: hi

are you

Echo: are you

I'm good

Echo: I'm good

Thank you

Echo: Thank you

Send a message...
Send
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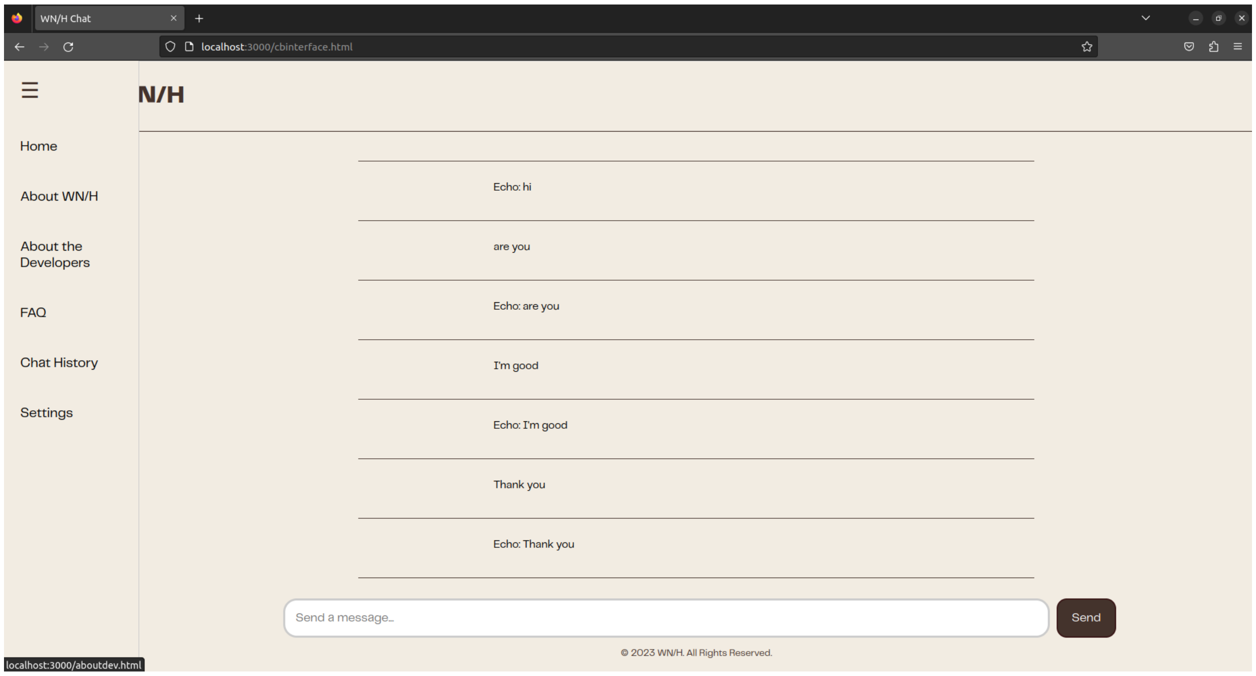
Added a transition/animation for when the sidebar pops out. Can be minimized by clicking anywhere else on the page.


WN/H Chat
localhost:3000/cbinterface.html
☰
N/H
Home
About WN/H
About the Developers
FAQ
Chat History
Settings

