ASSIGNMENT (09-10-2025) 14

2403A52060

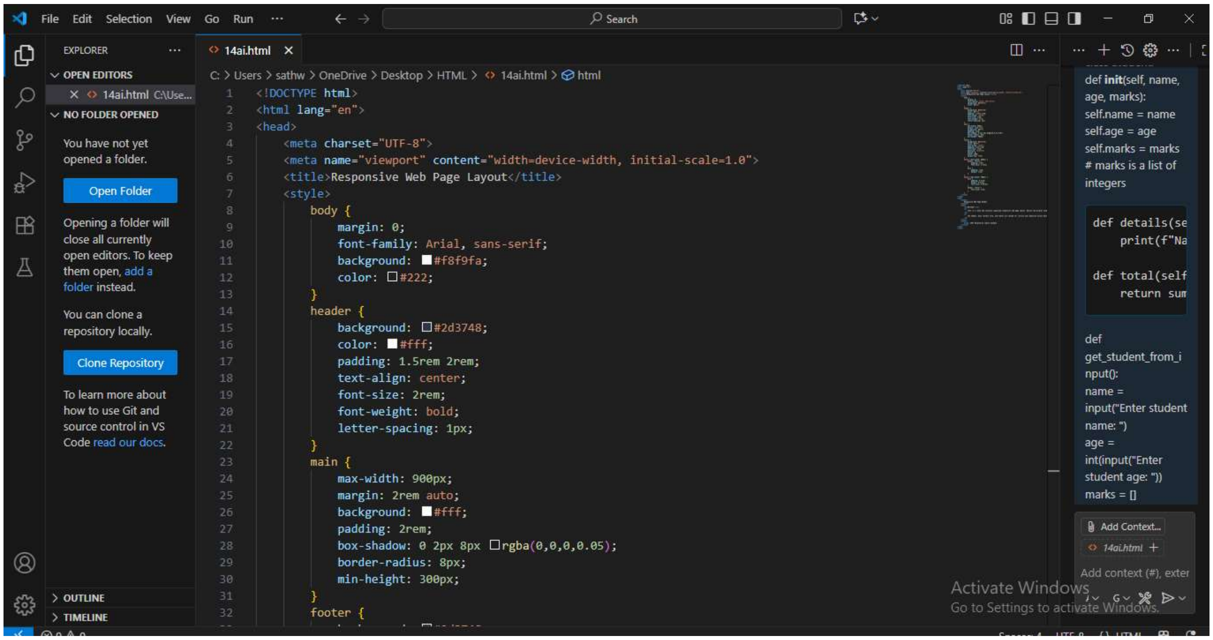
BATCH-03

TASK-01

PROMPT: Develop a Responsive Web Page Layout with the following instructions

Instructions:

- Design a basic web page layout with a header, main content area, and footer using HTML and CSS.
- Use AI to assist in generating responsive CSS for different screen sizes.
- Ensure the layout is clean and visually organized



You have not yet opened a folder.

Opening a folder will close all currently open editors. To keep them open, add a folder instead.

You can clone a repository locally.

To learn more about how to use Git and source control in VS Code read our docs.

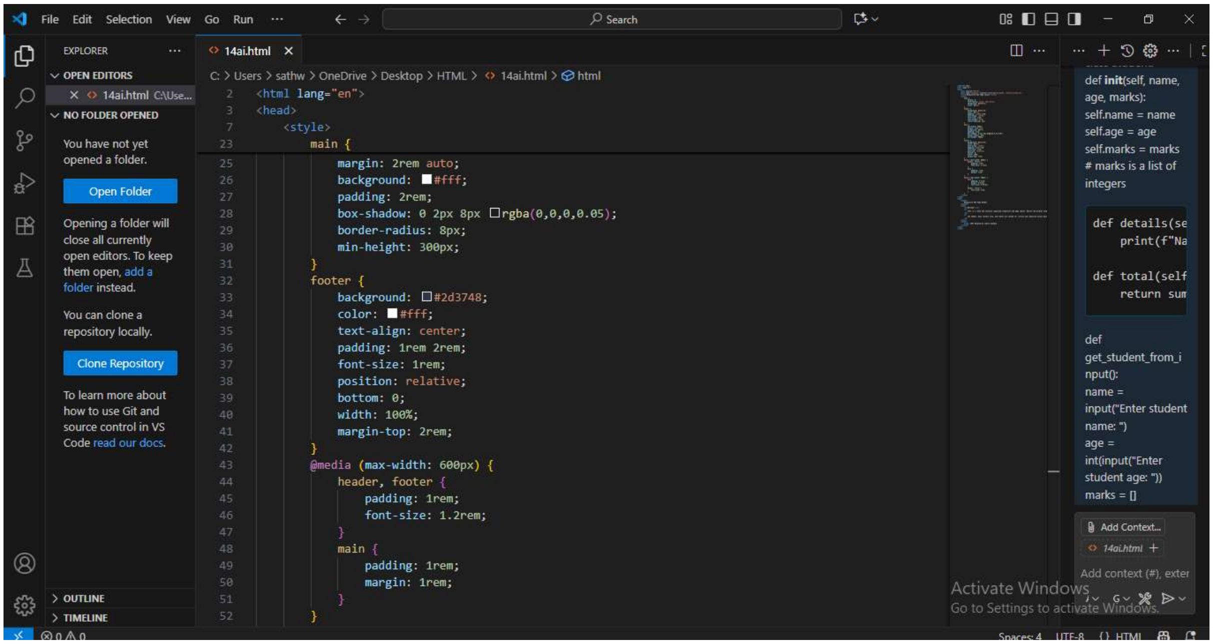
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Responsive Web Page Layout</title>
    <style>
        body {
            margin: 0;
            font-family: Arial, sans-serif;
            background: #f8f9fa;
            color: #222;
        }
        header {
            background: #2d3748;
            color: #fff;
            padding: 1.5rem 2rem;
            text-align: center;
            font-size: 2rem;
            font-weight: bold;
            letter-spacing: 1px;
        }
        main {
            max-width: 900px;
            margin: 2rem auto;
            background: #fff;
            padding: 2rem;
            box-shadow: 0 2px 8px rgba(0,0,0,0.05);
            border-radius: 8px;
            min-height: 300px;
        }
        footer {
```

def init(self, name, age, marks):
self.name = name
self.age = age
self.marks = marks
# marks is a list of integers

```
def details(se
    print(f"Na

def total(self
    return sum
```

def get_student_from_input():
name = input("Enter student name: ")
age = int(input("Enter student age: "))
marks = []



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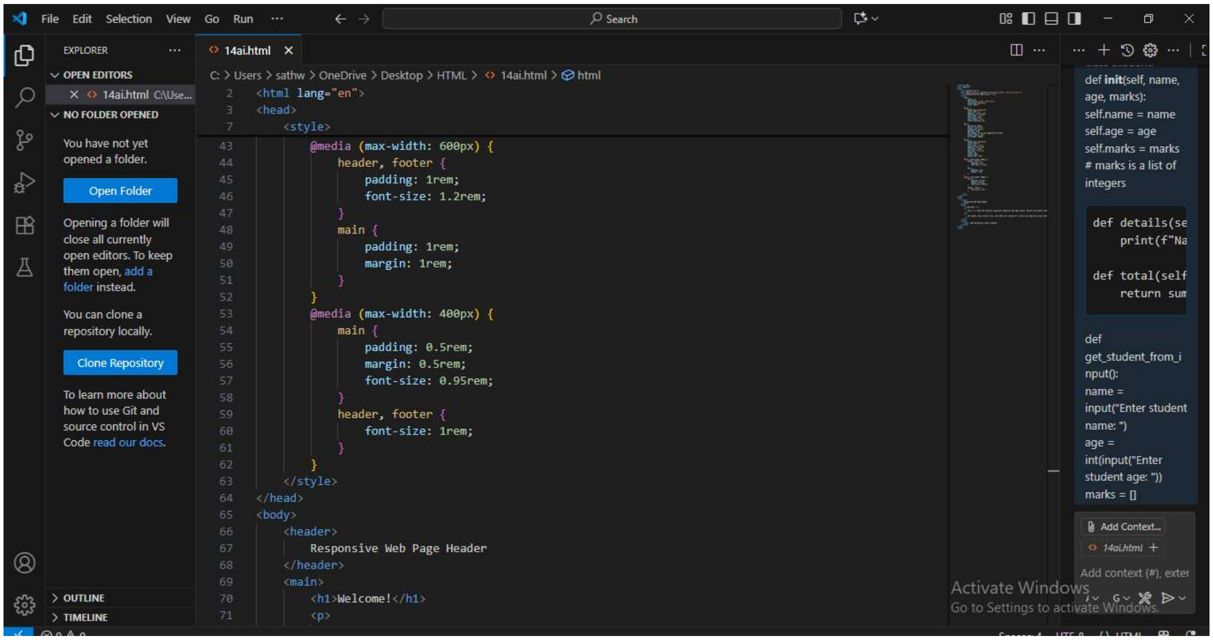
```
<html lang="en">
<head>
    <style>
        main {
            margin: 2rem auto;
            background: ■#fff;
            padding: 2rem;
            box-shadow: 0 2px 8px □rgba(0,0,0,0.05);
            border-radius: 8px;
            min-height: 300px;
        }
        footer {
            background: □#2d3748;
            color: ■#fff;
            text-align: center;
            padding: 1rem 2rem;
            font-size: 1rem;
            position: relative;
            bottom: 0;
            width: 100%;
            margin-top: 2rem;
        }
        @media (max-width: 600px) {
            header, footer {
                padding: 1rem;
                font-size: 1.2rem;
            }
            main {
                padding: 1rem;
                margin: 1rem;
            }
        }
```

def **init**(self, name, age, marks):
self.name = name
self.age = age
self.marks = marks
# marks is a list of integers

