DESIGNING A WEB PAGE: “TAX DECLARATION FORM”

The purpose of this task is to show how to use HTML, CSS, and JavaScript (if necessary) to design a web page.

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https://github.com/vladproduction/My-Pet-Projects/tree/main/tax-form-declaration

Task completed by following criteria:

1. Functional and non-functional requirements for the solution are provided.

2. Web page design complete and unambiguous.

3. HTML is semantically, and classes are used.

4. CSS stored in external files and maps to HTML using classes.

5. JS events is affecting the functionality of a web page.

Link to the project: https://github.com/vladproduction/My-Pet-Projects/tree/main/tax-form-declaration

1. Functional and non-functional requirements.

Functional Requirements:

1)Personal Information Input:

- Users can enter their full name.
- Users can provide their residential address.
- Users can input their Social Security Number (SSN).

2)Income Details:

- Users can enter their primary income (salary).
- Users can add other sources of income (e.g., freelance work, investments).

3)Expense Deductions (list deductible expenses):

- Medical expenses.
- Educational costs.
- Other allowable deductions.

4)Form Submission:

- Users can submit the form.
- Upon submission, a confirmation message or alert should be displayed.

5)Validation:

- The form should validate that all required fields are filled out.
- Invalid entries (like incorrect formats for SSN) should be flagged with appropriate error messages.
- The user should be informed about any missing or incorrect information upon submission.

6)Reset/Draft Saving:

- Users can reset the form to clear all inputs.
- Users can save their input as a draft (optional feature).

Non-Functional Requirements:

1)Performance: webpage must load within 2 seconds for a better user experience.

2)Responsiveness: The web page must display correctly on various devices (desktops, tablets, smartphones) and adjust to different screen sizes.

3)Usability:

- The user interface should be intuitive and easy to navigate.
- Clear instructions should be provided near relevant input areas.

4)Security:

- User data entered in the form must be transmitted securely (e.g., using HTTPS).
- Personal data should not be stored without user consent.

2. Page design (Mockup Design for Tax Declaration Form).

- Layout -

1)Header Section:

- Title: "Tax Declaration Form" (Center-aligned, bold, larger font size)
- Subtitle: "Mockup Tax Declaration Form"

2)Personal Information Section:

- Label: "Personal Information" (Bold, slightly larger font)
  - Full Name: [___________]
  - Address: [___________]
  - Social Security Number: [___________]

(use placeholder text in input fields for guidance, e.g., "John Doe", "123 Main St", "123-45-6789")

3)Income Details Section:

- Label: "Income Details" (Bold, slightly larger font)
  - Primary Income (EURO): [___________]
  - Additional Income (EURO): [___________]

(use placeholder text in input fields for guidance, e.g., "150")

4)Expense Deductions Section:

- Label: "Expense Deductions" (Bold, slightly larger font)
  - Medical Expenses (EURO): [___________]
  - Educational Costs (EURO): [___________]
  - Other Deductible Expenses (EURO): [___________]

(use placeholder text in input fields for guidance, e.g., "150")

5)Submission Buttons:

- Submit Button: [Submit]
- Reset Button: [Reset]

(Buttons styled with a contrasting color to stand out)

6)Validation Messages Section:

(Use notifications below each input field to display validation messages in red/alert style)

7)Footer Section:

- Contact Information: "For assistance, contact [support-office@tax.euro.com]"

- Styling Suggestions -

- Color Scheme: Use a clean, professional color palette (e.g., shades of blue, grey, and white).
- Typography: Choose legible fonts and maintain hierarchy (bolder and larger for section titles, standard size for input labels).
- Spacing: Ensure adequate padding and margins between input fields and sections for a clean layout.
- Responsive Design: Ensure that the layout adjusts fluidly for different screen sizes, rearranging form elements as necessary for mobile devices.
- Icons: Consider using icons next to form labels (e.g., a user icon next to “Full Name”) to enhance visual appeal.

