Report

Abstract of the project:

'Quench the thirst' is a web-based game meant to educate children and youth about the water crisis and water poverty worldwide. The story and game guides you through a simulation of Chiru's arduous struggles to find water each and every day. The player navigates obstacles like tumbleweeds and birds by jumping and ducking over them as they block their way. Every time an obstacle hits the player, water is lost -emulating the difficult landscape Chiru faces bringing water home to her family. The only way to succeed is to arrive home without having lost all of the water. The amount of water the player begins with is randomly generated (but reflects real circumstances), and the background also changes colour based on the time of day.

Objectives

The objectives are:

The main objective of the save water campaign is to increase awareness of consumers about the scarcity of clean water. We aim to reduce consumer everyday water usage rate due to the water crisis in Malaysia. We hope that through the campaign, consumers can learn how to save water and use the water wisely.

As games are more influencing on the people now a days we came up with a game which explains us the scarcity of water and helps us understand the importance of water.

We aim to target all levels of consumer including children, students and the whole family. We would educate consumers about the importance of safe water and the seriousness of scarcity of clean water supply. We must think for the next generation, therefore saving water starts from now

Software Requirement Specification

User requirement:

OS: Windows xp or above

Web browser: any web browser which supports html5

Software Requirements:

- Operating System : Microsoft Windows 10
- HTML
- CSS
- Javascript

Hardware Requirements:

- RAM : 4GB and higher
- Processor : Intel[i3] and above
- Hard disk : 500GB

Implementation

Implementation is the stage of the project when the theoretical design is turned into a working system. Thus, it can be considered to be the most critical stage in achieving a successful new system and in giving the user, confidence that the new system will work and be effective.

Technologies

Like every other computer network out there, the Web is made up of two main components: the web browser client and the web server.

The client requests the data and the server **shares** or **serves** its data. To achieve this, the two parties have to establish an agreement. That agreement is called the **Application Programming Interface** or in short, the **API.** But this data has to be arranged and formatted into a form that's understandable by end.

This is where HTML, CSS, JavaScript and the whole concept of web development come into play. Together we use these three languages to format, design and program web pages.

Java script:

JavaScript (shortened to JS) is a lightweight, interpreted, object-oriented language with first-class functions, and is known for the scripting language for Web pages, but mostly used in non-browsing environment . It is a prototype-based, scripting language that is dynamic, and supports object-oriented, and functional programming styles.

HTML:

HTML (HyperText Markup Language) is the basic building block of the Web. It defines the meaning and structure of web content. Other technologies besides HTML are generally used to describe a web page's appearance/presentation (CSS) or functionality/behavior (JavaScript).

HTML helps you structure your page into elements such as paragraphs, sections, headings, navigation bars, and so on.

HTML uses "markup" to annotate text, images, and other content for display in a Web browser. HTML markup includes special "elements" such as <head>, <title>, , <p> , <img>, <header>, <body>, <audio>, so on.

CSS:

Cascading Style Sheets (CSS) is a stylesheet language used to describe the presentation of a document written in HTML or XML (including XML dialects such as SVG, MathML or XHTML). CSS describes how elements should be rendered on screen, on paper, in speech, or on other media.

Overview:

HTML : HTML provides the basic structure of sites, which is enhanced and modified by other technologies like CSS and JavaScript.

