

*Module Title: Interactive Web Application*

*Type: Continuous Assessment 1*

*Title: Banger your head tickets*

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*Project's GitHub repository link:*

<https://github.com/thiagopetcov/CA1-In-class-Demo>

*College of computing training*

*(CCT)*

2019

# Report

## Introduction

The purpose of this assignment was to build a web application with an interesting design and focus on the front end user interface based on languages that are the foundation of the internet. We are learning how to manage the client and the server side; we were completely free to come up with an idea for the web application even for the code that was provided in class. The lecturer showed step by step what each line of code does and also he allowed us to reuse and modify the same code. I've decided to build an application that the user can buy tickets for metal concerts. The user can submit and delete ticket bookings.

## Project idea

The idea of the application is that a user can buy tickets online for a music event from their phone. Having the website app, the user can use a digital version of their ticket on a mobile device making it more practical and efficient for the client and also for the ticket distributor. This way the end user does not require a physical ticket to attend a music event

## Methods

### Step 1:

One of the first requirements was to use an online IDE called Gitpod and submit on our personal GitHub

### Step 2:

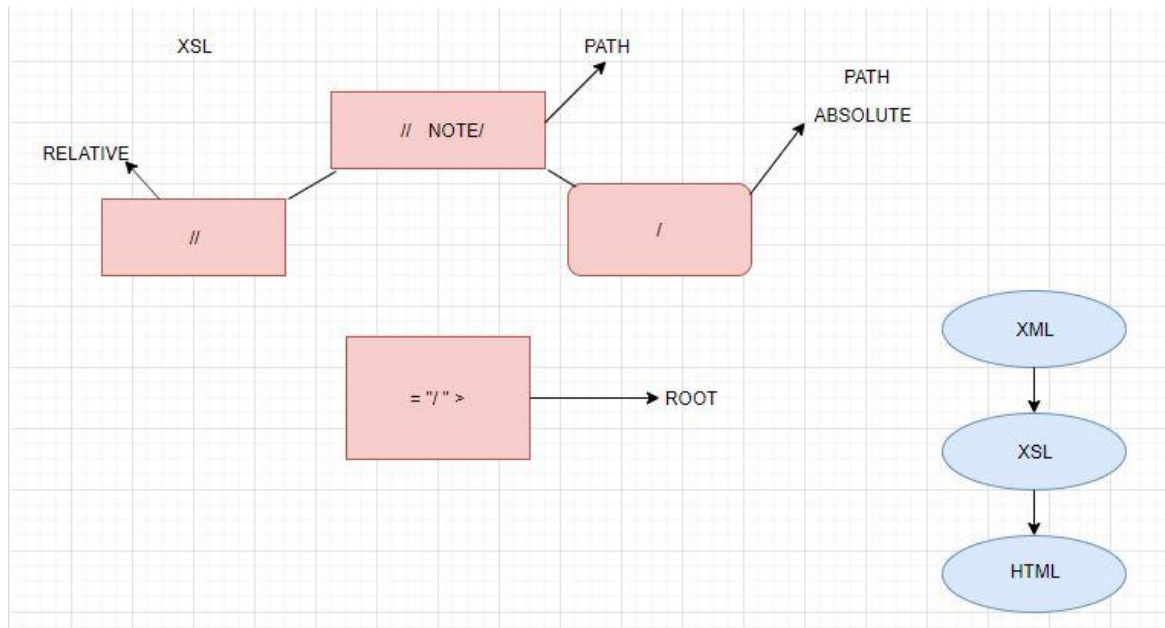
I notice that one of the core functions of the application would be based around the XML language which stands for Extensible Mark up language. Xml sends data from client to server. In this application Xml is used to store a lot of the main content. I used this information in order to change the website contents to be based around ticket bookings. The main table containing tickets is dynamically populated based on the XML.

### Step 3:

I learned how to make changes on the table where you can add and delete tickets. I also learned how to use commands like git add \*, git commit and git push in order to save and upload to Github.

The submit function reads the XML file, converts it to JSON, and writes back to the XML file. This updates the xml database.

Similarly the delete function uses the same method.



JSON: stands for java script object notation it's a format that you can send data from client to server and from server to client

XSD: Defines the logical structure of data in this project its use to validate the xml.

HTML: Hypertext mark up language. Html will define Web content Web images and web links and to gather all the content basic what is written on the page

Bootstrap: is an open source, front-end framework that's used to design websites and Web applications. It contains HTML and CSS based design templates for buttons, navigation, forms, typography, other interface components and also optional JavaScript extensions. Bootstrap mainly focuses on the front-end development of Web applications.

CSS: Cascading style sheets. CSS works like an artist in my words or designer to make the images well organise colours organize the titles size and style.