```
def details(se
    print(f"Na

def total(self
    return sum
```

def get_student_from_input():
name =
input("Enter student name: ")
age =
int(input("Enter student age: "))
marks = []



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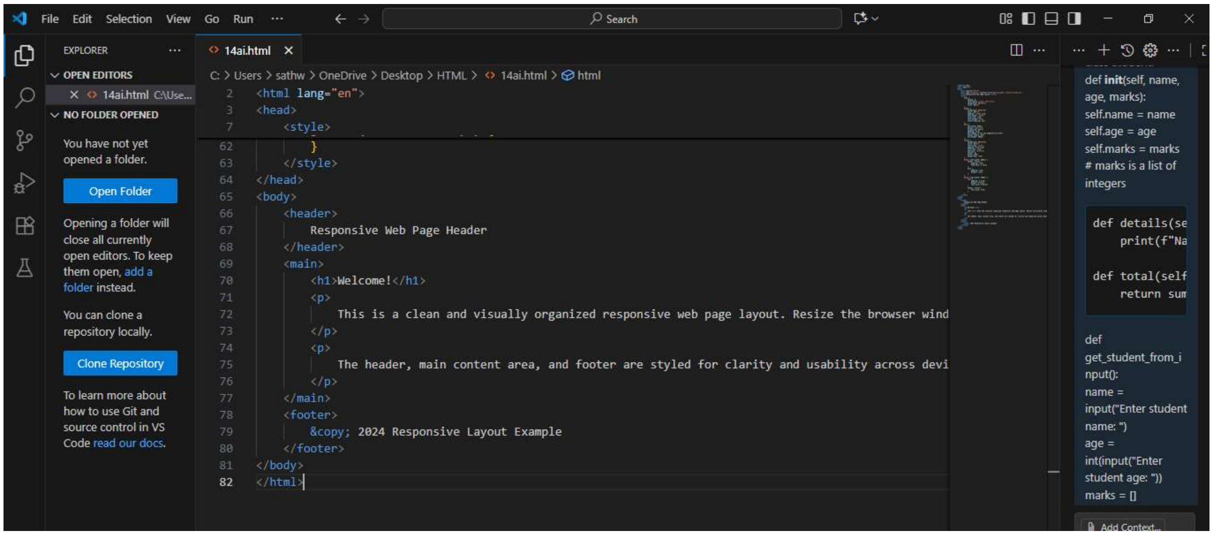
```
<html lang="en">
<head>
    <style>
        @media (max-width: 600px) {
            header, footer {
                padding: 1rem;
                font-size: 1.2rem;
            }
            main {
                padding: 1rem;
                margin: 1rem;
            }
        }
        @media (max-width: 400px) {
            main {
                padding: 0.5rem;
                margin: 0.5rem;
                font-size: 0.95rem;
            }
            header, footer {
                font-size: 1rem;
            }
        }
    </style>
</head>
<body>
    <header>
        Responsive Web Page Header
    </header>
    <main>
        <h1>Welcome!</h1>
        <p>
```

def **init**(self, name, age, marks):
self.name = name
self.age = age
self.marks = marks
# marks is a list of integers

```
def details(se
    print(f"Na

def total(self
    return sum
```

def get_student_from_input():
name =
input("Enter student name: ")
age =
int(input("Enter student age: "))
marks = []



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```
<html lang="en">
<head>
    <style>
        }
    </style>
</head>
<body>
    <header>
        Responsive Web Page Header
    </header>
    <main>
        <h1>Welcome!</h1>
        <p>
            This is a clean and visually organized responsive web page layout. Resize the browser wind
        </p>
        <p>
            The header, main content area, and footer are styled for clarity and usability across devi
        </p>
    </main>
    <footer>
        &copy; 2024 Responsive Layout Example
    </footer>
</body>
</html>
```

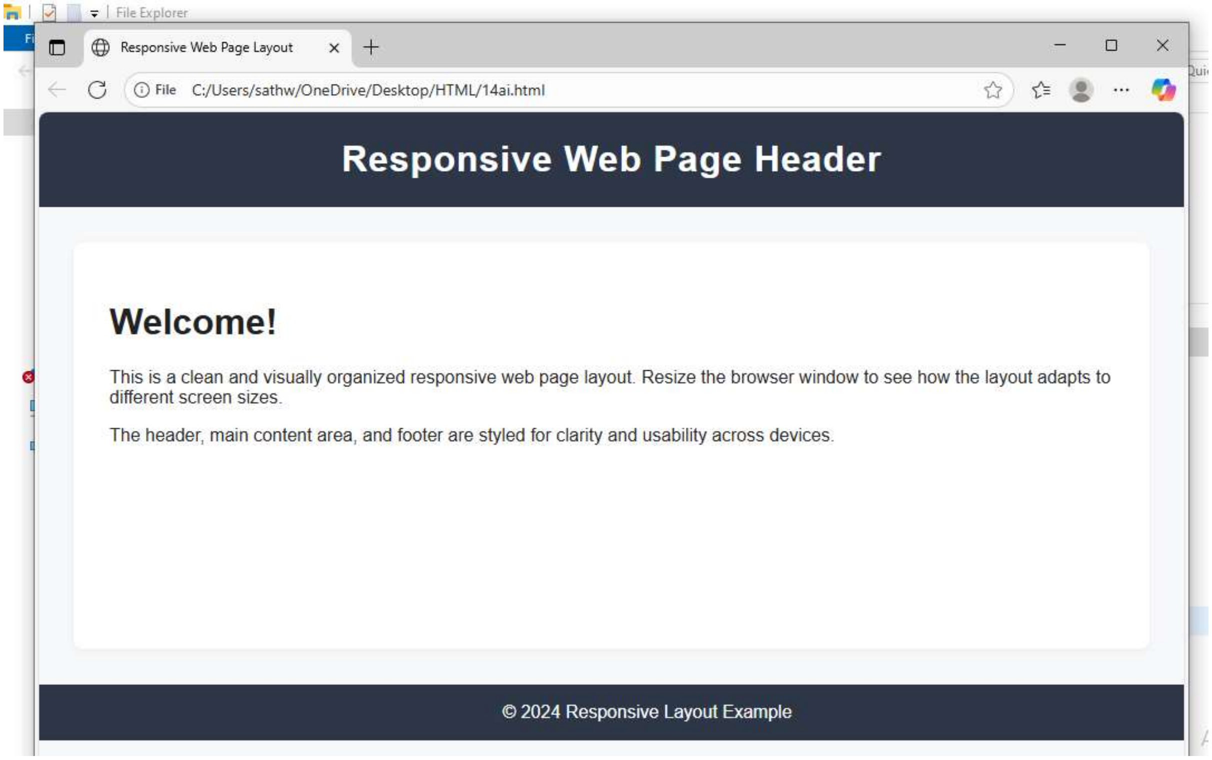
def **init**(self, name, age, marks):
self.name = name
self.age = age
self.marks = marks
# marks is a list of integers

```
def details(se
    print(f"Na

def total(self
    return sum
```

def get_student_from_input():
name =
input("Enter student name: ")
age =
int(input("Enter student age: "))
marks = []

OUTPUT:


File Explorer
Responsive Web Page Layout
File C:/Users/sathw/OneDrive/Desktop/HTML/14ai.html

Responsive Web Page Header

Welcome!

This is a clean and visually organized responsive web page layout. Resize the browser window to see how the layout adapts to different screen sizes.

The header, main content area, and footer are styled for clarity and usability across devices.

© 2024 Responsive Layout Example

EXPLANATION:

1. The vs code takes the prompt from the user and designs the code.
2. The prompt is to design a web page by using HTML,CSS and JS.
3. The vs code takes the instructions from the prompt and designs the code according to the prompt.

TASK-02

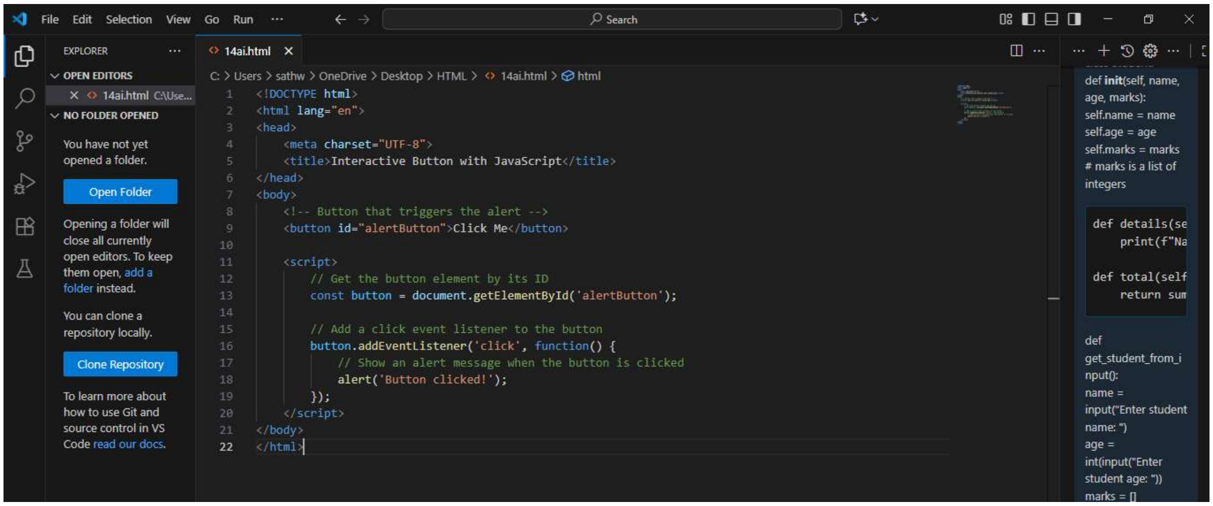
PROMPT: Develop a web page with Interactive Button with JavaScript by using the following instructions and the output should be matched to the expected output

Instructions:

• Create a button on a web page to generate JavaScript code that displays an alert

message when the button is clicked.

