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## INTRODUCTION

The job searching website we have been asked to design for the CA (continuous assessment) basically helps a user to find the job in which he is interested from a list jobs available. We have added a filter, through which user can get the interested job very easily, without checking each and every jobs available. After that when he clicks on a particular job, the website displays more details of that job. He can check all those details and if still interested we have given a 'apply' button in that page. When the user clicks on that 'apply' button, user will be guided to another page which asks for certain inputs. When he enters those details, website takes the details and sends for validation. If the validation is successful the user gets a message 'successfully applied for the job.'

## TECHNOLOGIES USED AND TOOLS USED

**HTML5** : Html stands for hyper text mark up language. Webpages uses Html to contain their contend. Hyper text means you can click on links in webpages and markup language is something that we use to markup in normal English to indicate things. Html defines the structure of the website.

**CSS3** : CSS stands for Cascading Style Sheets and this defines the over all appearance and styles of the website. CSS controls how the content of a website looks like. CSS is a rule based language that applies styling to the html elements.

**JAVASCRIPT**: Javascript is a high level, interpreted programming language used to make webpages more interactive. Javascripts runs in our browsers. Javascripts defines the behavior of the website and also helps to enhance the interaction between the user and the website. JavaScript is being used widely in game development and Mobile application development.

**JQUERY** : JQuery is a Javascript library. Library is a collection of tools which helps us to implement functionalities. Responsible for behavior and interactivity of the web pages. JQuery made it very easy to use Javascript codes at the websites. Many lines of Javascript codes can be implemented very easily in JQuery.

**JSON :** Json is Javascripts object notation. Its format in which we can transfer data from server to client and also from client to server as well. When an application sends an asynchronous request to a server for a complex type of data, which should be readable by the programming languages at the server side and also the programming language at the client side, data is been send as an object and this is called json object.

**VISUAL STUDIO CODE :** Visual studio code is a source code editor made by microsoft. We used this editor in this assignment for coding.

**XAMPP SERVER :** XAMPP is a free and open source cross platform web server solution developed by Apache friends consisting mainly of the Apache http server. XAMPP helps a local host or server to test its website and clients via computers and laptops before releasing it to the main server. It is a platform that furnishes a suitable environment to test and verify the working of projects based on Apache, Perl, MySQL database, PHP through the system of the host itself. In this assignment we used the live server which comes with the visual studio code editor as well.

## **APPROACH TO THE PROBLEM**

### **The approach in creating html layout**

The first thing we did for developing the job search engine was to find a similar website in the market. After doing some research on the internet we zoomed into indeed.ie as reference as it was offering similar features that was listed in the assignment. The request was to first list the entire list of jobs in the landing page. We chose html table elements to list the jobs. As the jobs are dynamic and needs to loaded from external file, we used Javascript to create html table elements dynamically.

The search engine has to allow a user to apply for selected job. The application of job required user to submit their details. We chose html form elements to collect the user details and validate their details.

### **The approach used in CSS styling to generate single look and feel for the website**

We used three CSS files to design the website look. The main CSS was used as a global styling component to give same look and feel for every page in the website. The page that collects the user data had its own styling component that makes the page highly responsive to any devices.

Again, we used Javascript to set the CSS styling attributes for the dynamically created html elements. We have attached a snapshot of the main CSS file here for the reference.

```
# apply-job.css X
styles > # apply-job.css > *
1  * {
2    box-sizing: border-box;
3  }
4
5  input[type="text"],
6  select,
7  textarea {
8    width: 100%;
9    padding: 12px;
10   border: 1px solid #ccc;
11   border-radius: 4px;
12   resize: vertical;
13 }
14
15 label {
16   padding: 12px 12px 12px 0;
17   display: inline-block;
18 }
19
20 input[type="submit"] {
21   background-color: gray;
22   color: white;
23   padding: 12px 20px;
24   border: none;
```

### The approach to mock database with JSON

The assignment was to use mock JSON file instead of database. To store and use the data we choose JSON format and it was packaged with the application as a sample dataset. The jobs model was first designed and then was packaged as a file called jobs.json.

We used [www.jsononlineeditor.com](http://www.jsononlineeditor.com) website to create the jobs model. The JSON model contained the id, title, category, details and company attributes of the job. A snapshot of the the Job model is attached here:

```
{
  "id": 101,
  "company": "Amazon",
  "title": "Junior Software Engineer",
  "category": "Full time",
  "type": "Contract",
  "location": "Dublin, Ireland",
  "details": "6-12 months of experience with strong JAVA skills",
  "salary": "34000",
  "about-company": "The company is an information and analytics company specialising in medical content, with 20 years of experience",
  "description": "The core of the system is written in Perl but we are in the process of modernising it over the next 6 months"
```

### **The JQuery and Javascript for validation and display of content to the website**

We majorly used jquery function to pick and choose the html elements for dynamically filling the data. JQuery parse method was used to parse the json file which in turn returns an array of jobs. After populating the jobs in an array, we used javascript constructs to iterate through each job and extracts the jobs value to populate on the website.

The Javascript was also used to validate the form content which collects the user basic data elements that was required to apply for a job. Once the form was filled with correct data, the submission status was sent back to the user using the Javascript variable.

## Testing

### Web page screen shot

Find jobs	Company reviews	Find salaries	Sign in	About us
<input type="text" value="Search for jobs.."/>				

[Junior Software Engineer - Full time](#)

Amazon  
Dublin, Ireland

34000  
6-12 months of experience with strong JAVA skills

### Filter

software engineer

[Junior Software Engineer - Full time](#)

Amazon  
Dublin, Ireland

34000  
6-12 months of experience with strong JAVA skills

## Job Description Page

Role : Junior Software Engineer

Company : Amazon

Location : Dublin, Ireland

Salary : 34000

Category : Full time

Details : 6-12 months of experience with strong JAVA skills

Description : The core of the system is written in Perl but we are in the process of modernising it over the next couple of months. So in addition to al be actively involved in many architectural and design decisions.

About company : The company is an information and analytics company specialising in medical content, with 20 years of experience. They provide reviewed journals to support health practitioners around the world. The core team is based in Paris, France and we are currently expanding the eng

## Input Validation Page

Find jobs	Company reviews	Find salaries	Sign in	About us
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First Name	shiju
Last Name	chandra
Email	shijuonmail@gmail.com
Phone	0899423426
CV Upload	<input type="button" value="Choose File"/> Graduate-cv.docx
<input type="button" value="Submit"/>	

Author: Shiju Chandra Poovullathil

## References and bibliography

[www.w3schools.com](http://www.w3schools.com)

[www.stackoverflow.com](http://www.stackoverflow.com)

[www.indeed.ie](http://www.indeed.ie)