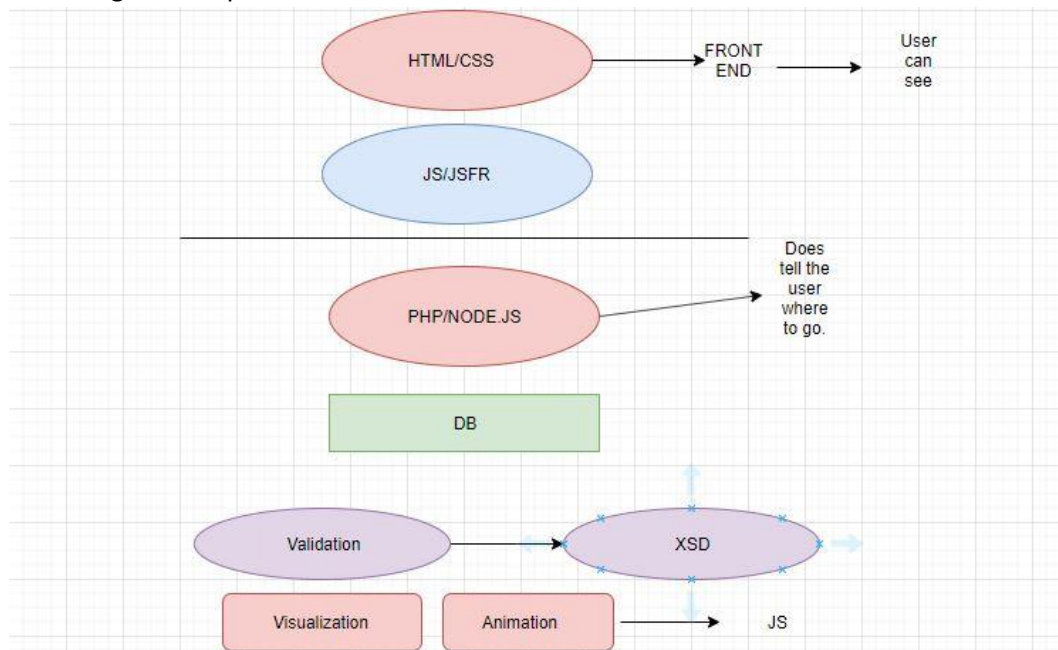
JavaScript is a client side technology it will be responsible for the functions and interactions on the page and it runs in the browser

Node.js is used to produce dynamic web elements before it is display in the user's browser

HTML, CSS, and java Script work together as a team and nowadays and they are responsible for maintaining the front end user interface which is the client side.

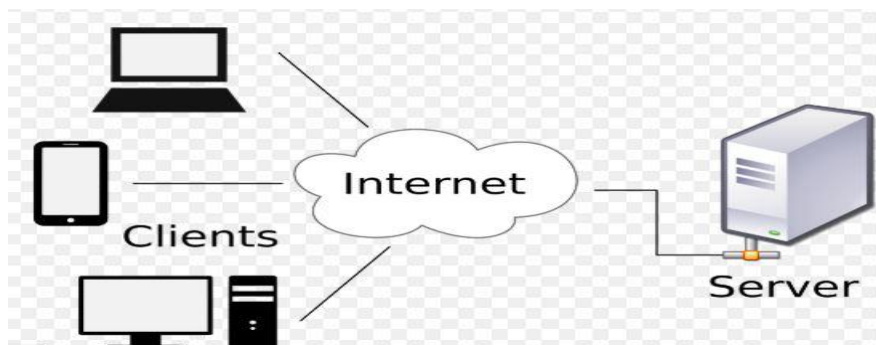
## Discussion

1. In order to build this web application it was built on the idea of CRUD. Also we are stacking technologies on top of one another



## Conclusion

What was learned from this experiment was to have a better awareness of how to build a web page and how important the languages are to translate and send information from the server through the internet and transform it in a visual way to the client. Today, many big companies utilise these technologies like Java Script. For example Google, Netflix, Amazon etc.



## HOME PAGE MANUAL

### SUBMIT

First the user has to select the type of ticket.

Then the user would add as many tickets as they want.

The user selects the price they require.

The user can then submit and their selection will be displayed on the screen.

## DELETE TICKET

In case the user is not happy with the ticket choice on the banger tickets table, the user can select one or multiple tickets and delete them from the table.

## Resources

<https://www.youtube.com/watch?v=gTOLh1eYk78>

[https://www.w3schools.com/cssref/pr\\_background-image.asp](https://www.w3schools.com/cssref/pr_background-image.asp)

Malika's lab class 29/12/20 Practical how to build a web app.

[https://en.wikipedia.org/wiki/Client%E2%80%93server\\_model](https://en.wikipedia.org/wiki/Client%E2%80%93server_model) //Image client side

The diagram about stack technologies was based on my notes from Mikhail Lectures in class.

Web application code based by Mikhail Timofeev : <https://github.com/mikhail-cct/CA1-In-class-Demo>