3. HTML files and classes.

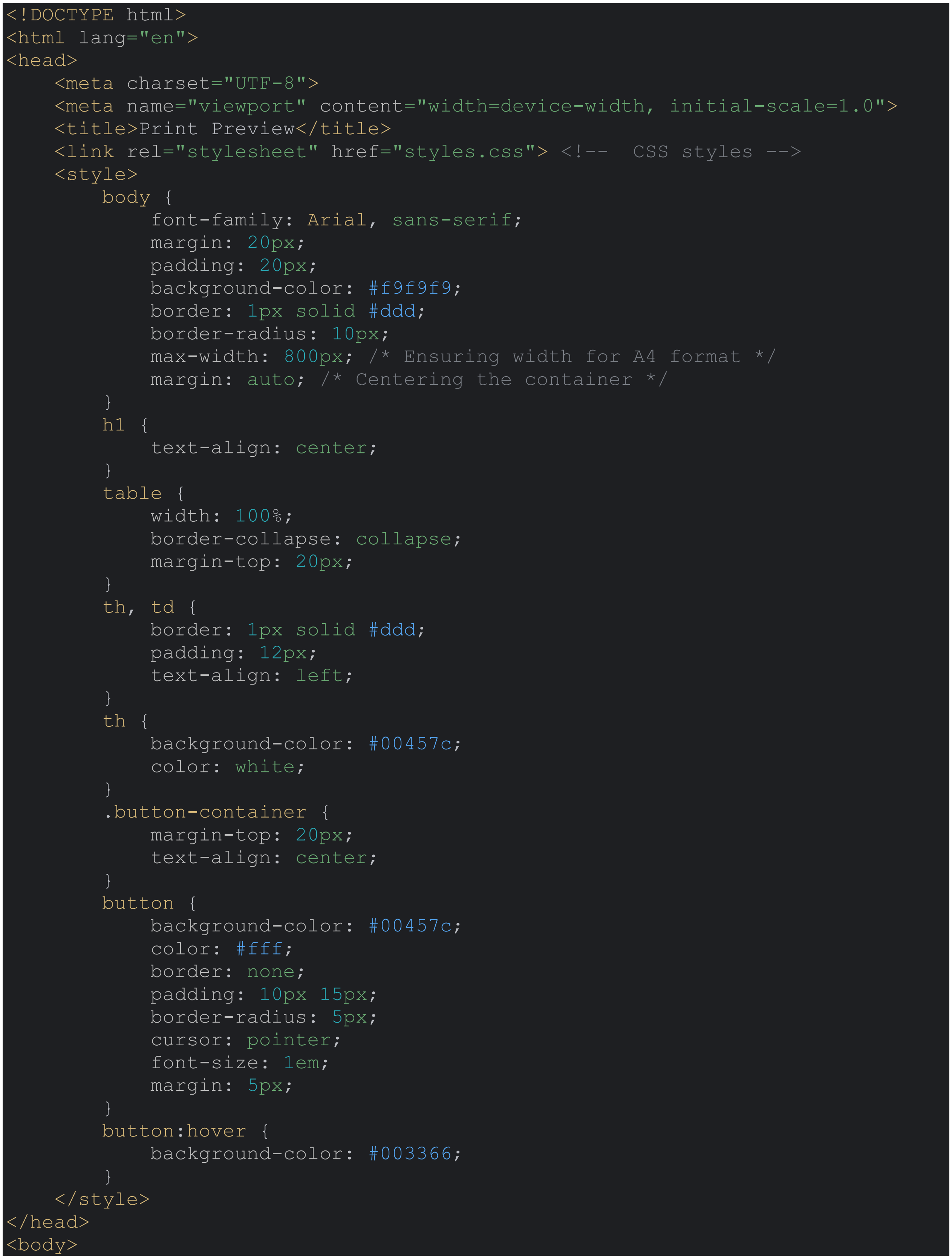
tax-declaration-form.html :

```html
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Tax Declaration Form</title>
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0-beta3/css/all.min.css">
    <!-- should before custom CSS file -->
    <link rel="stylesheet" href="styles.css"> <!-- Link to external CSS file -->
    <script src="script.js" defer></script> <!-- Link to external JS file -->
</head>

<body>

<header>
    <h1 class="main-title">Tax Declaration Form</h1> <!-- Main Title -->
    <h2 class="sub-title">Mockup Tax Declaration Form</h2> <!-- Subtitle -->
</header>

<form id="tax-form">

    <section class="personal-info">
        <div id="current-date-time" style="text-align: center; margin-bottom: 20px; font-weight: bold;">
            <span id="formatted-date-time"></span>
        </div>
        <h3><i class="fas fa-user"></i> Personal Information</h3>
        <label for="full-name">Full Name:</label>
        <input type="text" id="full-name" placeholder="John Doe" required
class="personal-input">
        <label for="address">Address:</label>
        <input type="text" id="address" placeholder="123 Main St" required
class="personal-input">
        <label for="ssn">Social Security Number:</label>
        <input type="text" id="ssn" placeholder="123-45-6789" required>
        <div class="validation-message" id="ssn-error"></div>
    </section>
    <section class="income-details">
        <h3><i class="fas fa-money-bill-wave"></i> Income Details</h3>
        <label for="primary-income">Primary Income (EURO):</label>
        <input type="number" id="primary-income" placeholder="150" required
class="money-input">
        <label for="additional-income">Additional Income (EURO):</label>
        <input type="number" id="additional-income" placeholder="150"
class="money-input">
    </section>
    <section class="expense-deductions">
        <h3><i class="fas fa-file-invoice-dollar"></i> Expense
Deductions</h3>
        <label for="medical-expenses">Medical Expenses (EURO):</label>
        <input type="number" id="medical-expenses" placeholder="150"
class="money-input">
        <label for="educational-costs">Educational Costs (EURO):</label>
        <input type="number" id="educational-costs" placeholder="150"
class="money-input">
        <label for="other-expenses">Other Deductible Expenses (EURO):</label>
        <input type="number" id="other-expenses" placeholder="150"
class="money-input">
    </section>
    <div class="buttons">
        <button type="submit" id="submit-btn">Submit</button>
        <button type="reset" id="reset-btn">Reset</button>
    </div>
</form>
<footer>
    <p>For assistance, contact: <a href="mailto:support-
office@tax.euro.com">support-office@tax.euro.com</a></p>
</footer>
</body>
</html>
```

