Task 1: Basic Syntax and DOM Manipulation

Level: Beginner

Description:

Create a simple JavaScript application that processes user input for their name, age, and whether they are a student. The application should display a personalised message based on the input. Additionally, implement a function to toggle a boolean value for a separate task.

Objective:

Implement basic JavaScript concepts including variables, data types, conditional statements, loops, and functions.

Pre-requisites:

- Understanding of basic JavaScript (variables, data types, functions)
- Familiarity with conditional statements
- Knowledge of loops

Concepts Covered:

- Variables and data types
- Conditional statements
- Loops

Instructions:

- 1. Define variables to store the user's name, age, and student status.
- 2. Create a function to generate a personalised message based on the input values.
- 3. Use conditional statements to check if the user is a student and create a personalised message.
- 4. Use a loop to repeat the personalised message based on the user's age (if age is less than or equal to 10, repeat the message that many times).
- 5. Implement a function to toggle a boolean value.

Example Input:

Set 1:

• Name: "Alice"

• Age: 5

• Is Student: true

Set 2:

Name: "Bob"

• Age: 15

• Is Student: false

Set 3:

• Name: "Charlie"

• Age: 8

• Is Student: true

Expected Output:

Set 1:

```
"Hello, my name is Alice and I am a student."

"Hello, my name is Alice and I am a student."

"Hello, my name is Alice and I am a student."

"Hello, my name is Alice and I am a student."

"Hello, my name is Alice and I am a student."
```

Set 2:

"Hello, my name is Bob."

Set 3:

```
"Hello, my name is Charlie and I am a student."

"Hello, my name is Charlie and I am a student."

"Hello, my name is Charlie and I am a student."

"Hello, my name is Charlie and I am a student."

"Hello, my name is Charlie and I am a student."

"Hello, my name is Charlie and I am a student."

"Hello, my name is Charlie and I am a student."

"Hello, my name is Charlie and I am a student."
```

GitHub Instructions

1. Open in Visual Studio Code:

- After clicking on the "Open in Visual Studio Code" button from the GitHub Classroom confirmation page, Visual Studio Code (VSCode) will open the repository directly.
- o If prompted, select "Open" or "Allow" to open the repository in VSCode.

2. Open the Terminal in VSCode:

 In VSCode, open a terminal by selecting Terminal > New Terminal from the top menu.

3. Create Your Directory:

In the VSCode terminal, navigate to the tasks/student directory:

```
Unset cd tasks/student
```

Create a new directory with your GitHub username (replace your-username with your actual GitHub username):

```
Unset
mkdir your-username cd your-username
```

4. Create a Directory for the Task:

Create a new directory for the task, e.g., task1:

```
Unset
mkdir task1 cd task1
```

5. Complete the Task:

 In VSCode, create a new file named index.js in your task1 directory and Write your solution in the index.js file.

6. Run and Test Your Code:

In the VSCode terminal, navigate back to the root directory of the repository:

```
Unset cd ../../../
```

Run your code to ensure it works correctly. Use the following commands:

```
Unset
node tasks/student/your-username/task1/index.js "Alice" 5 true
node tasks/student/your-username/task1/index.js "Bob" 15 false
node tasks/student/your-username/task1/index.js "Charlie" 8 true
node tasks/student/your-username/task1/index.js toggle
```

7. Commit Your Changes:

In the VSCode terminal, add your changes to git:

```
Unset
git add tasks/student/your-username/task1/index.js
```

Commit your changes with a meaningful message:

```
Unset
git commit -m "Completed task 1"
```

Push your changes to your repository:

```
Unset
git push origin main
```

8. Create a Pull Request:

- Go to your repository on GitHub.
- o Click on the "Pull Requests" tab.
- Click the "New Pull Request" button.
- Ensure the base repository is the original template repository and the base branch is main.
- Ensure the head repository is your forked repository and the compare branch is main.
- Click "Create Pull Request".
- Add a title and description for your pull request and submit it.

Summary of Commands

```
Unset
# Open in Visual Studio Code
# Open terminal in VSCode
# Navigate to the tasks/student directory
cd tasks/student
# Create your own directory and navigate to it
mkdir your-username
cd your-username
# Create a directory for the task and navigate to it
mkdir task1
cd task1
# Complete the task by editing index.js
# Navigate back to the root directory
cd ../../../
# Run your code
node tasks/student/your-username/task1/index.js "Alice" 5 true
node tasks/student/your-username/task1/index.js "Bob" 15 false
node tasks/student/your-username/task1/index.js "Charlie" 8 true
node tasks/student/your-username/task1/index.js toggle
# Add, commit, and push your changes
git add tasks/student/your-username/task1/index.js
git commit -m "Completed task 1"
git push origin main
# Create a pull request on GitHub
```