- Ensure the code is clean and well-commented.



You have not yet opened a folder.

Opening a folder will close all currently open editors. To keep them open, add a folder instead.

You can clone a repository locally.

To learn more about how to use Git and source control in VS Code read our docs.

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Interactive Button with JavaScript</title>
</head>
<body>
    <!-- Button that triggers the alert -->
    <button id="alertButton">Click Me</button>

    <script>
        // Get the button element by its ID
        const button = document.getElementById('alertButton');

        // Add a click event listener to the button
        button.addEventListener('click', function() {
            // Show an alert message when the button is clicked
            alert('Button clicked!');
        });
    </script>
</body>
</html>
```

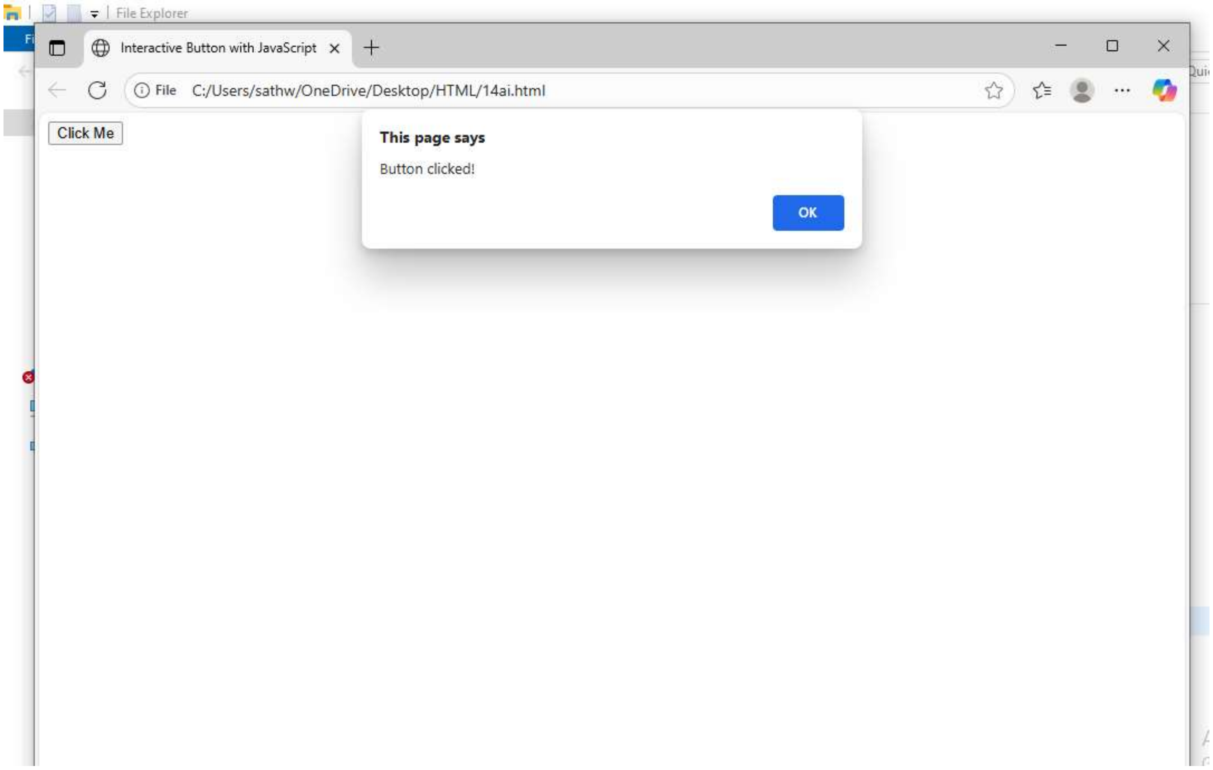
def **init**(self, name, age, marks):
self.name = name
self.age = age
self.marks = marks
# marks is a list of integers

```
def details(se
    print(f"Na

def total(self
    return sum
```

def get_student_from_input():
name = input("Enter student name: ")
age = int(input("Enter student age: "))
marks = []

OUTPUT:



File Explorer
Interactive Button with JavaScript
File
C:/Users/sathw/OneDrive/Desktop/HTML/14ai.html
Click Me
OK

This page says

Button clicked!

EXPLANATION:

1. The prompt given by the user is to design a webpage .
2. The topic is button click if the user clicks the button the it should generate the output that the page belongs to the button click.
3. So the prompt given to the vs code to generate the webpage by using the JS language and cconcept used in it is button click.

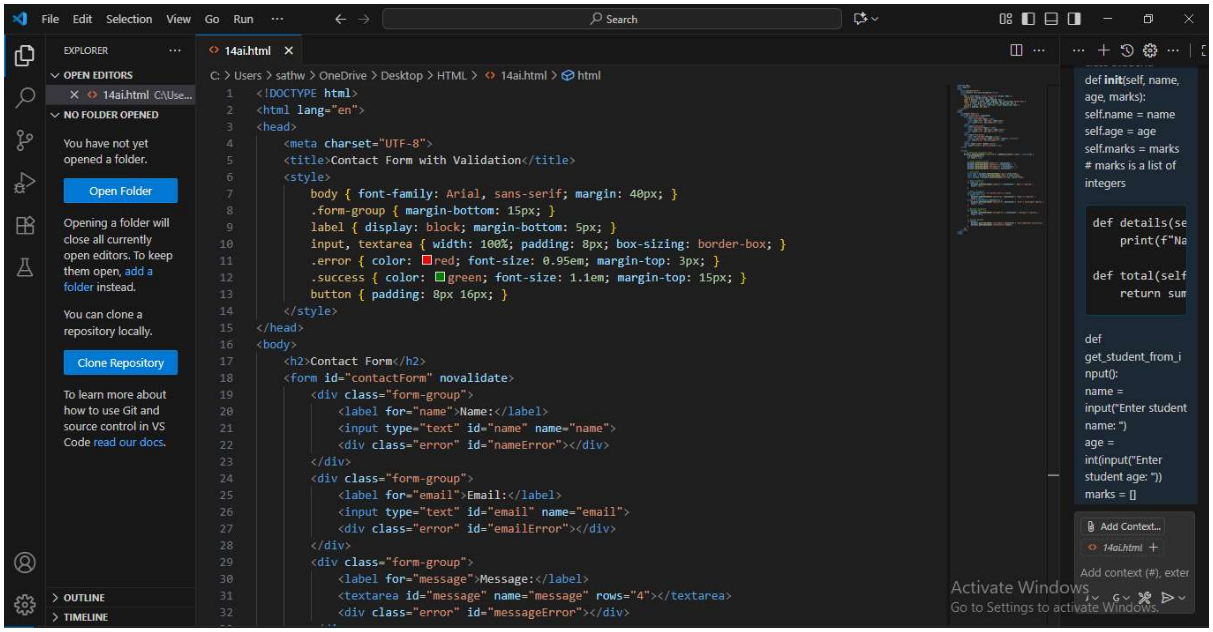
4. The vs code generated the code using JS and HTML , CSS .

TASK-03

PROMPT: Develop a web page of Form with Validation by the following instructions and the output should be matched with the expected output

Instructions:

- Design a contact form with fields: Name, Email, Message.
- Use AI to generate JavaScript code for form validation (e.g., non-empty fields, valid email format).
- Add inline error messages if input is invalid.



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You can clone a repository locally.

To learn more about how to use Git and source control in VS Code read our docs.

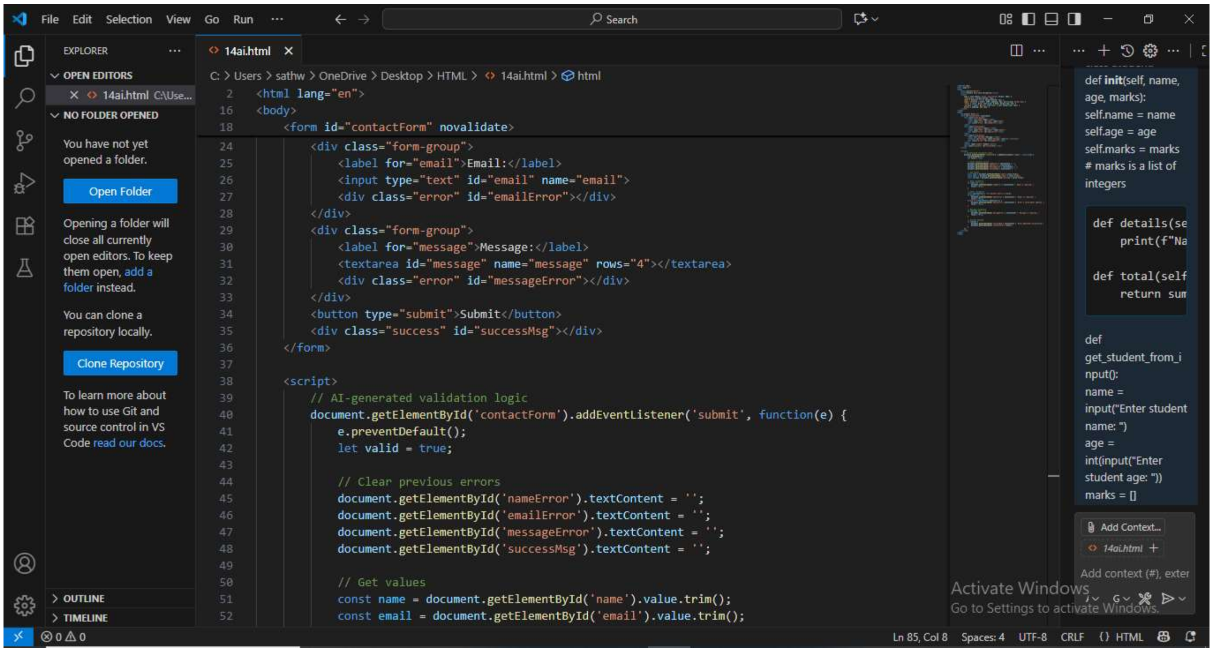
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Contact Form with Validation</title>
    <style>
        body { font-family: Arial, sans-serif; margin: 40px; }
        .form-group { margin-bottom: 15px; }
        label { display: block; margin-bottom: 5px; }
        input, textarea { width: 100%; padding: 8px; box-sizing: border-box; }
        .error { color: red; font-size: 0.95em; margin-top: 3px; }
        .success { color: green; font-size: 1.1em; margin-top: 15px; }
        button { padding: 8px 16px; }
    </style>
</head>
<body>
    <h2>Contact Form</h2>
    <form id="contactForm" novalidate>
        <div class="form-group">
            <label for="name">Name:</label>
            <input type="text" id="name" name="name">
            <div class="error" id="nameError"></div>
        </div>
        <div class="form-group">
            <label for="email">Email:</label>
            <input type="text" id="email" name="email">
            <div class="error" id="emailError"></div>
        </div>
        <div class="form-group">
            <label for="message">Message:</label>
            <textarea id="message" name="message" rows="4"></textarea>
            <div class="error" id="messageError"></div>
```