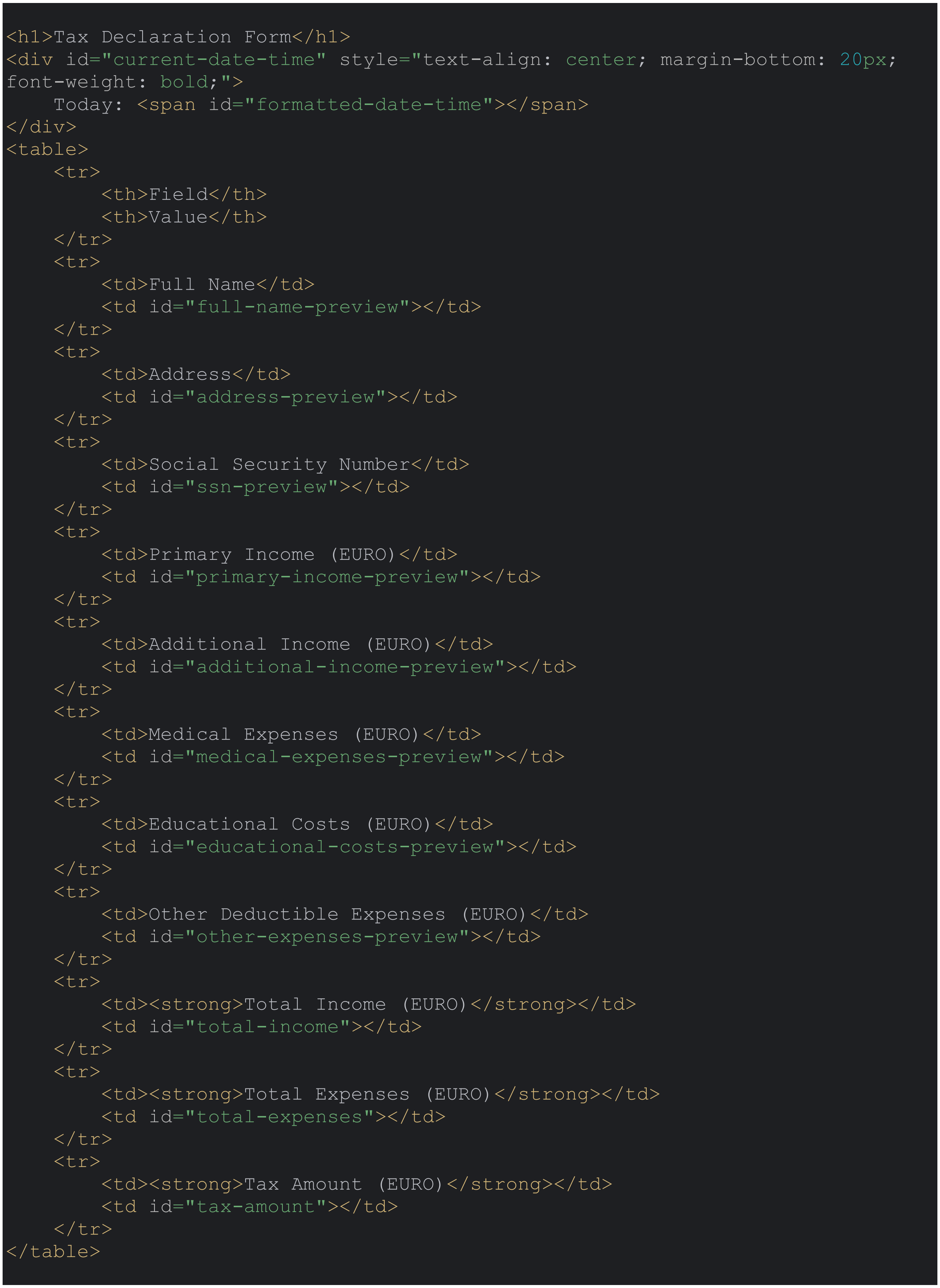
Description HTML (tax-declaration-form.html):

1. Header and Subtitle: Displays the title and subtitle of the form.
2. Current Date and Time: Displays the current date and time at the top of the form in the desired format.
3. Form Sections: Contains sections for personal information, income details, and expense deductions, with appropriate labels and input fields.
4. Validation Messages: Includes a validation area for displaying error messages related to the SSN.
5. Submit and Reset Buttons: Allows for form submission and resetting of the fields.
6. Footer: Provides contact information for assistance.

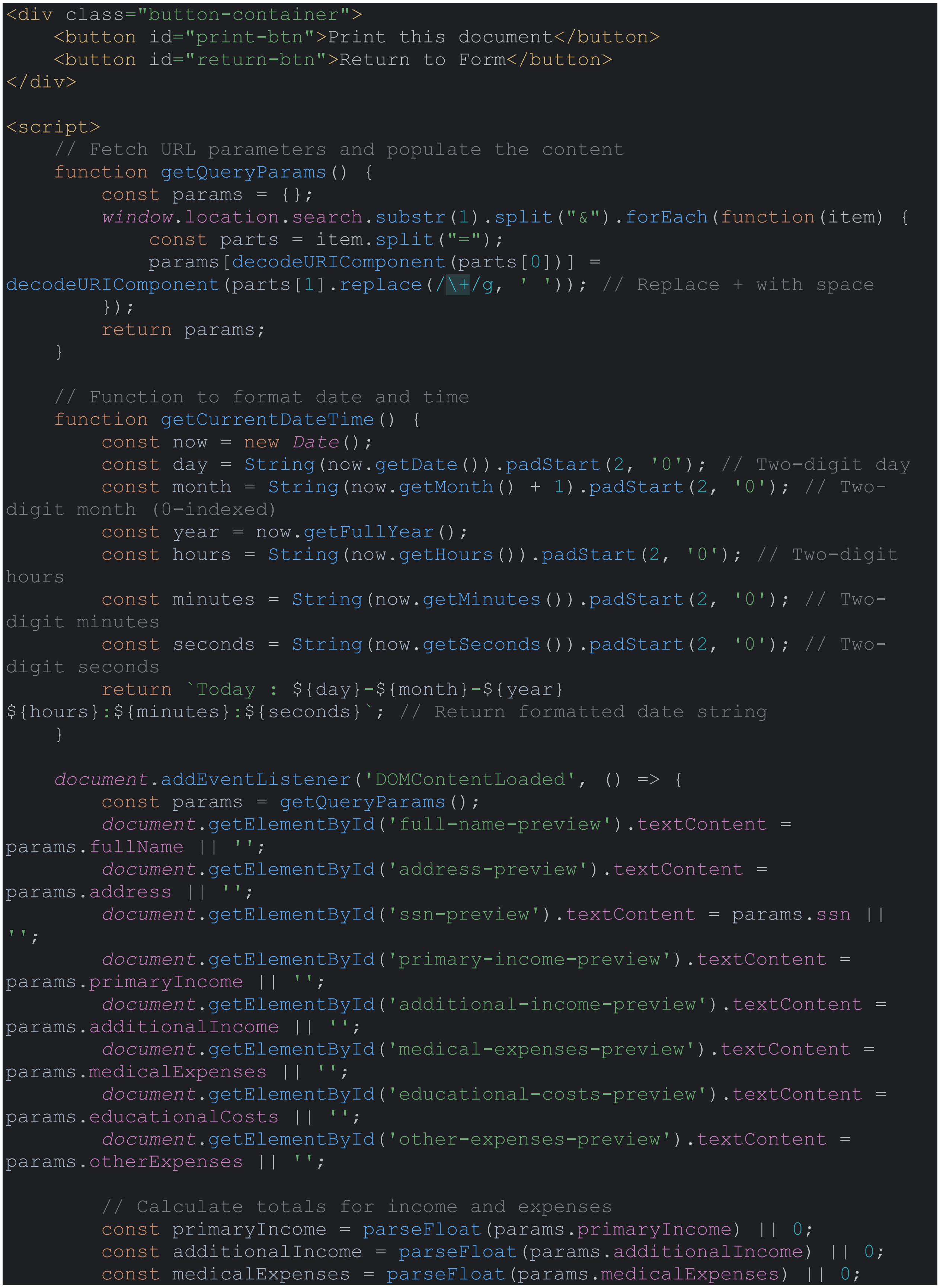
print-preview.html :



```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Print Preview</title>
    <link rel="stylesheet" href="styles.css"> <!--  CSS styles -->
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 20px;
            padding: 20px;
            background-color: #f9f9f9;
            border: 1px solid #ddd;
            border-radius: 10px;
            max-width: 800px; /* Ensuring width for A4 format */
            margin: auto; /* Centering the container */
        }
        h1 {
            text-align: center;
        }
        table {
            width: 100%;
            border-collapse: collapse;
            margin-top: 20px;
        }
        th, td {
            border: 1px solid #ddd;
            padding: 12px;
            text-align: left;
        }
        th {
            background-color: #00457c;
            color: white;
        }
        .button-container {
            margin-top: 20px;
            text-align: center;
        }
        button {
            background-color: #00457c;
            color: #fff;
            border: none;
            padding: 10px 15px;
            border-radius: 5px;
            cursor: pointer;
            font-size: 1em;
            margin: 5px;
        }
        button:hover {
            background-color: #003366;
        }
    </style>
</head>
<body>
```



