Designing A Highly Interactive Web-based Tutorial

Executive Summary

Our client is a leading American Foundation for chess that teaches valuable thinking and life skills to children through the game of chess. The client wanted to develop a simple and easy to understand tutorial for students in 2nd grade and 3rd grade. HashedIn helped the team in building an interactive chess tutorial website.

Hashedin

Problem Statement

Through the game of chess, our client helps young children improve their creative and problem-solving skills. To help their students in 2nd grade and 3rd grade understand the game, a chess tutorial had to be developed. This application had to be engaging, interactive, and easy for the children to use and understand.

Business Requirements

End Objective

The requirement was to create an interactive chess tutorial for young children in the 2nd and 3rd grade.

Key Requirements

The solution was developed to enable the team to achieve the following:

▶ Enhance performance through an interactive web app

▶ Synchronization capabilities to align video and lip-sync

Our Solution Structure

We built a web-based tutorial that consisted of multiple video tutorial lessons which were categorised as Basic and Advance. Each lesson would have a video lesson with instructions and interspersed with interactive activities and review questions at the end of the lessons.

Solution Dynamics

All the activities involved user interaction with the chessboard. Hence, a library was required not only to render the board but also to allow interactions with it. We used open source libraries to meet a majority of the requirements. This library consists of two files chessboard.js and chess.js. These two libraries are designed to handle the chess move generation/validation, piece placement/movement, and check/checkmate/stalemate detection. It basically had all the capabilities except AI.

User Interface

The UI is pretty simple. In the header, the user can select a lesson from a dropdown that lists all the lessons. As the end users were young kids, it is important to keep them engaged and focussed. Hence we came up with some creative ideas to make the UI more engaging and keep them attentive. Animations and sound effects were incorporated to respond to any action by the user. To make the app more interactive and encouraging to the kids, a little dinosaur pops up with clues, appreciations or instructions.

Technology Stack

▶ **Front end:** JQuery, NodeJS, CSS, HTML

Business Outcomes

The client had an easy to understand and high-performance chess tutorial app. The key benefits of the app were as follows:

▶ Kid friendly application without any glitches

▶ Highly interactive app designed to enhance student's performance

▶ Access to a systematic tutorial method

HashedIn has helped many promising firms across the globe by building customized solutions to give the users a completely hassle-free experience. Kindly let us know if you have any specific problem/use case, where we can provide more information or consult you.

https://hashedin.com/contact-us/