



HINDUSTHAN INSTITUTE OF TECHNOLOGY

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Innovations in Teaching Learning Process

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Gamified Learning Experience – FlexBox Froggy

Objectives:

- FlexBox Froggy includes properties like flex-direction, justify-content, align-items, and more.
- Flexbox Layouts provides a series of challenges or levels where users need to arrange a group of frogs on lily pads using Flexbox properties.
- Flexbox Froggy provides a hands-on, interactive experience, allowing users to experiment with Flexbox properties and see the immediate visual results.
- It helps users to understand how changes in Flexbox properties impact the layout of elements on a webpage.
- By framing the learning process as a game with a clear objective.

Description:

- Open the Flexbox Froggy website in a web browser.
- Begin with the first level. Levels are typically arranged in order of increasing complexity, so it's recommended to start from the beginning.
- Read the instructions for the level to understand the goal and requirements for arranging the frogs on the lily pads.
- Use the Flexbox properties (e.g., flex-direction, justify-content, align-items, etc.) to manipulate the layout of the frogs on the lily pads.

- Observe the visual changes on the screen as you adjust Flexbox properties.
- Once you believe you have successfully completed the level, submit your solution. If the solution is correct, you may proceed to the next level.
- Continue progressing through the levels one by one.
- Work through all the levels until you reach the end of the game.

Outcomes:

- Participants gain familiarity with various Flexbox properties, including flex-direction, justify-content, align-items, flex-grow, flex-shrink, and more.
- Users develop a clear understanding of fundamental Flexbox concepts such as flex containers, flex items, main and cross axes, and how these elements interact to create flexible and responsive layouts.
- The game provides hands-on experience in using Flexbox properties to manipulate the layout of elements on a webpage.
- Participants enhance their problem-solving skills by tackling a series of progressively challenging layout puzzles.
- Flexbox Froggy is structured in a way that introduces concepts gradually, allowing users to build on their knowledge from one level to the next.
- The immediate visual feedback in the game allows users to see the effects of their Flexbox property adjustments in real-time.
- The gamified nature of Flexbox Froggy makes the learning experience enjoyable and engaging.
- Completing Flexbox Froggy provides users with confidence in their ability to use Flexbox for designing layouts in real-world web development projects.
- The game serves as a foundation for understanding how to create flexible and responsive layouts efficiently.

Photos:

