Project Title	Virtual Pet Simulator
Technologies	HTML, CSS, JavaScript
Project Difficulties level	Hard

Project Description:

In this web development assignment, you will create a Virtual Pet Simulator using HTML, CSS, and JavaScript. The goal of this project is to design an interactive web application that simulates the experience of taking care of a virtual pet. This project combines front-end development skills with user interaction.

Project Requirements:

1. Virtual Pet Design:

- Create a virtual pet character with visual assets. You can design your pet using images or simple animations.

- Your virtual pet should have attributes such as hunger, happiness, and energy.

2. User Interface:

- Design an engaging user interface for the Virtual Pet Simulator.

- Use HTML for structuring the layout, including the pet character and status indicators.

- Apply CSS for styling, including visual effects like animations and transitions.

3. Pet Interaction:

- Implement user interactions to take care of the virtual pet. Users should be able to feed, play with, and put the pet to sleep.

- These interactions should affect the pet's attributes, such as reducing hunger and increasing happiness.

4. Attribute Display:

- Display the pet's attributes (e.g., hunger, happiness, energy) on the screen. Use graphical representations like progress bars or icons.

- Update these attributes in real-time as users interact with the pet.

5. Pet Animation:

- Animate the pet character to reflect its current state. For example, when the pet is hungry, it could appear sad, and when it's happy, it could display a cheerful animation.

6. Game Logic:

- Implement game logic to manage the pet's attributes, interactions, and transitions between states (e.g., from awake to asleep).

- Ensure that the pet's attributes can increase or decrease over time.

7. Extra Features (Optional):

- If you want to add more complexity, consider features like multiple pet types, a day-night cycle, or achievements.

Submission Requirements:

- Submit your project as a ZIP file containing HTML, CSS, and JavaScript files.

- Include a README file with instructions on how to interact with the Virtual Pet Simulator.

Grading Criteria:

Your project will be evaluated based on the following criteria:

- Functionality: Does the Virtual Pet Simulator effectively simulate the experience of taking care of a virtual pet?

- User Interface: Is the Virtual Pet Simulator visually appealing and user-friendly?

- Code Quality: Is the code well-structured, organized, and commented?

- Additional Features: If you've added extra features, they will be considered in the assessment.

Tips:

- Plan the pet's behavior and attribute changes carefully.

- Test the Virtual Pet Simulator to ensure a smooth and engaging user experience.

- Encourage users to interact with the pet regularly to keep it happy and healthy.