Echo: hi

are you

Echo: are you

I'm good

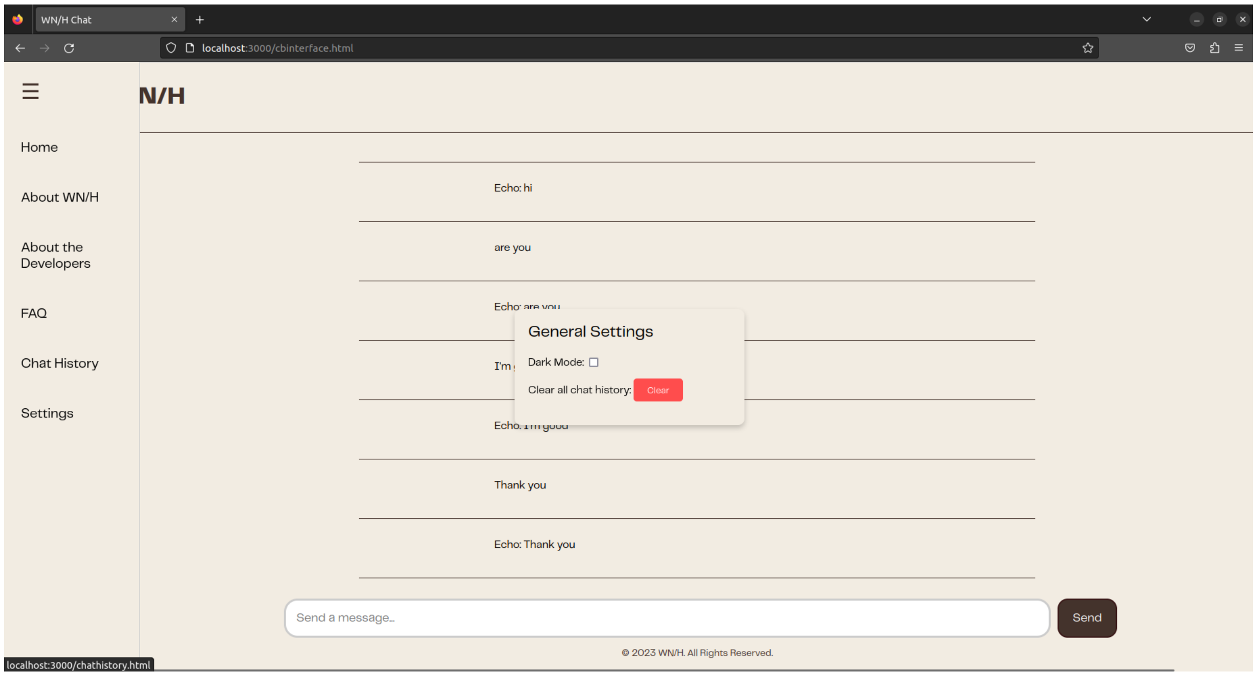
Echo: I'm good

Thank you

Echo: Thank you

Send a message...
Send
© 2023 WN/H. All Rights Reserved.
localhost:3000/aboutdev.html

Clicking on “Settings” brings out this settings pop up, where you can turn “Dark mode” on. “Clear chat” is not functional yet



```
Echo: hi
are you
Echo: are you
I'm
Echo: I'm good
Thank you
Echo: Thank you
```

General Settings

Dark Mode: ☐

Clear all chat history: Clear

WN/H Chat
localhost:3000/cbinterface.html
N/H
Home
About WN/H
About the Developers
FAQ
Chat History
Settings
Send a message...
Send
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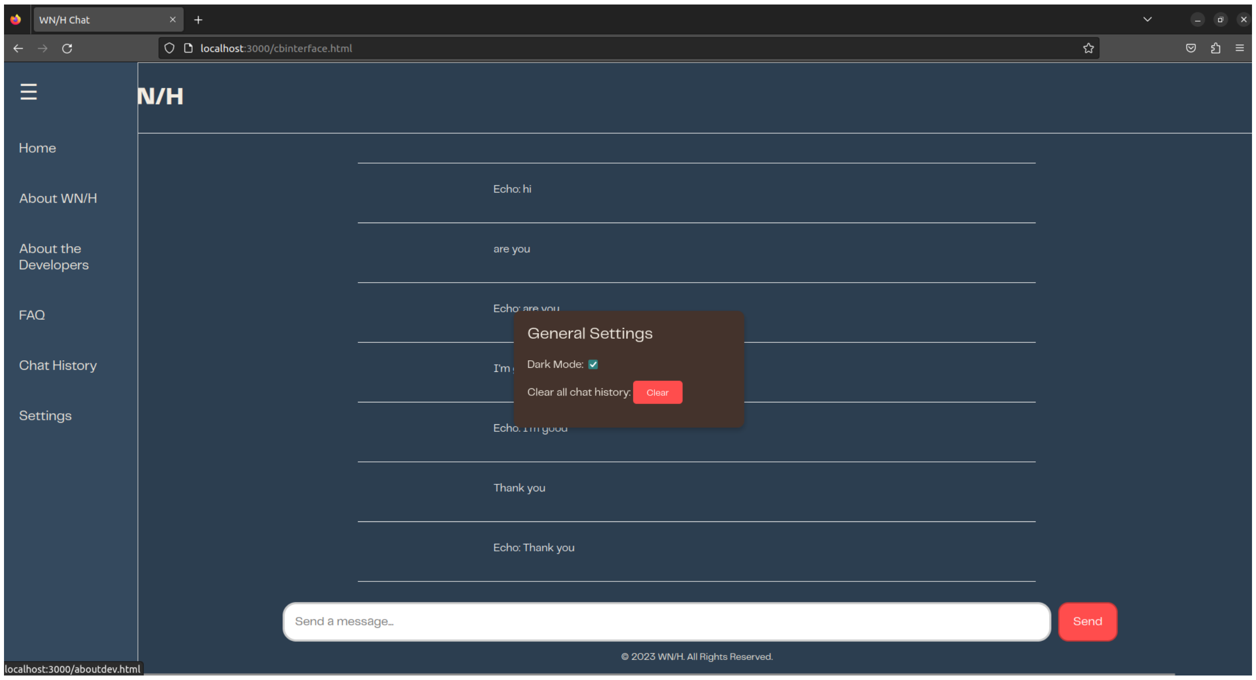
localhost:3000/chathistory.html



```
Echo: hi
are you
Echo: are you
I'm
Echo: I'm good
Thank you
Echo: Thank you
```