def **init**(self, name, age, marks):
self.name = name
self.age = age
self.marks = marks
# marks is a list of integers

```
def details(se
    print(f"Na

def total(self
    return sum
```

def get_student_from_input():
name = input("Enter student name: ")
age = int(input("Enter student age: "))
marks = []



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OUTLINE
TIMELINE
14ai.html
C: > Users > sathw > OneDrive > Desktop > HTML > 14ai.html > html

```html
<html lang="en">
<body>
    <form id="contactForm" novalidate>
        <div class="form-group">
            <label for="email">Email:</label>
            <input type="text" id="email" name="email">
            <div class="error" id="emailError"></div>
        </div>
        <div class="form-group">
            <label for="message">Message:</label>
            <textarea id="message" name="message" rows="4"></textarea>
            <div class="error" id="messageError"></div>
        </div>
        <button type="submit">Submit</button>
        <div class="success" id="successMsg"></div>
    </form>

    <script>
        // AI-generated validation logic
        document.getElementById('contactForm').addEventListener('submit', function(e) {
            e.preventDefault();
            let valid = true;

            // Clear previous errors
            document.getElementById('nameError').textContent = '';
            document.getElementById('emailError').textContent = '';
            document.getElementById('messageError').textContent = '';
            document.getElementById('successMsg').textContent = '';

            // Get values
            const name = document.getElementById('name').value.trim();
            const email = document.getElementById('email').value.trim();
```

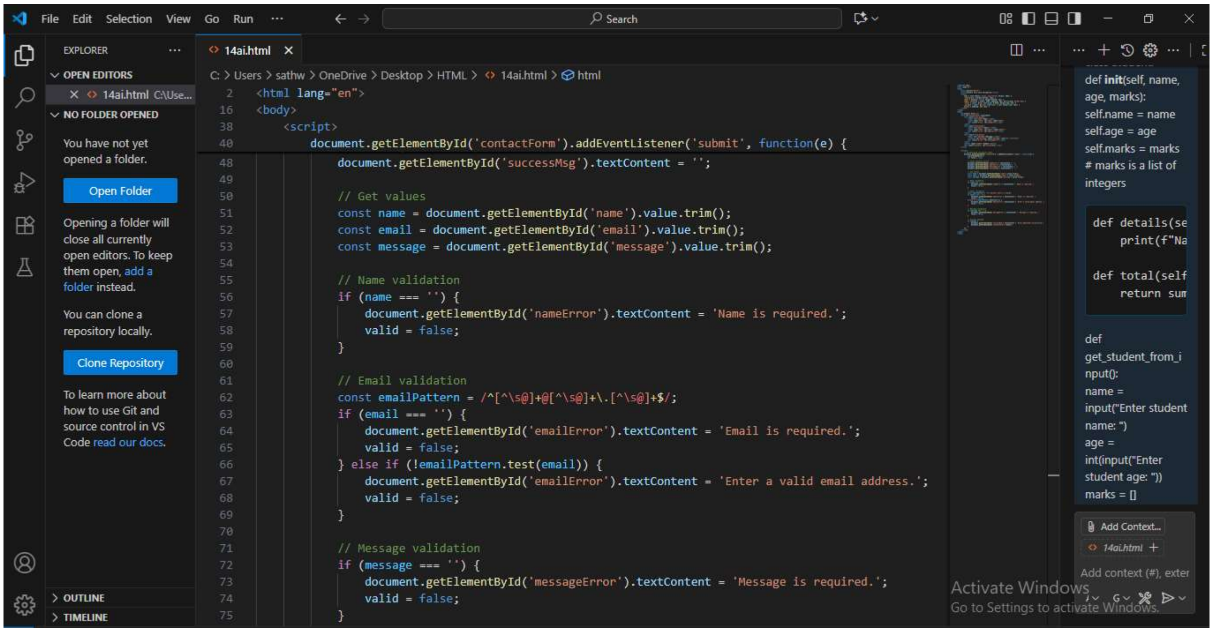
def **init**(self, name, age, marks):
self.name = name
self.age = age
self.marks = marks
# marks is a list of integers

```
def details(se
    print(f"Na

def total(self
    return sum
```

def get_student_from_input():
name = input("Enter student name: ")
age = int(input("Enter student age: "))
marks = []

⊗ 0 ⚠ 0
Ln 85, Col 8 Spaces: 4 UTF-8 CRLF {} HTML


File Edit Selection View Go Run ···
Search
EXPLORER
OPEN EDITORS
14ai.html C:\Use...
NO FOLDER OPENED

You have not yet opened a folder.

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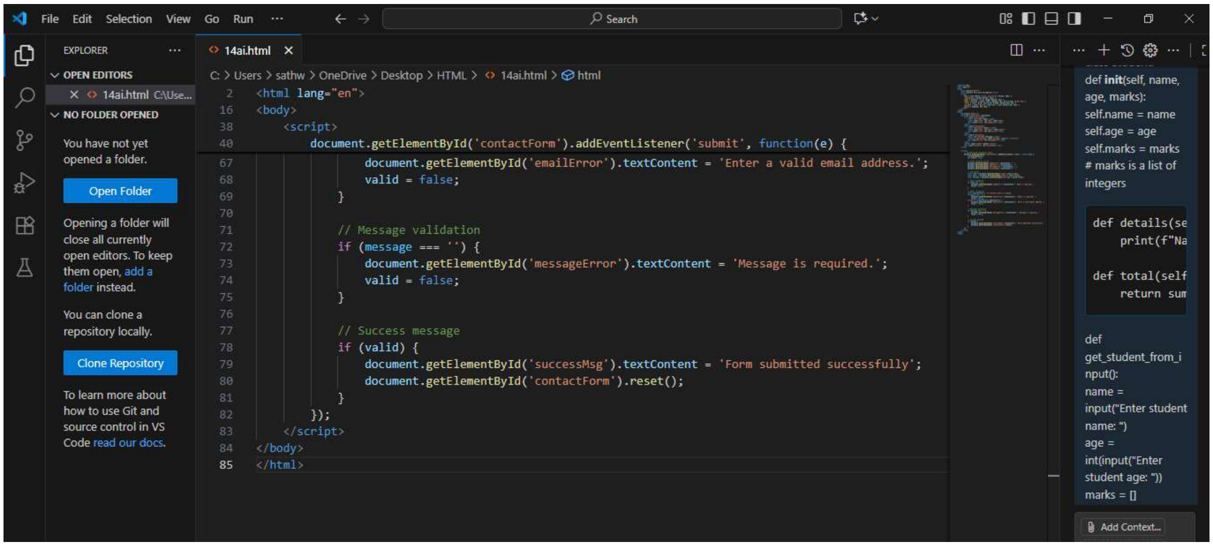
OUTLINE
TIMELINE
14ai.html
C: > Users > sathw > OneDrive > Desktop > HTML > 14ai.html > html

```html
<html lang="en">
<body>
    <script>
        document.getElementById('contactForm').addEventListener('submit', function(e) {
            document.getElementById('successMsg').textContent = '';

            // Get values
            const name = document.getElementById('name').value.trim();
            const email = document.getElementById('email').value.trim();
            const message = document.getElementById('message').value.trim();

            // Name validation
            if (name === '') {
                document.getElementById('nameError').textContent = 'Name is required.';
                valid = false;
            }

            // Email validation
            const emailPattern = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;
            if (email === '') {
                document.getElementById('emailError').textContent = 'Email is required.';
                valid = false;
            } else if (!emailPattern.test(email)) {
                document.getElementById('emailError').textContent = 'Enter a valid email address.';
                valid = false;
            }

            // Message validation
            if (message === '') {
                document.getElementById('messageError').textContent = 'Message is required.';
                valid = false;
            }
```

def **init**(self, name, age, marks):
self.name = name
self.age = age
self.marks = marks
# marks is a list of integers

```
def details(se
    print(f"Na

def total(self
    return sum
```

def get_student_from_input():
name = input("Enter student name: ")
age = int(input("Enter student age: "))
marks = []