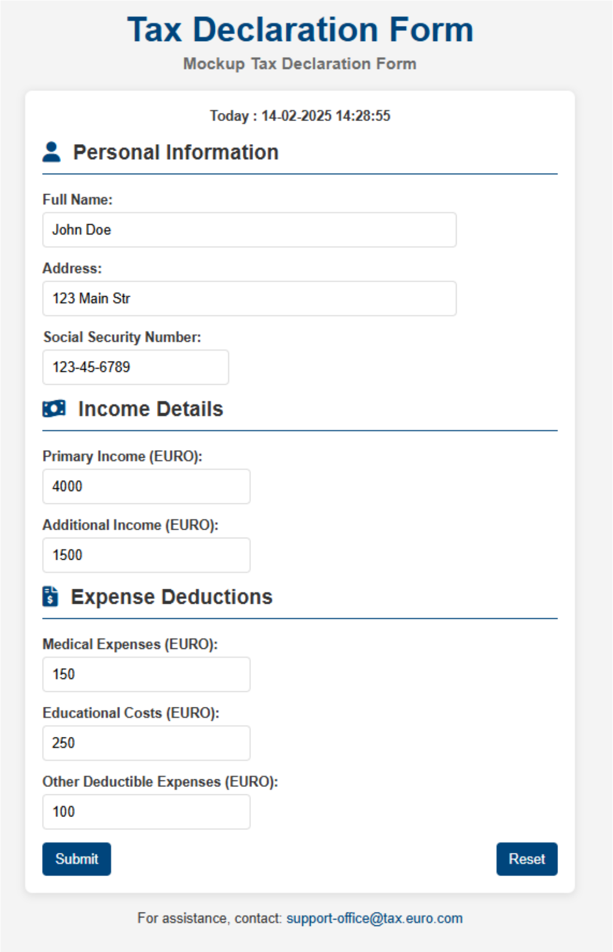
```html
<h1>Tax Declaration Form</h1>
<div id="current-date-time" style="text-align: center; margin-bottom: 20px;
font-weight: bold;">
    Today: <span id="formatted-date-time"></span>
</div>
<table>
    <tr>
        <th>Field</th>
        <th>Value</th>
    </tr>
    <tr>
        <td>Full Name</td>
        <td id="full-name-preview"></td>
    </tr>
    <tr>
        <td>Address</td>
        <td id="address-preview"></td>
    </tr>
    <tr>
        <td>Social Security Number</td>
        <td id="ssn-preview"></td>
    </tr>
    <tr>
        <td>Primary Income (EURO)</td>
        <td id="primary-income-preview"></td>
    </tr>
    <tr>
        <td>Additional Income (EURO)</td>
        <td id="additional-income-preview"></td>
    </tr>
    <tr>
        <td>Medical Expenses (EURO)</td>
        <td id="medical-expenses-preview"></td>
    </tr>
    <tr>
        <td>Educational Costs (EURO)</td>
        <td id="educational-costs-preview"></td>
    </tr>
    <tr>
        <td>Other Deductible Expenses (EURO)</td>
        <td id="other-expenses-preview"></td>
    </tr>
    <tr>
        <td><strong>Total Income (EURO)</strong></td>
        <td id="total-income"></td>
    </tr>
    <tr>
        <td><strong>Total Expenses (EURO)</strong></td>
        <td id="total-expenses"></td>
    </tr>
    <tr>
        <td><strong>Tax Amount (EURO)</strong></td>
        <td id="tax-amount"></td>
    </tr>
</table>
```



```
<div class="button-container">
    <button id="print-btn">Print this document</button>
    <button id="return-btn">Return to Form</button>
</div>

<script>
    // Fetch URL parameters and populate the content
    function getQueryParams() {
        const params = {};
        window.location.search.substr(1).split("&").forEach(function(item) {
            const parts = item.split("=");
            params[decodeURIComponent(parts[0])] =
decodeURIComponent(parts[1].replace(/\+/g, ' ')); // Replace + with space
        });
        return params;
    }

    // Function to format date and time
    function getCurrentDateTime() {
        const now = new Date();
        const day = String(now.getDate()).padStart(2, '0'); // Two-digit day
        const month = String(now.getMonth() + 1).padStart(2, '0'); // Two-
digit month (0-indexed)
        const year = now.getFullYear();
        const hours = String(now.getHours()).padStart(2, '0'); // Two-digit
hours
        const minutes = String(now.getMinutes()).padStart(2, '0'); // Two-
digit minutes
        const seconds = String(now.getSeconds()).padStart(2, '0'); // Two-
digit seconds
        return `Today : ${day}-${month}-${year}
${hours}:${minutes}:${seconds}`; // Return formatted date string
    }

    document.addEventListener('DOMContentLoaded', () => {
        const params = getQueryParams();
        document.getElementById('full-name-preview').textContent =
params.fullName || '';
        document.getElementById('address-preview').textContent =
params.address || '';
        document.getElementById('ssn-preview').textContent = params.ssn ||
'';
        document.getElementById('primary-income-preview').textContent =
params.primaryIncome || '';
        document.getElementById('additional-income-preview').textContent =
params.additionalIncome || '';
        document.getElementById('medical-expenses-preview').textContent =
params.medicalExpenses || '';
        document.getElementById('educational-costs-preview').textContent =
params.educationalCosts || '';
        document.getElementById('other-expenses-preview').textContent =
params.otherExpenses || '';

        // Calculate totals for income and expenses
        const primaryIncome = parseFloat(params.primaryIncome) || 0;
        const additionalIncome = parseFloat(params.additionalIncome) || 0;
        const medicalExpenses = parseFloat(params.medicalExpenses) || 0;
        const educationalCosts = parseFloat(params.educationalCosts) || 0;
        const otherExpenses = parseFloat(params.otherExpenses) || 0;

        const totalIncome = primaryIncome + additionalIncome;
        const totalExpenses = medicalExpenses + educationalCosts +
otherExpenses;
        const taxAmount = totalIncome - totalExpenses; // Difference between
income and expenses

        // Display totals
        document.getElementById('total-income').textContent =
totalIncome.toFixed(2);
        document.getElementById('total-expenses').textContent =
totalExpenses.toFixed(2);
        document.getElementById('tax-amount').textContent =
taxAmount.toFixed(2);

        // Set current date and time on the form
        document.getElementById('current-date-time').textContent =
getCurrentDateTime();

        // Print function
        document.getElementById('print-btn').onclick = function() {
            window.print();
        };

        // Return to form button functionality
        document.getElementById('return-btn').onclick = function() {
            window.history.back(); // Go back to the previous page (the
declaration form)
        };
    });
</script>
```