General Settings

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Clear all chat history: Clear

WN/H Chat
localhost:3000/cbinterface.html
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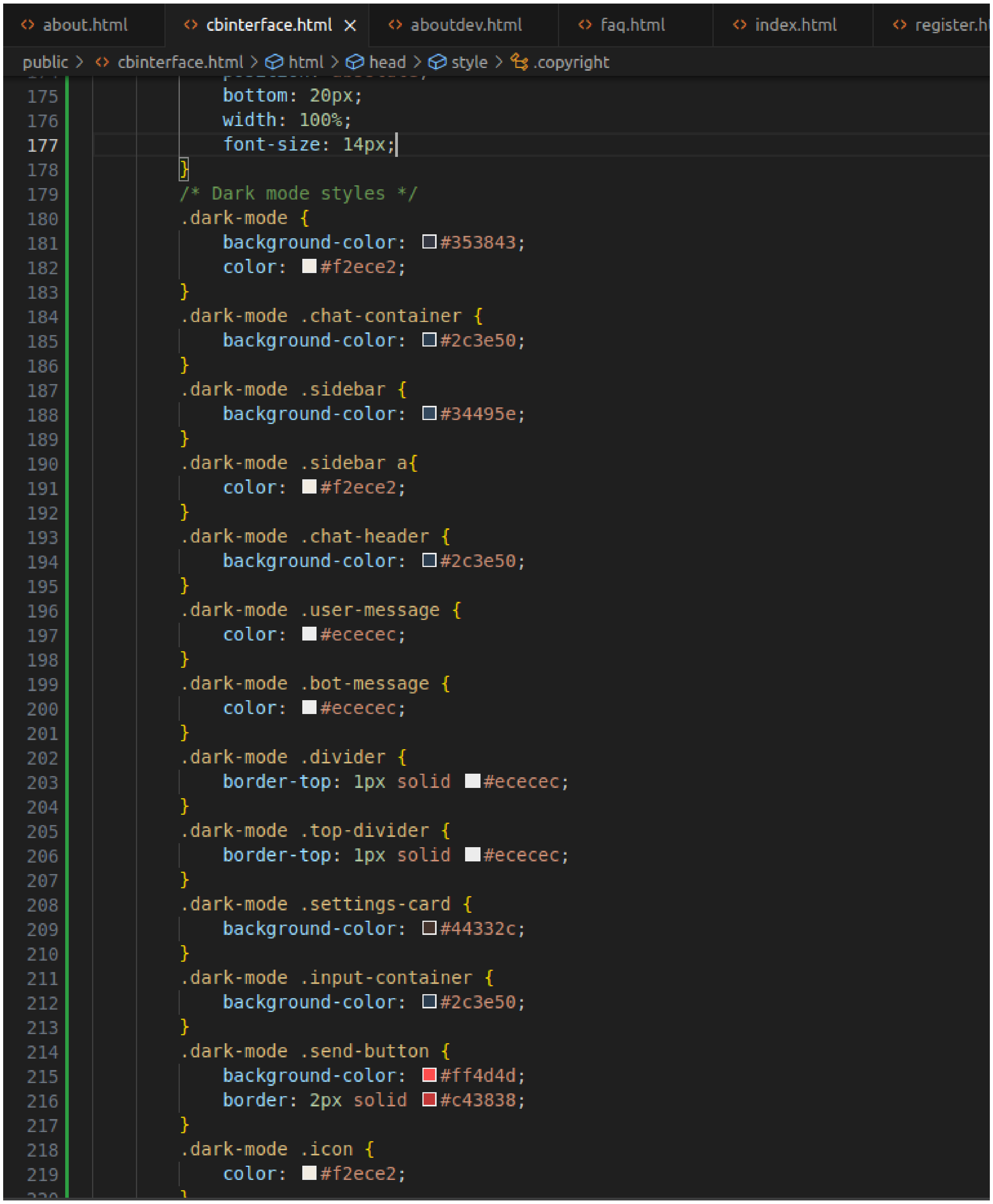
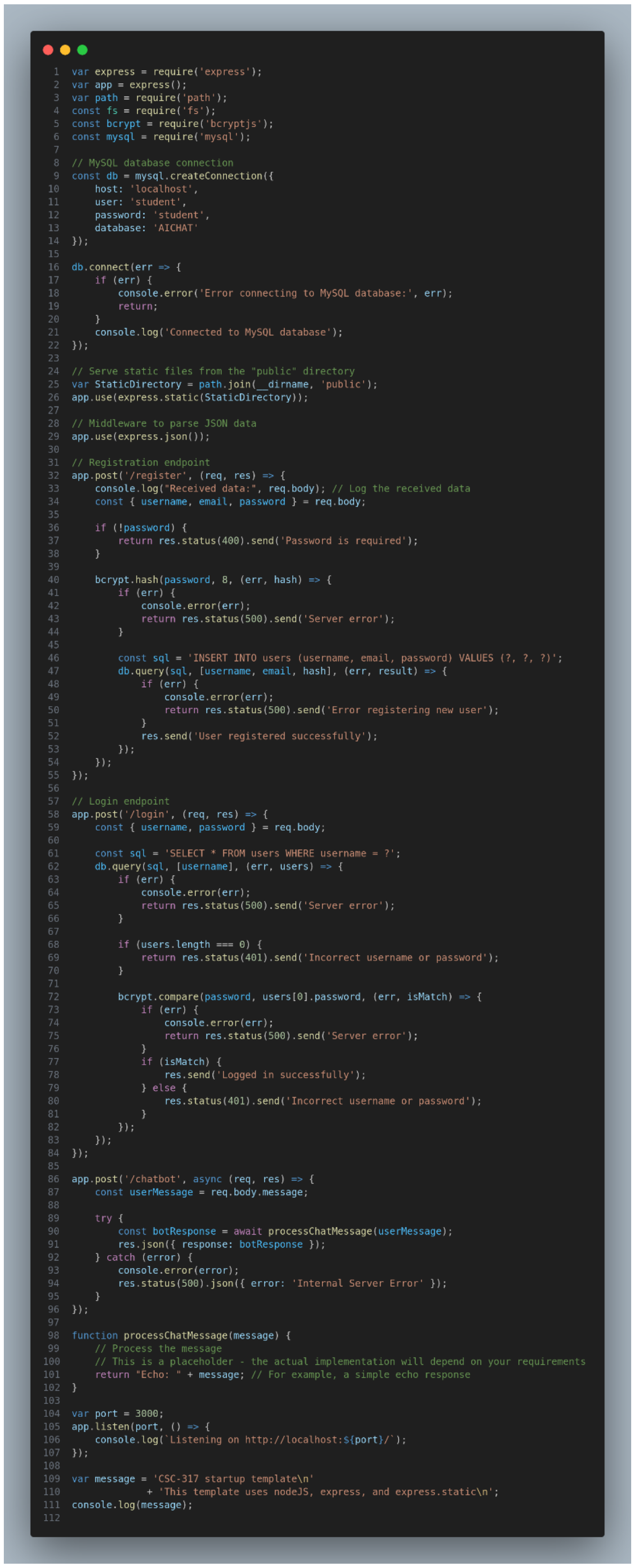
localhost:3000/aboutdev.html