File Edit Selection View Go Run ···
Search
EXPLORER
OPEN EDITORS
14ai.html C:\Use...
NO FOLDER OPENED

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14ai.html
C: > Users > sathw > OneDrive > Desktop > HTML > 14ai.html > html

```html
<html lang="en">
<body>
    <script>
        document.getElementById('contactForm').addEventListener('submit', function(e) {
                document.getElementById('emailError').textContent = 'Enter a valid email address.';
                valid = false;
            }

            // Message validation
            if (message === '') {
                document.getElementById('messageError').textContent = 'Message is required.';
                valid = false;
            }

            // Success message
            if (valid) {
                document.getElementById('successMsg').textContent = 'Form submitted successfully';
                document.getElementById('contactForm').reset();
            }
        });
    </script>
</body>
</html>
```

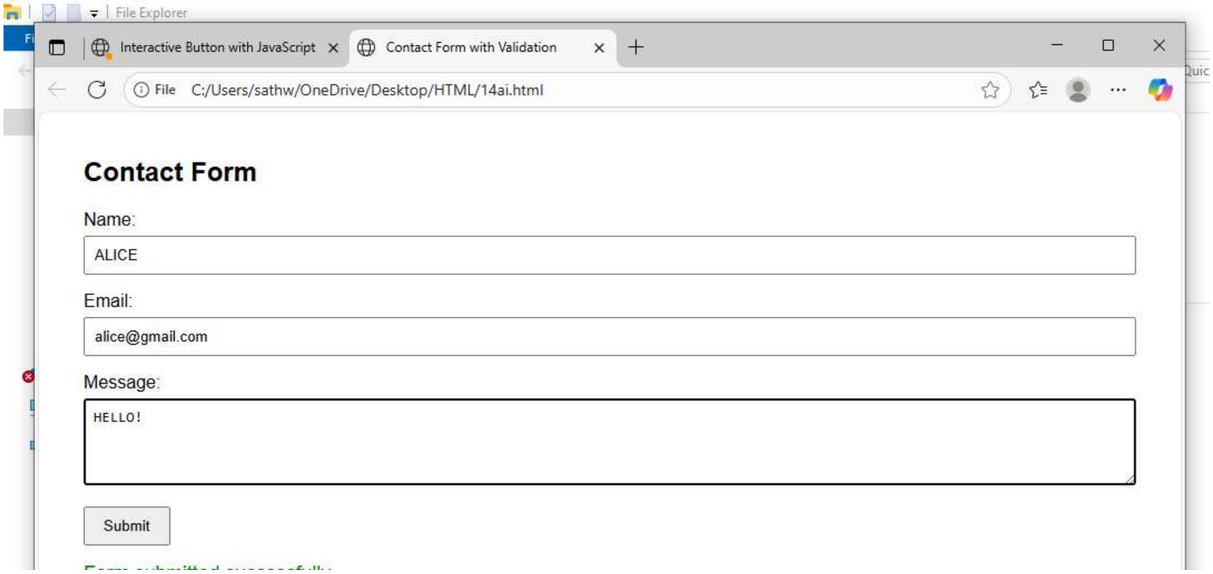
def **init**(self, name, age, marks):
self.name = name
self.age = age
self.marks = marks
# marks is a list of integers

```
def details(se
    print(f"Na

def total(self
    return sum
```

def get_student_from_input():
name = input("Enter student name: ")
age = int(input("Enter student age: "))
marks = []

OUTPUT:


File Explorer
Interactive Button with JavaScript
Contact Form with Validation
File
C:/Users/sathw/OneDrive/Desktop/HTML/14ai.html
Submit

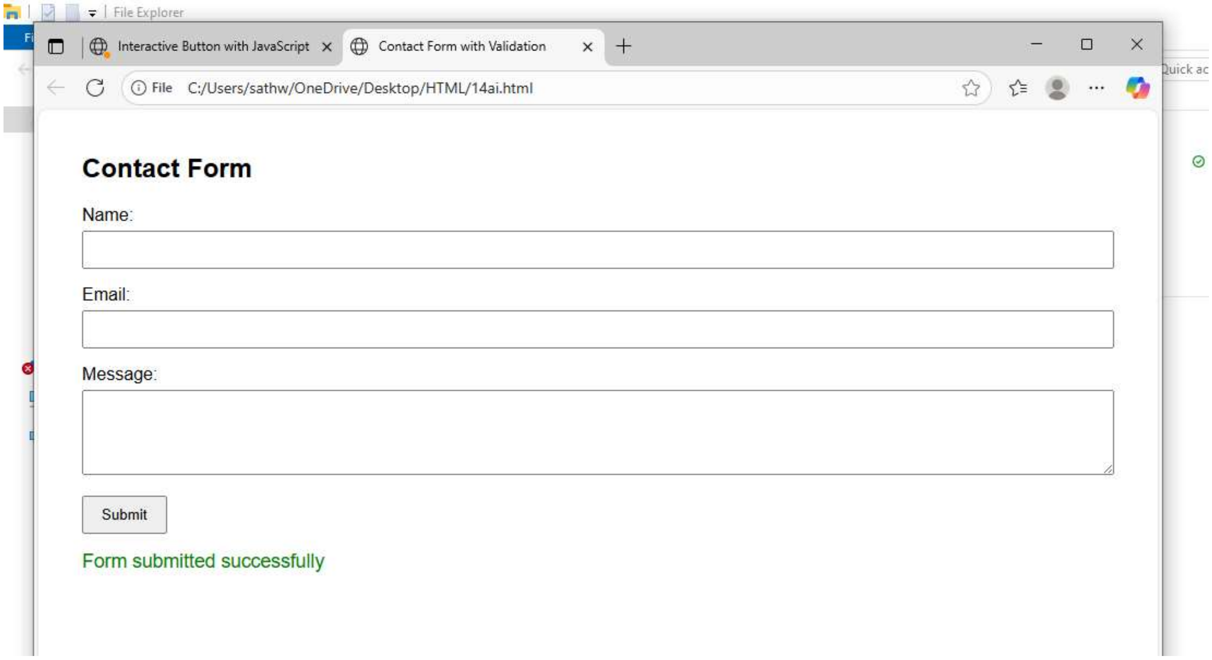
Contact Form

Name: ALICE

Email: alice@gmail.com

Message: HELLO!

Form submitted successfully


File Explorer
Interactive Button with JavaScript
Contact Form with Validation
File
C:/Users/sathw/OneDrive/Desktop/HTML/14ai.html
Submit

Contact Form

Name:

Email:

Message:

Form submitted successfully

EXPLANATION:

1. The prompt given by the user to design a web page which consists of form.
2. The vs code uses JS,HTML and CSS for designing a webpage.
3. The page include name,email,message boxes by which the user enters the text dynamically.
4. After entering the information there is submit button included there by clicking on it the form is submitted.