Description HTML (print-preview.html):

1. Header: Displays the title of the document.
2. Current Date and Time: Shows the current date and time in the specified format at the top of the page.
3. Data Table: Structured table presents the user's tax declaration information, including financial data.
4. Calculated Totals: Displays total income, total expenses, and tax amount based on user input.
5. Print and Return Buttons: Provides options to print the document or return to the original tax declaration form for edits.



Tax Declaration Form

Mockup Tax Declaration Form

Today : 14-02-2025 14:28:55

Personal Information

Full Name:

John Doe

Address:

123 Main Str

Social Security Number:

123-45-6789

Income Details

Primary Income (EURO):

4000

Additional Income (EURO):

1500

Expense Deductions

Medical Expenses (EURO):

150

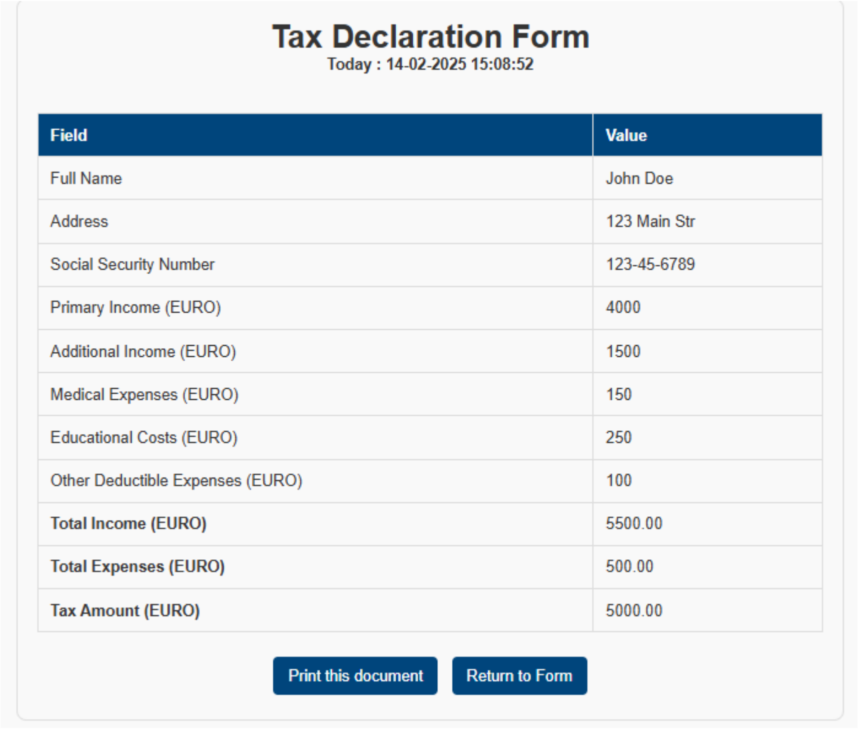
Educational Costs (EURO):

250

Other Deductible Expenses (EURO):

