



“The Fun Way to Learn Software Testing”

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What is CodeFighter?

CodeFighter is a fun, yet educational defense game that engages students to learn new technological methodologies. Its ultimate goal is to teach the different aspects of black box and white box testing. Through this unique apparatus, it forces students to think in a strategic manner in order to complete the game.

Software Testing

Software Testing is an important part of the development of any software. It can be overlooked as unnecessary but it is in-fact a large part of any software launch. It not only checks for bugs but it helps maintain and keep your software up to date. That is why it is important that methodologies are taught to create efficient software.

Black Box

Black-box testing is a method of software testing that examines the functionality of an application without peering into its internal structures or workings. This method of **test** can be applied to virtually every level of software

testing: unit, integration, system and acceptance.

White Box

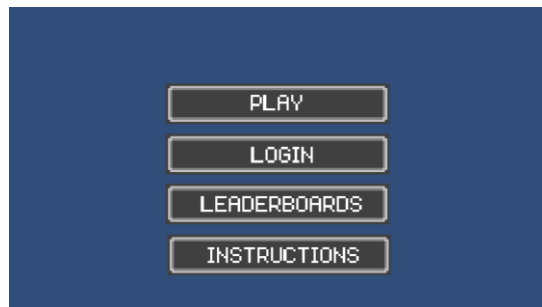
White-box testing (also known as clear **box testing**, glass **box testing**, transparent **box testing**, and structural **testing**) is a method of **testing** software that **tests** internal structures or workings of an application, as opposed to its functionality (i.e. black-**box testing**).

Installation:

The game can run on any device that can use web browsers that support WebGL. No downloads or extensions required.

There is minimal action the client needs to take to set up this application. The latest version can run on a variety of platforms such as MacOS, Linux, and Windows. To run, along with the application, user must have the game files: CODEFIGHTER_DATA.

Starting the game:



One the application has launched, the user will be able to see the menu page, where the buttons, “Play”, “Login”, “Leader-boards” an “Instructions” are located in the center of the

screen. Users who are guests and do not have an account with the application can play without an option to save their progress in the game.

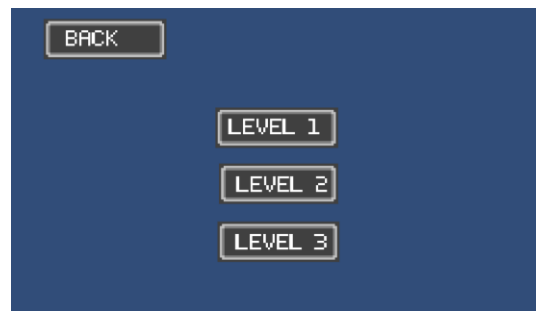
There is also a leaderboard that can be viewed and instructions on how to play the game are available.

Users that do have a user account and wish to access it, will need to click on “Login”, and they will be re-directed to a window that will request the user's username and password so that their progress and data can become accessible to the user. They need to put in the correct combination to access all of that information.



Game Play:

The game starts with a level one. You can only go to the next level once the previous level has been completed.



The back button re-directs user the menu page.

Each level has the same concept, but it get's progressively difficult once you go the next level.

The user is given a certain amount of lives and a time that you need to keep he monsters back.

For black box monsters, you need to place anons in certain areas of the map to try and kill them, white for white box monsters trivia is triggered that the user needs to give the correct



answer o to kill the white box monsters. If the wrong answer is given, the monster is able to pass through and attack the tower which causes the user to lose a life an money. If the user is able to ward off the wave of monsters till the time is done an with live left, the user is able to go to the next left. If not, game over.

Why should you play this game?

It is fun while incorporating some lessons. The user might not even be able to tell they have been learning!