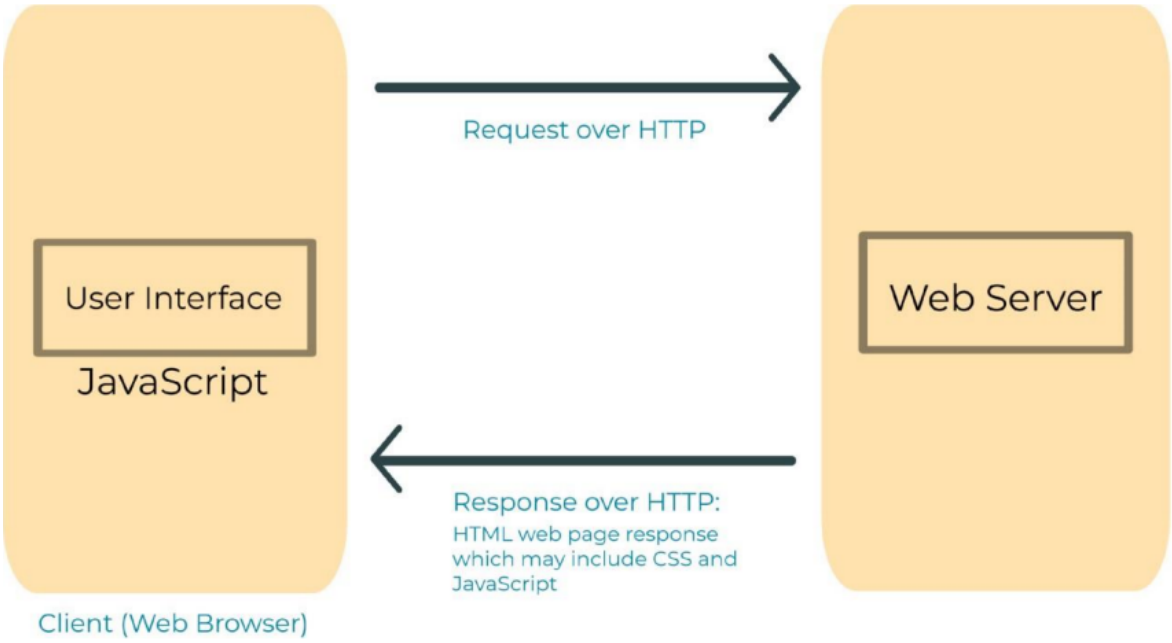
CSS: CSS is used to control presentation, formatting, and layout.

JavaScript: JavaScript is used to control the behavior of different elements.

Working of the project

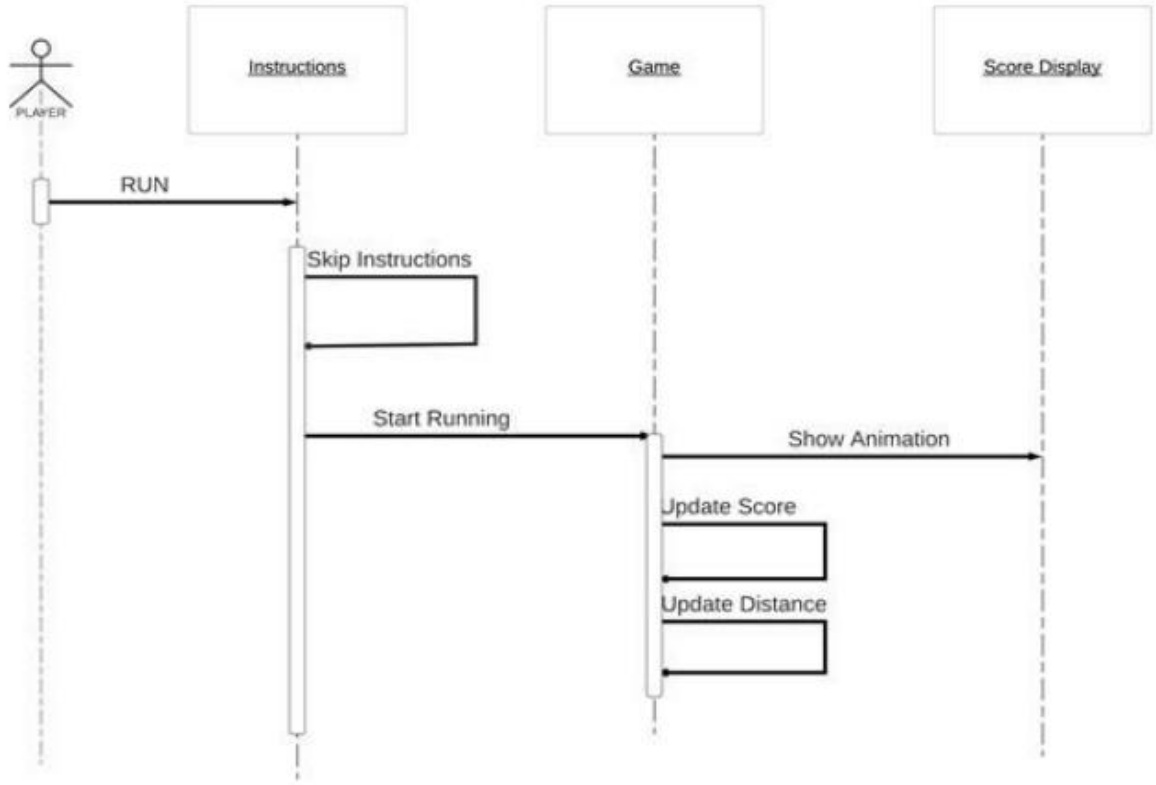
Architecture :