100

For assistance, contact: support-office@tax.euro.com

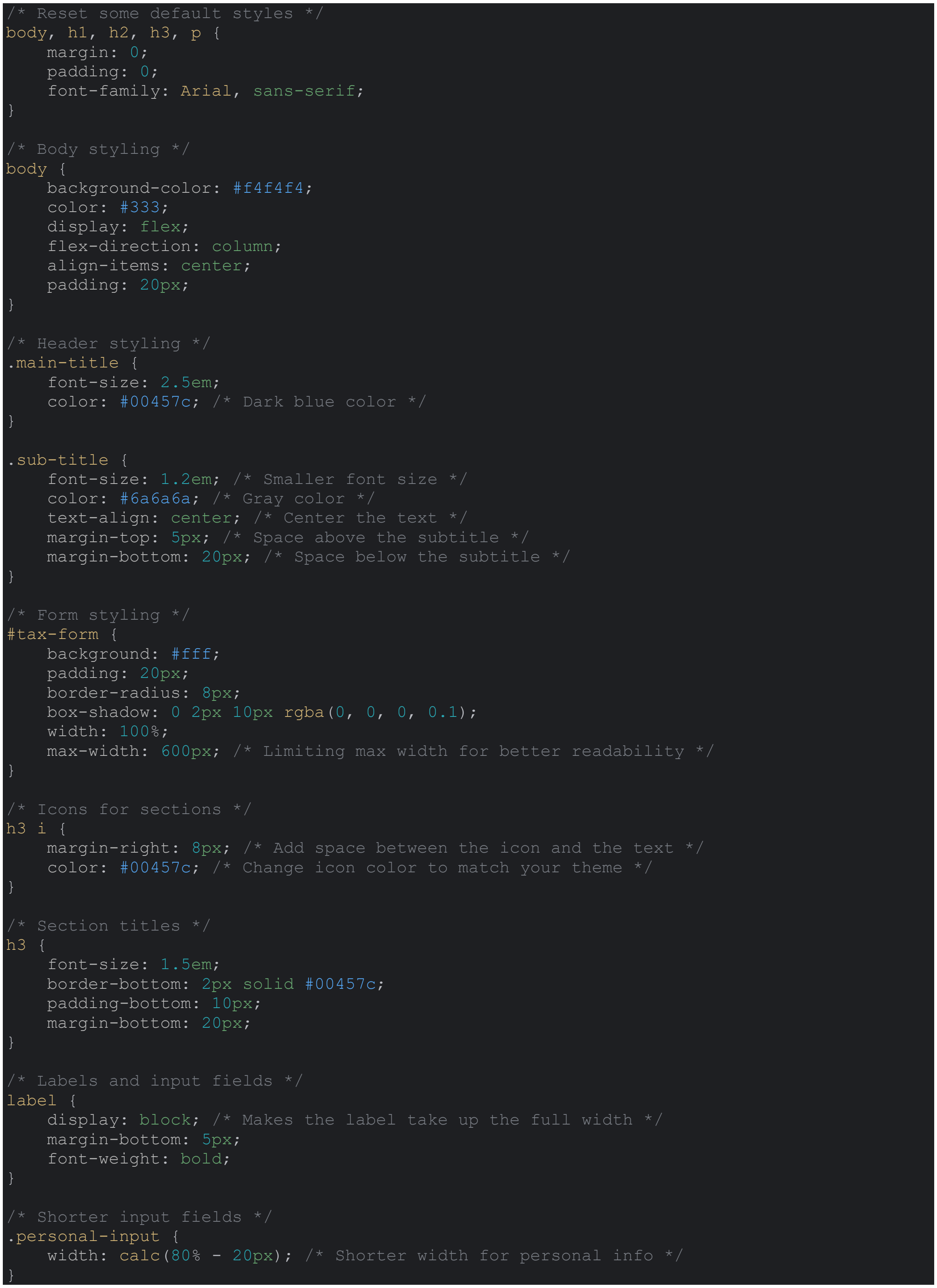


Tax Declaration Form

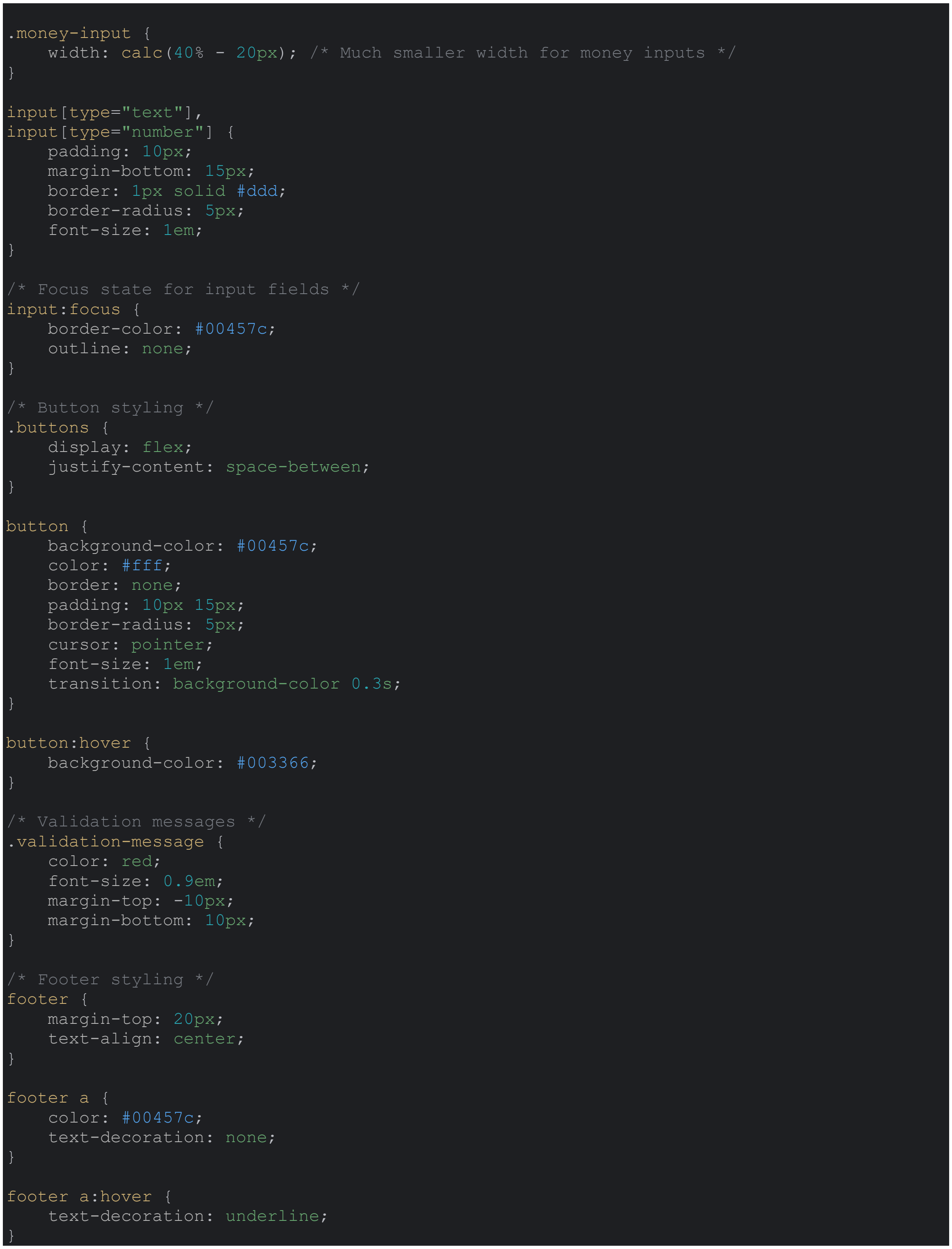
Today : 14-02-2025 15:08:52

Field	Value
Full Name	John Doe
Address	123 Main Str
Social Security Number	123-45-6789
Primary Income (EURO)	4000
Additional Income (EURO)	1500
Medical Expenses (EURO)	150
Educational Costs (EURO)	250
Other Deductible Expenses (EURO)	100
Total Income (EURO)	5500.00
Total Expenses (EURO)	500.00
Tax Amount (EURO)	5000.00

4. **CSS external files maps to HTML using classes.**



```css
/* Reset some default styles */
body, h1, h2, h3, p {
    margin: 0;
    padding: 0;
    font-family: Arial, sans-serif;
}

/* Body styling */
body {
    background-color: #f4f4f4;
    color: #333;
    display: flex;
    flex-direction: column;
    align-items: center;
    padding: 20px;
}

/* Header styling */
.main-title {
    font-size: 2.5em;
    color: #00457c; /* Dark blue color */
}

.sub-title {
    font-size: 1.2em; /* Smaller font size */
    color: #6a6a6a; /* Gray color */
    text-align: center; /* Center the text */
    margin-top: 5px; /* Space above the subtitle */
    margin-bottom: 20px; /* Space below the subtitle */
}

/* Form styling */
#tax-form {
    background: #fff;
    padding: 20px;
    border-radius: 8px;
    box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);
    width: 100%;
    max-width: 600px; /* Limiting max width for better readability */
}

/* Icons for sections */
h3 i {
    margin-right: 8px; /* Add space between the icon and the text */
    color: #00457c; /* Change icon color to match your theme */
}

/* Section titles */
h3 {
    font-size: 1.5em;
    border-bottom: 2px solid #00457c;
    padding-bottom: 10px;
    margin-bottom: 20px;
}

/* Labels and input fields */
label {
    display: block; /* Makes the label take up the full width */
    margin-bottom: 5px;
    font-weight: bold;
}

/* Shorter input fields */
.personal-input {