For the dark mode, additional CSS code (changes the color only)


about.html
cbinterface.html
aboutdev.html
faq.html
index.html
public > cbinterface.html > html > head > style > .copyright

```
        bottom: 20px;
        width: 100%;
        font-size: 14px;
    }
    /* Dark mode styles */
    .dark-mode {
        background-color: #353843;
        color: #f2ece2;
    }
    .dark-mode .chat-container {
        background-color: #2c3e50;
    }
    .dark-mode .sidebar {
        background-color: #34495e;
    }
    .dark-mode .sidebar a{
        color: #f2ece2;
    }
    .dark-mode .chat-header {
        background-color: #2c3e50;
    }
    .dark-mode .user-message {
        color: #ececec;
    }
    .dark-mode .bot-message {
        color: #ececec;
    }
    .dark-mode .divider {
        border-top: 1px solid #ececec;
    }
    .dark-mode .top-divider {
        border-top: 1px solid #ececec;
    }
    .dark-mode .settings-card {
        background-color: #44332c;
    }
    .dark-mode .input-container {
        background-color: #2c3e50;
    }
    .dark-mode .send-button {
        background-color: #ff4d4d;
        border: 2px solid #c43838;
    }
    .dark-mode .icon {
        color: #f2ece2;
```

Updated server317.js



```javascript
var express = require('express');
var app = express();
var path = require('path');
const fs = require('fs');
const bcrypt = require('bcryptjs');
const mysql = require('mysql');

// MySQL database connection
const db = mysql.createConnection({
    host: 'localhost',
    user: 'student',
    password: 'student',
    database: 'AICHAT'
});

db.connect(err => {
    if (err) {
        console.error('Error connecting to MySQL database:', err);
        return;
    }
    console.log('Connected to MySQL database');
});

// Serve static files from the "public" directory
var StaticDirectory = path.join(__dirname, 'public');
app.use(express.static(StaticDirectory));

// Middleware to parse JSON data
app.use(express.json());

// Registration endpoint
app.post('/register', (req, res) => {
    console.log("Received data:", req.body); // Log the received data
    const { username, email, password } = req.body;

    if (!password) {
        return res.status(400).send('Password is required');
    }

    bcrypt.hash(password, 8, (err, hash) => {
        if (err) {
            console.error(err);
            return res.status(500).send('Server error');
        }

        const sql = 'INSERT INTO users (username, email, password) VALUES (?, ?, ?)';
        db.query(sql, [username, email, hash], (err, result) => {
            if (err) {
                console.error(err);
                return res.status(500).send('Error registering new user');
            }
            res.send('User registered successfully');
        });
    });
});

// Login endpoint
app.post('/login', (req, res) => {
    const { username, password } = req.body;

    const sql = 'SELECT * FROM users WHERE username = ?';
    db.query(sql, [username], (err, users) => {
        if (err) {
            console.error(err);
            return res.status(500).send('Server error');
        }

        if (users.length === 0) {
            return res.status(401).send('Incorrect username or password');
        }

        bcrypt.compare(password, users[0].password, (err, isMatch) => {
            if (err) {
                console.error(err);
                return res.status(500).send('Server error');
            }
            if (isMatch) {
                res.send('Logged in successfully');
            } else {
                res.status(401).send('Incorrect username or password');
            }
        });
    });
});

app.post('/chatbot', async (req, res) => {
    const userMessage = req.body.message;

    try {
        const botResponse = await processChatMessage(userMessage);
        res.json({ response: botResponse });
    } catch (error) {
        console.error(error);
        res.status(500).json({ error: 'Internal Server Error' });
    }
});

function processChatMessage(message) {
    // Process the message
    // This is a placeholder - the actual implementation will depend on your requirements
    return "Echo: " + message; // For example, a simple echo response
}

var port = 3000;
app.listen(port, () => {
    console.log(`Listening on http://localhost:${port}/`);
});

var message = 'CSC-317 startup template\n'
            + 'This template uses nodeJS, express, and express.static\n';
console.log(message);
```