

Connect-Four: UNIT 11 Report

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App URL: <https://edeneault.github.io/Connect-Four/> GitHub Repository:
<https://github.com/edeneault/Connect-Four/tree/main>

Features

- Game Start and Reset Buttons.
- Mark-up includes Nav Bar with the buttons and persisted value scoreboard. Nav Bar is collapsable.
- Token drop is CSS Animated- *vert-slide-in* and *star-spin*.
- Local Storage is uses to persist - shortest and longest game values in the scoreboard.
- 3D CSS EyeBall integrated into the background images for "large" viewports (above width: 1320px). @Media inquiries included to remove if the user viewport is to small to support "positioning".
- Responsive Behavior - adapts to smaller viewports with the use of BootStrap4 classes and CSS @media inquiries.

Known Issues and Future Study

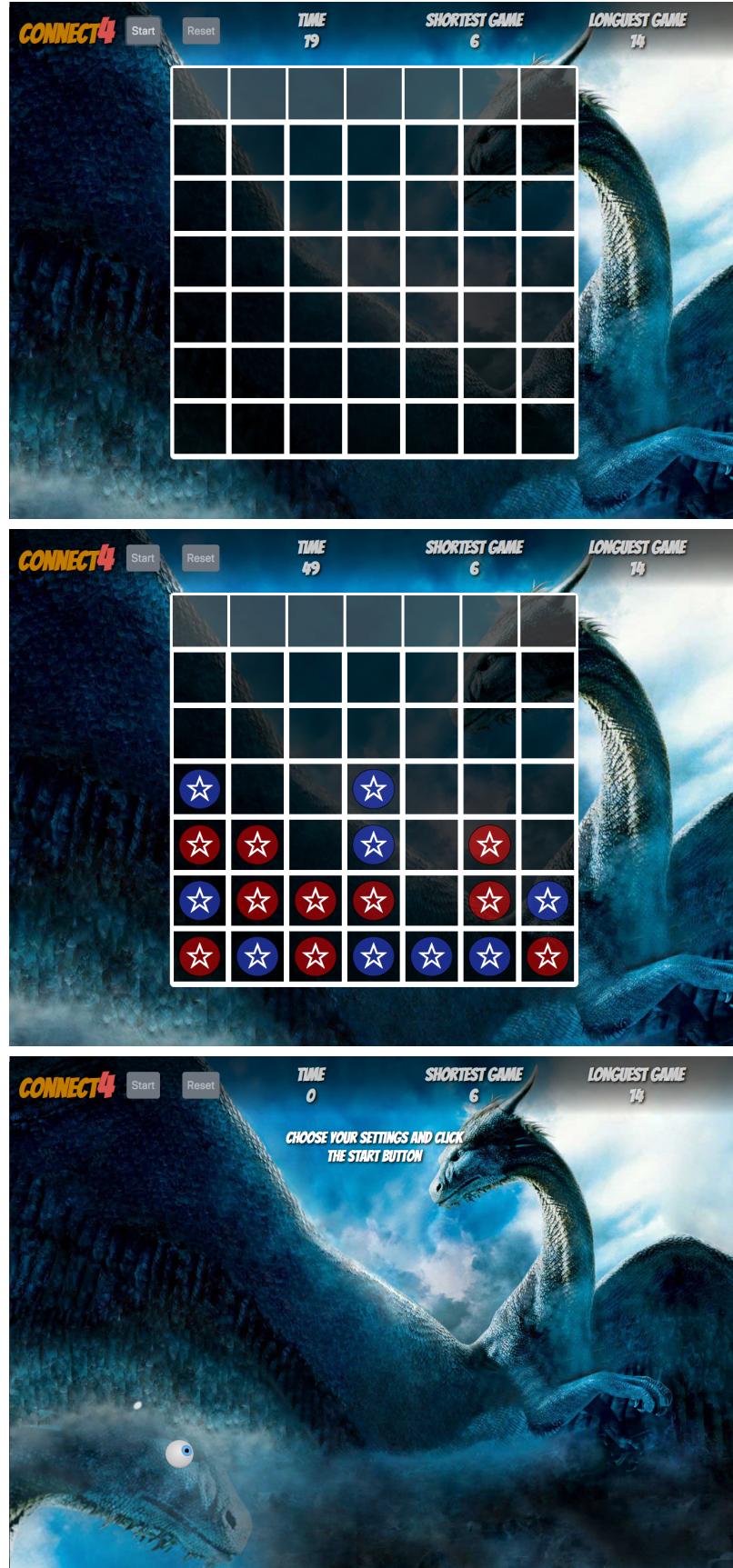
- Alignment of falling tokens is off on smaller screens. Needs further study to fix.
- Adding difficulty settings by dynamically adjusting height and width values using user input. To be implemented.
- The code would benefit from utilizing more economical syntax/structure code i.e. higher order functions and ES 2015 functions.
- As mentioned, in the project hand-out, checkForWin() could be more efficient. I think that using a set of *array-like collections* for winning states in combination with *some* would return quickly if the state of the board has a winner.

Process & Learnings

- The process that I followed was the following:
 - Game design reflection: functions needed and game logic.
 - Assignment step-by-step to build basic app functionality and mark-up.
 - Addition of additional helper functions
 - Polishing of html and css
 - Commenting and Documentation
- Higher order functions and ES2015 is a challenge: My learning is not settled and I don't yet have full clarity on when and how to implement in my coding style. Surely, this will come in time with more practice.

- Experimented with 3d capabilities of css and got some practice with css positioning. (and it's limitations when designing for responsiveness)

Game Renderings



Technologies && Third Party Libraries && Fonts

- Bootstrap4: <https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css>
- Google Font API: <https://fonts.googleapis.com/css?family=Bangers>

Sources && References

- Code Base provided by SpringBoard - Connect-four (Unit 11)
- Eye Ball css was adapted from the code in the following article:
<https://cssanimation.rocks/spheres/>
- Background Image: <https://wallpaperaccess.com/full/199962.jpg> (non-monitized use is explicitly stated as permitted)