    width: calc(80% - 20px); /* Shorter width for personal info */
}
```



```
.money-input {
    width: calc(40% - 20px); /* Much smaller width for money inputs */
}

input[type="text"],
input[type="number"] {
    padding: 10px;
    margin-bottom: 15px;
    border: 1px solid #ddd;
    border-radius: 5px;
    font-size: 1em;
}

/* Focus state for input fields */
input:focus {
    border-color: #00457c;
    outline: none;
}

/* Button styling */
.buttons {
    display: flex;
    justify-content: space-between;
}

button {
    background-color: #00457c;
    color: #fff;
    border: none;
    padding: 10px 15px;
    border-radius: 5px;
    cursor: pointer;
    font-size: 1em;
    transition: background-color 0.3s;
}

button:hover {
    background-color: #003366;
}

/* Validation messages */
.validation-message {
    color: red;
    font-size: 0.9em;
    margin-top: -10px;
    margin-bottom: 10px;
}

/* Footer styling */
footer {
    margin-top: 20px;
    text-align: center;
}

footer a {
    color: #00457c;
    text-decoration: none;
}

footer a:hover {
    text-decoration: underline;
}
```

Description CSS:

- **Reset Styles:** Basic resets for margins and paddings to ensure consistency across browsers;
- **Body Styling:** Background color, font family, and center alignment for the entire body;

- **Header Styling**: Specific colors and sizes for the main and subtitle;
- **Form Styling**: Adding padding, a background, border radius, and shadow for the form to enhance appearance;
- **Section Titles**: Styled headers for sections with borders to separate them visually;
- **Label and Input Fields**: Block display for labels, styling input fields for padding, borders, and focus effects;
- **Button Styling**: Styled buttons with hover effects for better interactivity;
- **Validation Messages**: Specific color and styles for validation messages, making them stand out in red;
- **Footer Styling**: Simple styling for footer text and links;