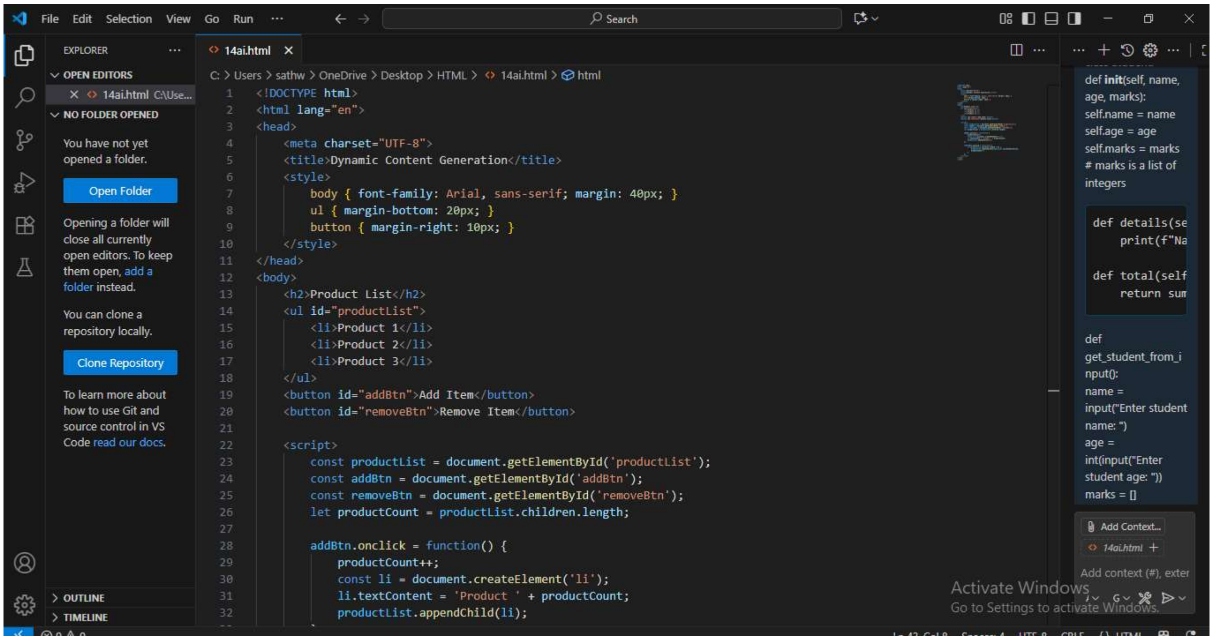
TASK-04

PROMPT: Develop a webpage which contains the Dynamic Content Generation by following the instructions and the output should match with the expected output.

Instructions:

- Create a list of items (e.g., product names) using HTML.
- Use AI-generated JavaScript to dynamically add or remove

items from the list when a button is click.



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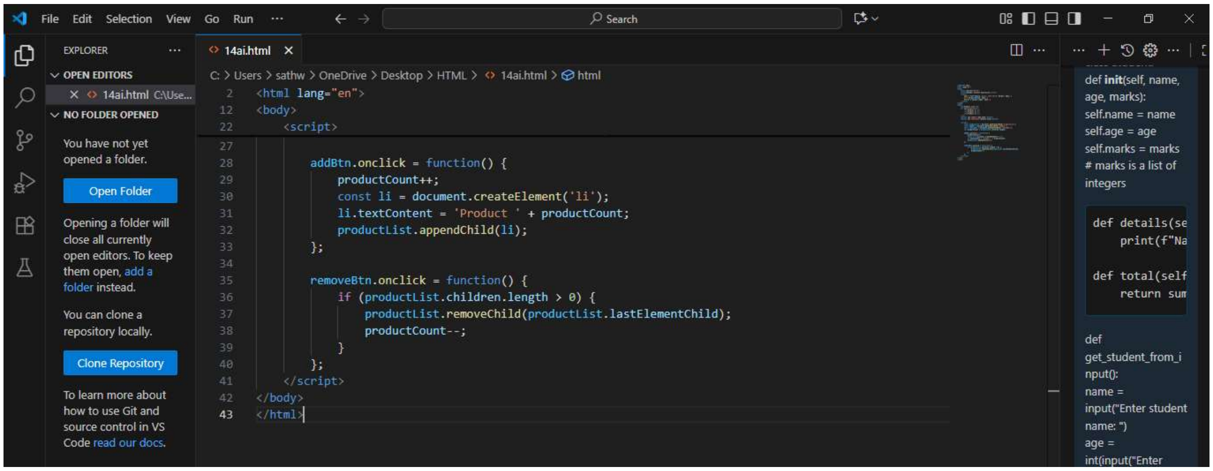
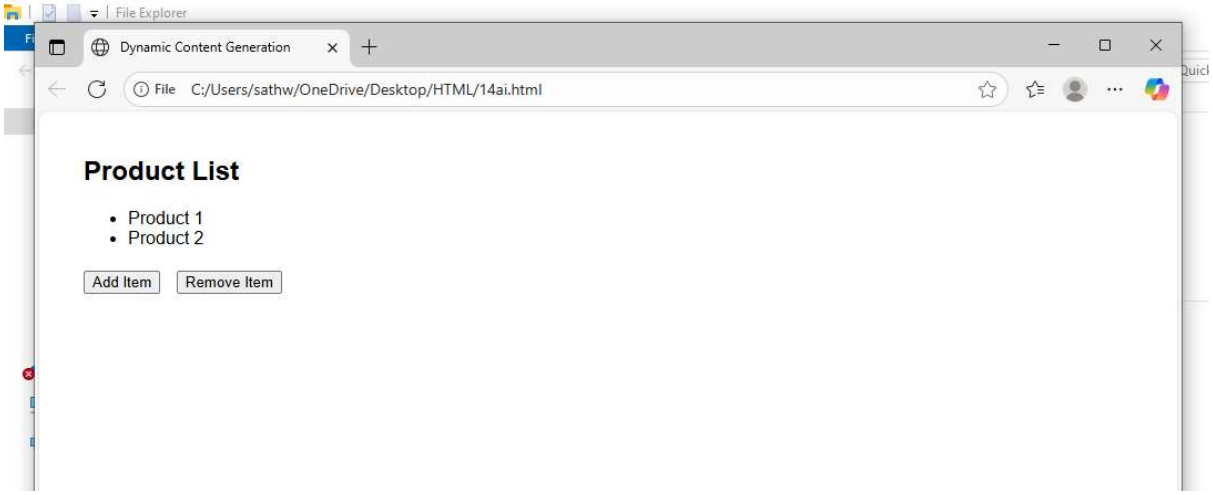
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Dynamic Content Generation</title>
    <style>
        body { font-family: Arial, sans-serif; margin: 40px; }
        ul { margin-bottom: 20px; }
        button { margin-right: 10px; }
    </style>
</head>
<body>
    <h2>Product List</h2>
    <ul id="productList">
        <li>Product 1</li>
        <li>Product 2</li>
        <li>Product 3</li>
    </ul>
    <button id="addBtn">Add Item</button>
    <button id="removeBtn">Remove Item</button>

    <script>
        const productList = document.getElementById('productList');
        const addBtn = document.getElementById('addBtn');
        const removeBtn = document.getElementById('removeBtn');
        let productCount = productList.children.length;

        addBtn.onclick = function() {
            productCount++;
            const li = document.createElement('li');
            li.textContent = 'Product ' + productCount;
            productList.appendChild(li);
```

```python
def init(self, name,
age, marks):
self.name = name
self.age = age
self.marks = marks
# marks is a list of
integers

def details(se
    print(f"Na

def total(self
    return sum

def
get_student_from_i
nput():
name =
input("Enter student
name: ")
age =
int(input("Enter
student age: "))
marks = []
```



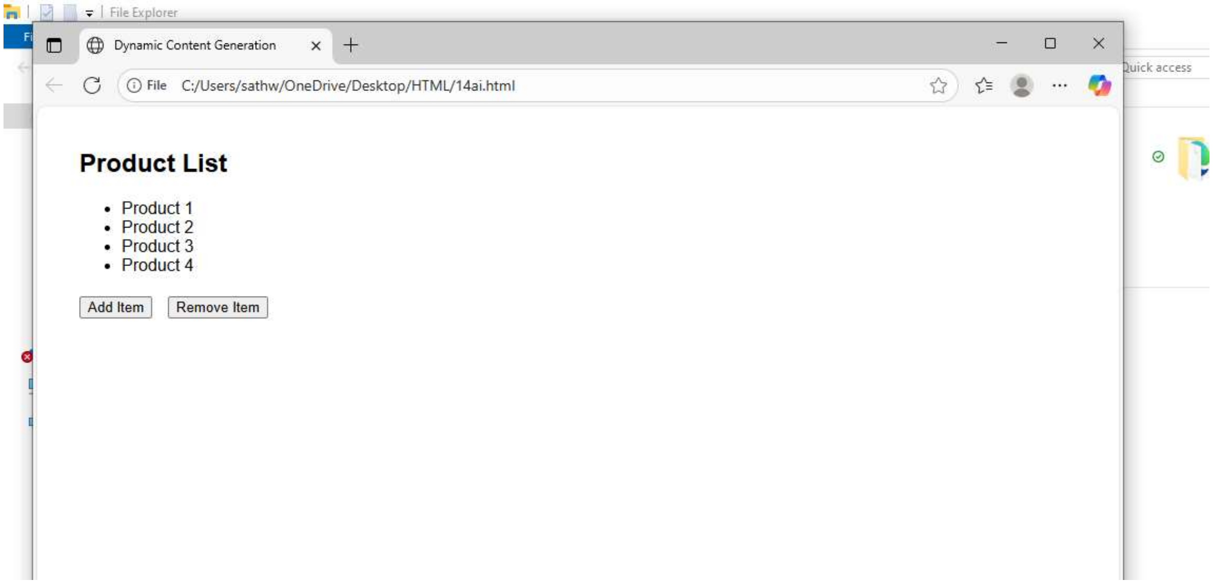
```html
<html lang="en">
<body>
    <script>

        addBtn.onclick = function() {
            productCount++;
            const li = document.createElement('li');
            li.textContent = 'Product ' + productCount;
            productList.appendChild(li);
        };