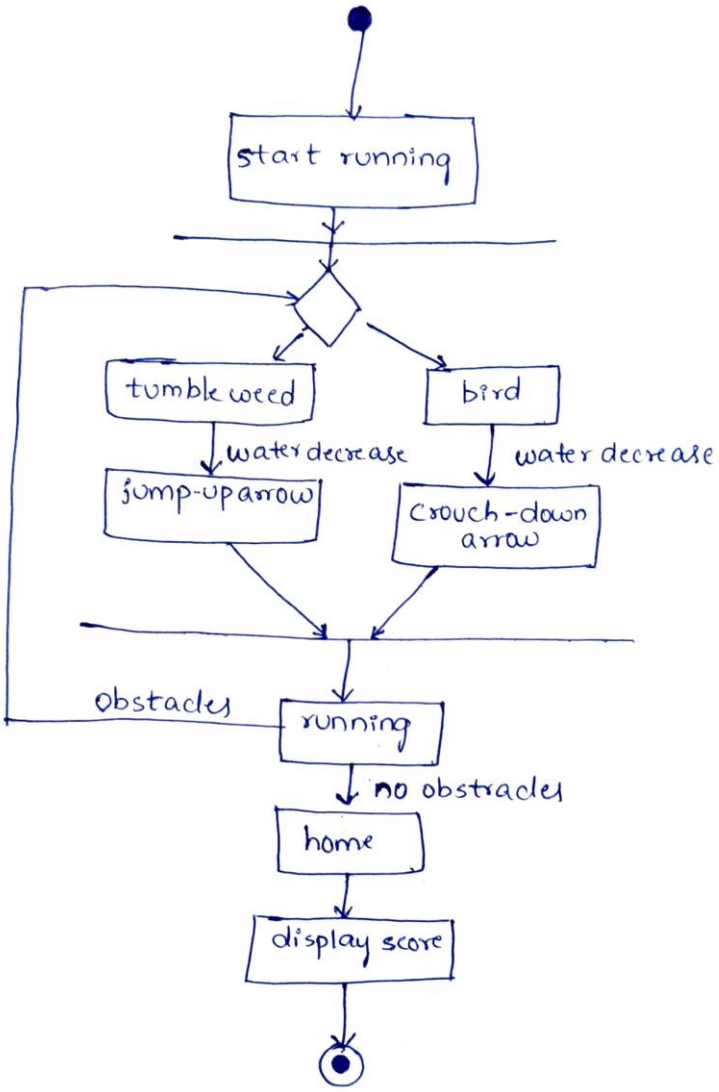
The architect plans the structure of the system to meet the needs like these. It is essential to have proper software architecture, mainly for a large software system. Having a clear design of a complete system as a starting point provides a solid basis for developers to follow.



Architecture Diagram for game outline

Sequence Diagram for the game events:

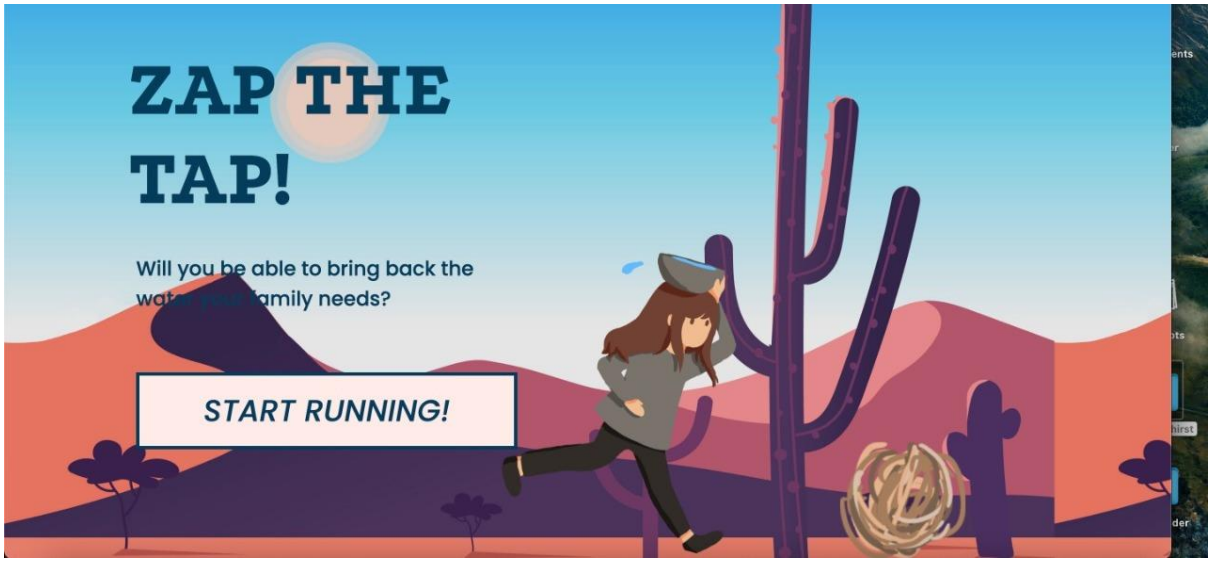




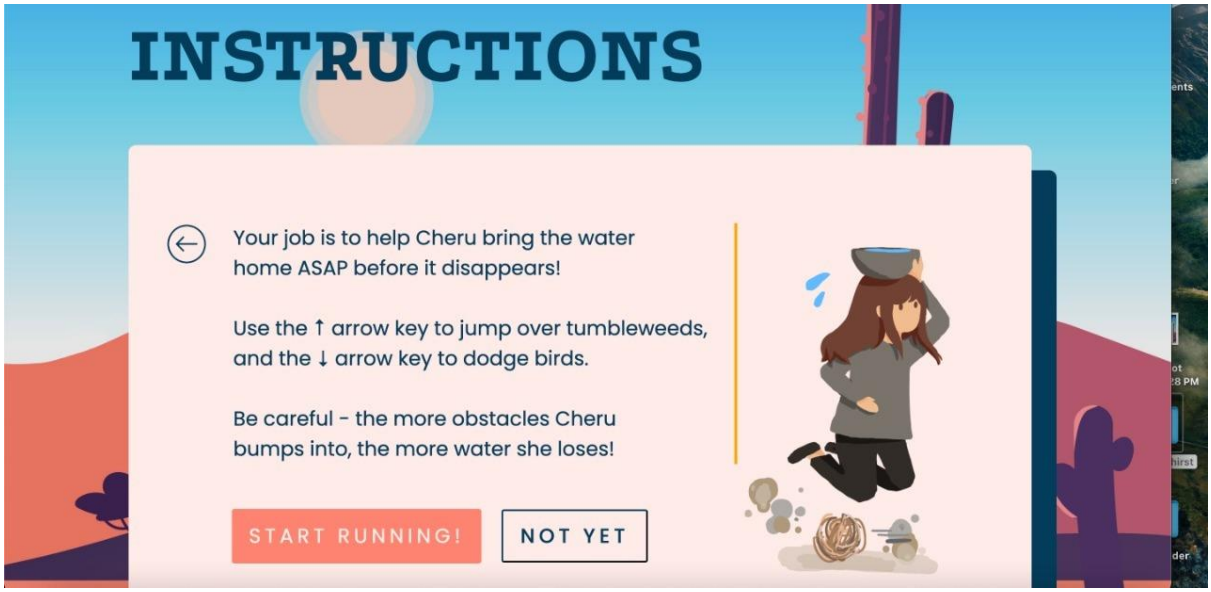
Activity Diagram for game events

Outputs Screens:

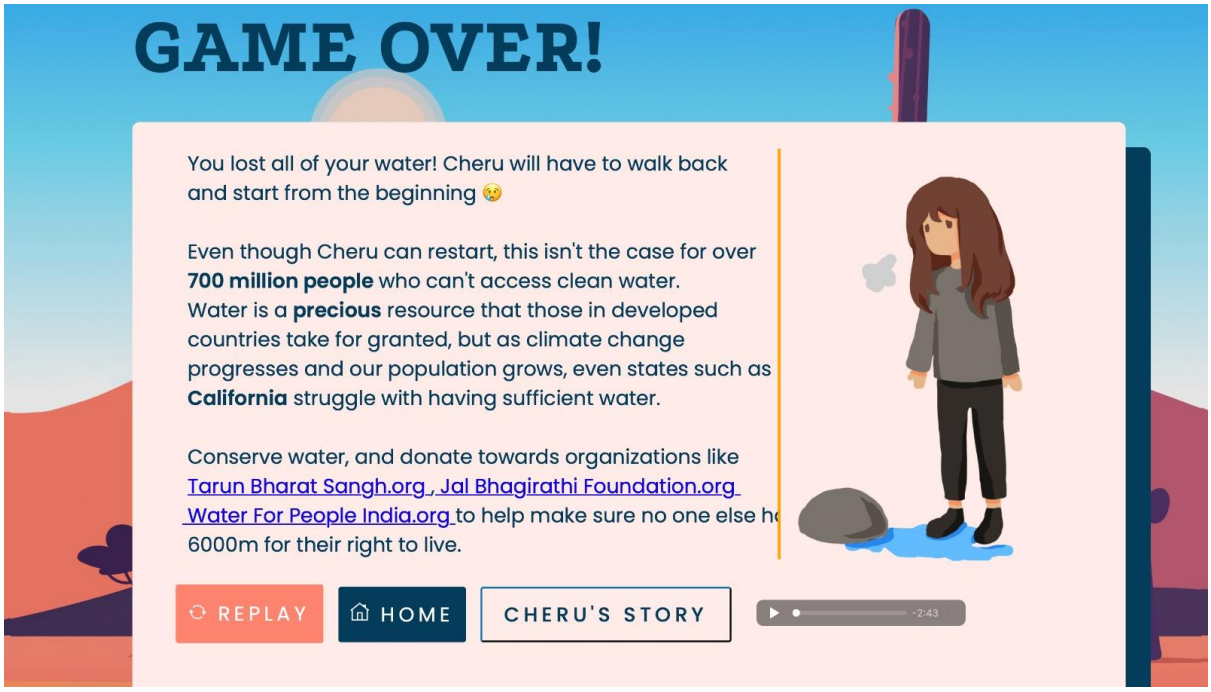
Home page



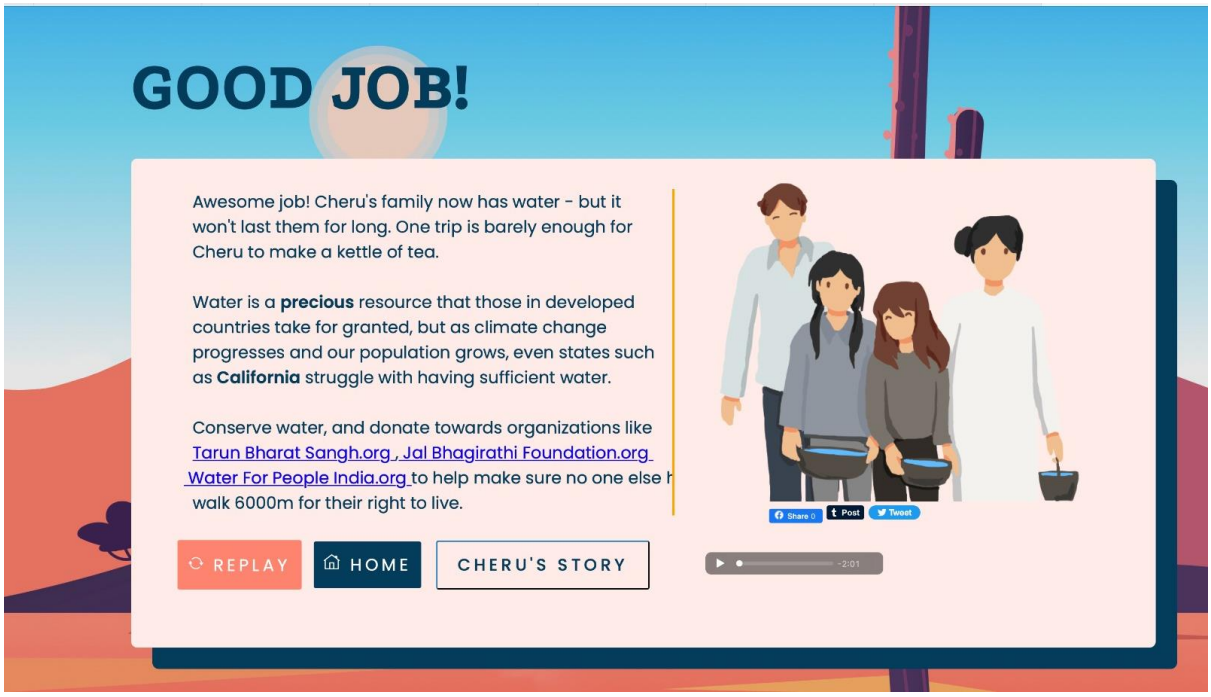
Instruction page



Game over



Game successful



Conclusion

Managing a scarce resource like water is a serious business. But by, educating on how to use water wisely then it should be fun, especially if we want our message to resonate with kids. This game teaches kids water conservation and this game is fun for everyone.

Bibliography

1) https://developer.mozilla.org/en-US/docs/Web/API
2)https://developer.mozilla.org/en-US/docs/Web/JavaScript/About_JavaScript