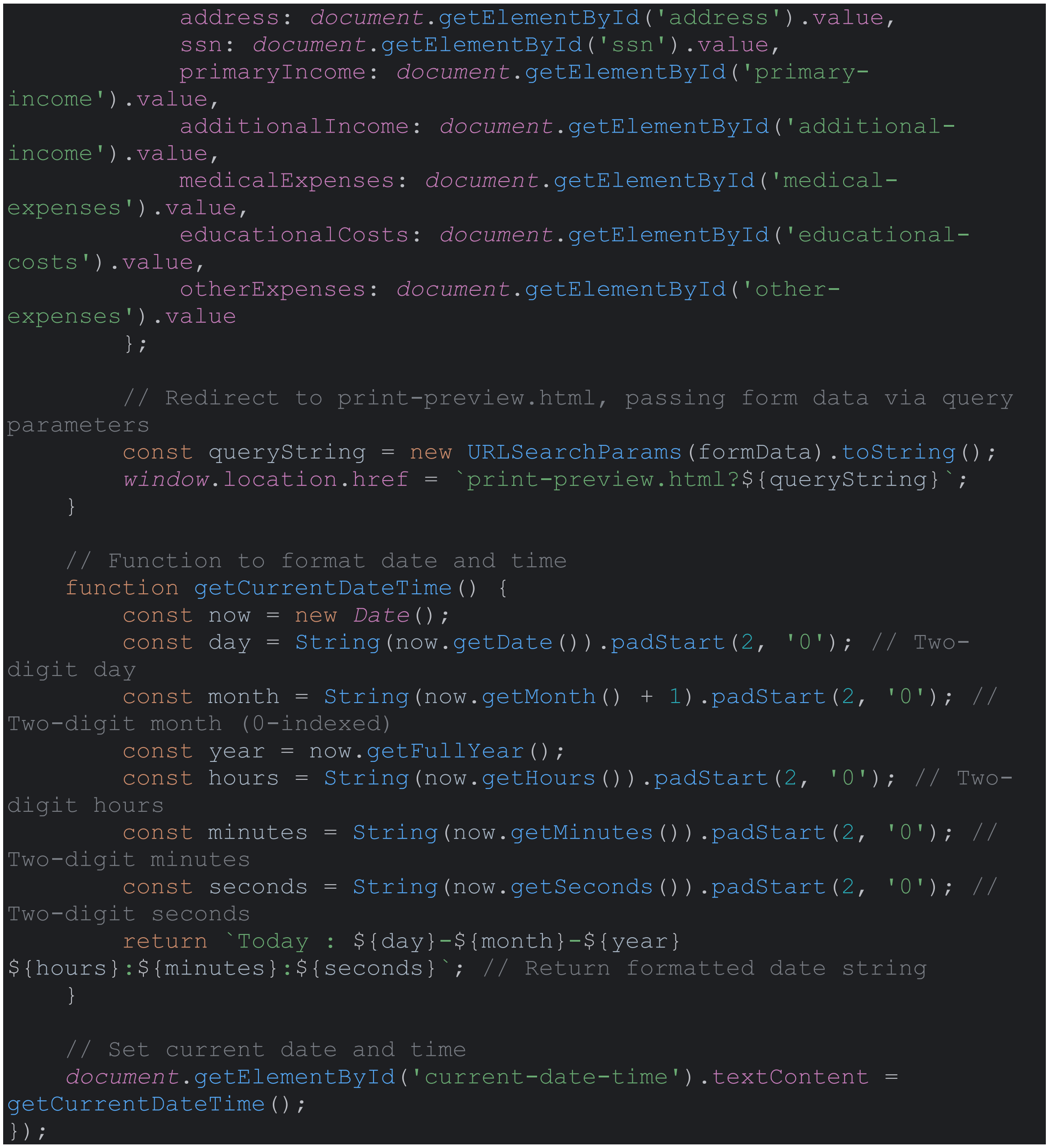
Relations HTML and CSS:

Provided CSS code in a file named **styles.css** within the same directory as HTML file;

HTML file correctly links to the styles.css using the <link> tag in the <head> section;

5. **JS events (content of file and description provided).**

```
document.addEventListener('DOMContentLoaded', () => {
    const form = document.getElementById('tax-form');
    const ssnInput = document.getElementById('ssn');
    const ssnError = document.getElementById('ssn-error');

    form.addEventListener('submit', function(event) {
        ssnError.textContent = '';

        if (!validateSSN(ssnInput.value)) {
            event.preventDefault(); // Prevent form submission
            ssnError.textContent = 'Please enter a valid Social
Security Number (format: XXX-XX-XXXX).';
        } else {
            event.preventDefault(); // Prevent the default form
submission
            showPrintPreview(); // Call the function to show print
preview
        }
    });

    function validateSSN(ssn) {
        const ssnPattern = /^\d{3}-\d{2}-\d{4}$/; // Pattern: XXX-XX-
XXXX
        return ssnPattern.test(ssn);
    }

    function showPrintPreview() {
        const formData = {
            fullName: document.getElementById('full-name').value,
```



```
            address: document.getElementById('address').value,
            ssn: document.getElementById('ssn').value,
            primaryIncome: document.getElementById('primary-
income').value,
            additionalIncome: document.getElementById('additional-
income').value,
            medicalExpenses: document.getElementById('medical-
expenses').value,
            educationalCosts: document.getElementById('educational-
costs').value,
            otherExpenses: document.getElementById('other-
expenses').value
        };

        // Redirect to print-preview.html, passing form data via query
parameters
        const queryString = new URLSearchParams(formData).toString();
        window.location.href = `print-preview.html?${queryString}`;
    }

    // Function to format date and time
    function getCurrentDateTime() {
        const now = new Date();
        const day = String(now.getDate()).padStart(2, '0'); // Two-
digit day
        const month = String(now.getMonth() + 1).padStart(2, '0'); //
Two-digit month (0-indexed)
        const year = now.getFullYear();
        const hours = String(now.getHours()).padStart(2, '0'); // Two-
digit hours
        const minutes = String(now.getMinutes()).padStart(2, '0'); //
Two-digit minutes
        const seconds = String(now.getSeconds()).padStart(2, '0'); //
Two-digit seconds
        return `Today : ${day}-${month}-${year}
${hours}:${minutes}:${seconds}`; // Return formatted date string
    }

    // Set current date and time
    document.getElementById('current-date-time').textContent =
getCurrentDateTime();
});
```

Description code of script.js :

1. Event Listener for DOMContentLoaded: Ensures the script runs once the DOM is fully loaded.
2. Form Submission Handling: Validates the SSN and either displays an error message or redirects to the print preview.
3. Validation Function: Checks if the SSN format is correct.
4. Print Preview Redirection: Collects form data and redirects to the print-preview.html page with the data as query parameters.
5. Date and Time Formatting Function: Returns a formatted date string in the specified format.
6. Display Current Date and Time: Sets the current date and time on the main form page.