        removeBtn.onclick = function() {
            if (productList.children.length > 0) {
                productList.removeChild(productList.lastElementChild);
                productCount--;
            }
        };
    </script>
</body>
</html>
```

OUTPUT


File Explorer
Dynamic Content Generation
File C:/Users/sathw/OneDrive/Desktop/HTML/14ai.html
Add Item
Remove Item

Product List

- Product 1
- Product 2


File Explorer
Dynamic Content Generation
File C:/Users/sathw/OneDrive/Desktop/HTML/14ai.html
Quick access
Add Item
Remove Item

Product List

- Product 1
- Product 2
- Product 3
- Product 4

EXPLANATION

1. This HTML page displays a product list and two buttons. Clicking "Add Item" adds a new product to the list.
2. Clicking "Remove Item" removes the last product. The JavaScript dynamically updates the list based on user actions.

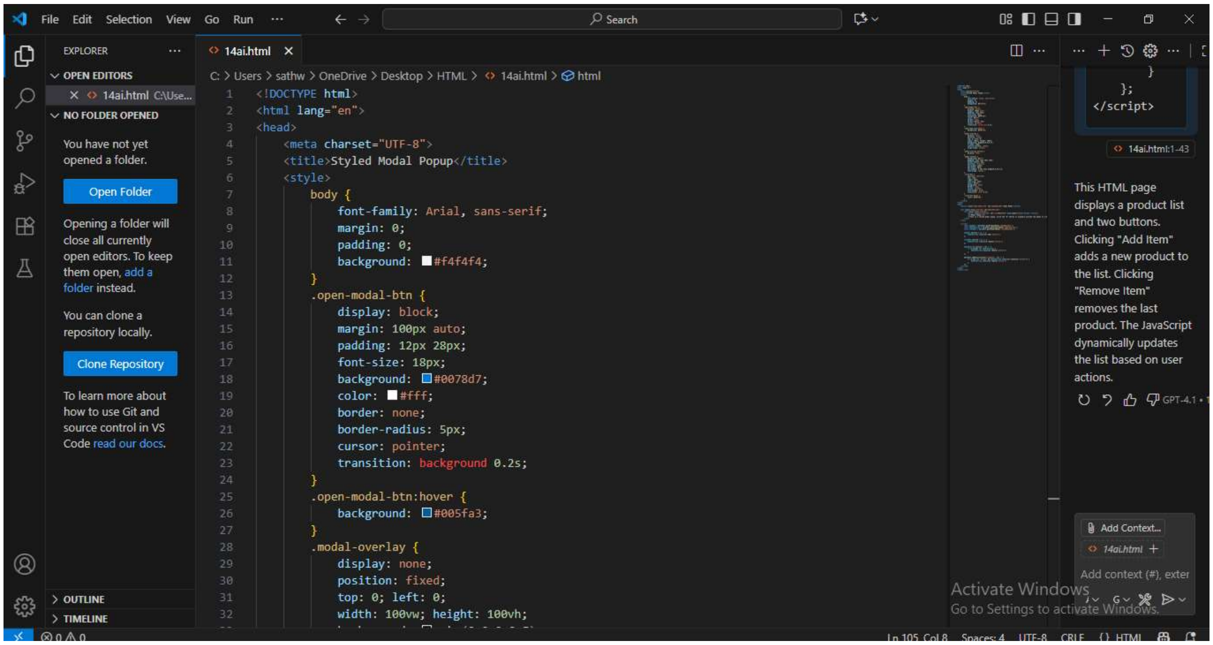
TASK-05

PROMPT: Develop a webpage that contain a Styled Modal Popup which include the following instructions and the output must match the expected output.

Instructions:

- Use AI to generate a modal popup that opens when a button is clicked.

- Style the modal using CSS with a semi-transparent overlay.
- Include a close button that hides the modal.

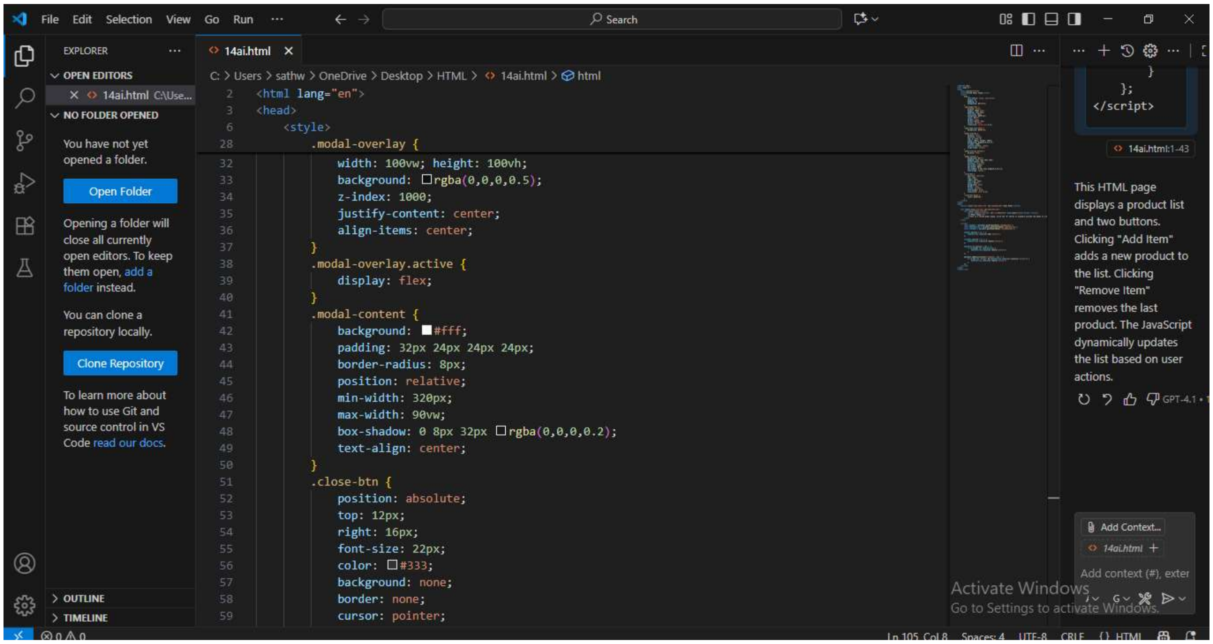

File Edit Selection View Go Run ···
Search
EXPLORER
OPEN EDITORS
14ai.html C:\Use...
NO FOLDER OPENED
You have not yet opened a folder.
Open Folder
Opening a folder will close all currently open editors. To keep them open, add a folder instead.
You can clone a repository locally.
Clone Repository
To learn more about how to use Git and source control in VS Code read our docs.
OUTLINE
TIMELINE
14ai.html
C: > Users > sathw > OneDrive > Desktop > HTML > 14ai.html > html
Activate Windows
Go to Settings to activate Windows.
Add Context...
14ai.html
Add context (#), exter
Ln 105, Col 8 Spaces: 4 UTF-8 CRLF {} HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Styled Modal Popup</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
            background: #f4f4f4;
        }
        .open-modal-btn {
            display: block;
            margin: 100px auto;
            padding: 12px 28px;
            font-size: 18px;
            background: #0078d7;
            color: #fff;
            border: none;
            border-radius: 5px;
            cursor: pointer;
            transition: background 0.2s;
        }
        .open-modal-btn:hover {
            background: #005fa3;
        }
        .modal-overlay {
            display: none;
            position: fixed;
            top: 0; left: 0;
            width: 100vw; height: 100vh;
```

```
    }
};
</script>
```

14ai.html:1-43

This HTML page displays a product list and two buttons. Clicking "Add Item" adds a new product to the list. Clicking "Remove Item" removes the last product. The JavaScript dynamically updates the list based on user actions.


File Edit Selection View Go Run ···
Search
EXPLORER
OPEN EDITORS
14ai.html C:\Use...
NO FOLDER OPENED
You have not yet opened a folder.
Open Folder
Opening a folder will close all currently open editors. To keep them open, add a folder instead.
You can clone a repository locally.
Clone Repository
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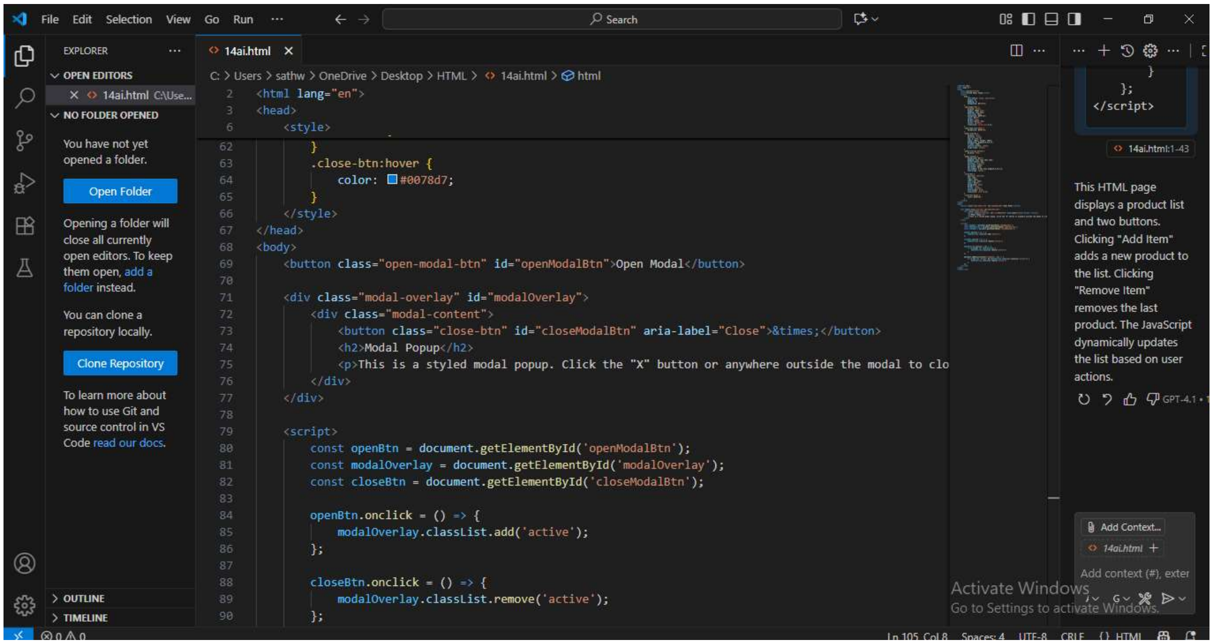
OUTLINE
TIMELINE
14ai.html
C: > Users > sathw > OneDrive > Desktop > HTML > 14ai.html > html
Activate Windows
Go to Settings to activate Windows.
Add Context...
14ai.html
Add context (#), exter
Ln 105, Col 8 Spaces: 4 UTF-8 CRLF {} HTML

```
<html lang="en">
<head>
    <style>
        .modal-overlay {
            width: 100vw; height: 100vh;
            background: rgba(0,0,0,0.5);
            z-index: 1000;
            justify-content: center;
            align-items: center;
        }
        .modal-overlay.active {
            display: flex;
        }
        .modal-content {
            background: #fff;
            padding: 32px 24px 24px 24px;
            border-radius: 8px;
            position: relative;
            min-width: 320px;
            max-width: 90vw;
            box-shadow: 0 8px 32px rgba(0,0,0,0.2);
            text-align: center;
        }
        .close-btn {
            position: absolute;
            top: 12px;
            right: 16px;
            font-size: 22px;
            color: #333;
            background: none;
            border: none;
            cursor: pointer;
```

```
    }
};
</script>
```

14ai.html:1-43

This HTML page displays a product list and two buttons. Clicking "Add Item" adds a new product to the list. Clicking "Remove Item" removes the last product. The JavaScript dynamically updates the list based on user actions.



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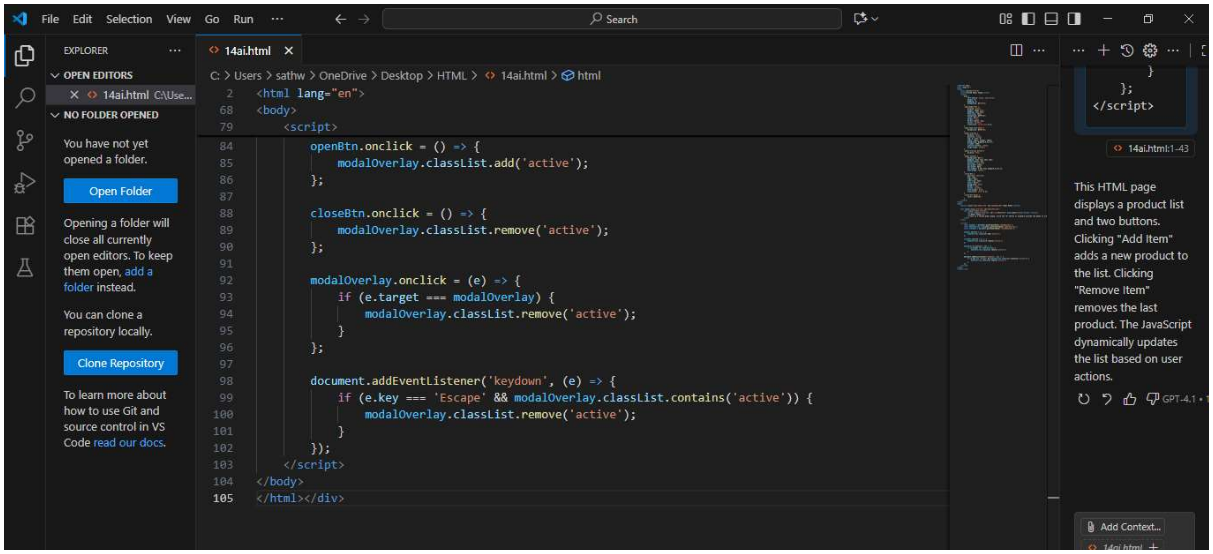
```
<html lang="en">
<head>
    <style>
        }
        .close-btn:hover {
            color: #0078d7;
        }
    </style>
</head>
<body>
    <button class="open-modal-btn" id="openModalBtn">Open Modal</button>

    <div class="modal-overlay" id="modalOverlay">
        <div class="modal-content">
            <button class="close-btn" id="closeModalBtn" aria-label="Close">&times;</button>
            <h2>Modal Popup</h2>
            <p>This is a styled modal popup. Click the "X" button or anywhere outside the modal to clo
        </div>
    </div>

    <script>
        const openBtn = document.getElementById('openModalBtn');
        const modalOverlay = document.getElementById('modalOverlay');
        const closeBtn = document.getElementById('closeModalBtn');

        openBtn.onclick = () => {
            modalOverlay.classList.add('active');
        };

        closeBtn.onclick = () => {
            modalOverlay.classList.remove('active');
        };
```

```
        }
    };
</script>
```

This HTML page displays a product list and two buttons. Clicking "Add Item" adds a new product to the list. Clicking "Remove Item" removes the last product. The JavaScript dynamically updates the list based on user actions.



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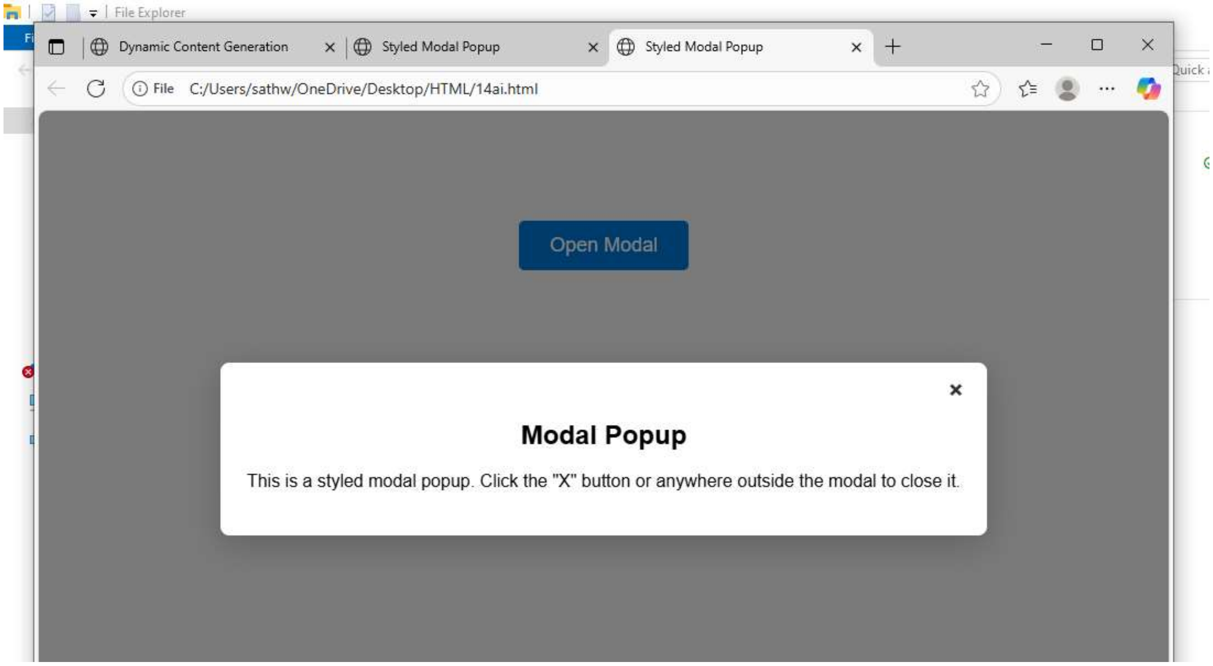
```
<html lang="en">
<body>
    <script>
        openBtn.onclick = () => {
            modalOverlay.classList.add('active');
        };

        closeBtn.onclick = () => {
            modalOverlay.classList.remove('active');
        };

        modalOverlay.onclick = (e) => {
            if (e.target === modalOverlay) {
                modalOverlay.classList.remove('active');
            }
        };

        document.addEventListener('keydown', (e) => {
            if (e.key === 'Escape' && modalOverlay.classList.contains('active')) {
                modalOverlay.classList.remove('active');
            }
        });
    </script>
</body>
</html></div>
```

```
        }
    };
</script>
```

This HTML page displays a product list and two buttons. Clicking "Add Item" adds a new product to the list. Clicking "Remove Item" removes the last product. The JavaScript dynamically updates the list based on user actions.

OUTPUT



File Explorer
Dynamic Content Generation
Styled Modal Popup
Styled Modal Popup
File C:/Users/sathw/OneDrive/Desktop/HTML/14ai.html
Open Modal
×

Modal Popup

This is a styled modal popup. Click the "X" button or anywhere outside the modal to close it.

EXPLANATION

1. This HTML page shows a button that opens a styled modal popup.
2. The modal can be closed by clicking the "X", clicking outside the modal, or pressing Escape.
3. CSS styles the modal and button, while JavaScript controls opening and closing the modal.