



## INDIVIDUAL ASSIGNMENT

## LEVEL 5

# **COMP50016-2: Server Side Programming - 2**

# Individual assignment

Batch code: IF2321SE

**Student Name: Kavindu Kaumal Karunaratne** 

**CB number : CB010103** 

#### INSTRUCTION TO CANDIDATES

- 1. Late submission will be awarded zero (0) unless extenuating circumstances (EC) are upheld.
- 2. Cases of plagiarism will be penalized.
- 3. The assignment should be submitted as softcopy via LMS.

#### Acknowledgement

Our sincere gratitude and appreciation go to Sir Vipula S Anandapiya, the lecturer of Server-Side Programming - II, for the guidance given to complete this lecture assignment. The support, guidance, and encouragement have been invaluable throughout this process.

## **Executive Summary**

This report consists of the details of job finding website. This report consists of an introduction and a mind map of the website. Code screen shots of the user interface and the models used. This also consists of how the website is used, features of each role, test cases and future upgrade plan.

## **Table of Contents**

Ackno	owledgement	2
Execu	tive Summary	2
1.0.	Introduction	5
2.0.	Mind Map	6
3.0.	User Interfaces	7
3.1	. User Login Page	7
3.2	. User Register Page	8
4.0.	Partial	9
4.1	. Hero Partial	9
5.0.	Job Pages	.11
5.1	Show All Job Post Page	.11
5.4	Show Edit Job Post Page	14
5.5	Show Manage Job Post Page	15
6.0.	Components	16
6.1	. Card	16
6.2	Flash Message	16
6.3	. Job Card	17
6.4	. Job Tags	17
6.5	. Layout	18
7.0.	Employee	19
7.1	Profile Page	19
7.2	. Upload CV Page	20
8.0.	Email	21

8.1.	Email Template	21
9.0. A	Administrator	22
9.1.	Dashboard Page	22
9.2.	Analytics Page	23
9.3.	Administrator Register Page	24
9.4.	Administrator Edit Page	25
10.0.	Eloquent Models	26
10.1.	User Model	26
10.2.	Job Model	27
10.3.	Bookmark Model	28
11.0.	Process	28
12.0.	Features	34
12.1.	Administrator	34
12.2.	Business	34
12.3.	Employer	34
13.0.	Test Cases	34
14.0.	Future Upgrade Plan.	36
15.0.	Conclusion	37

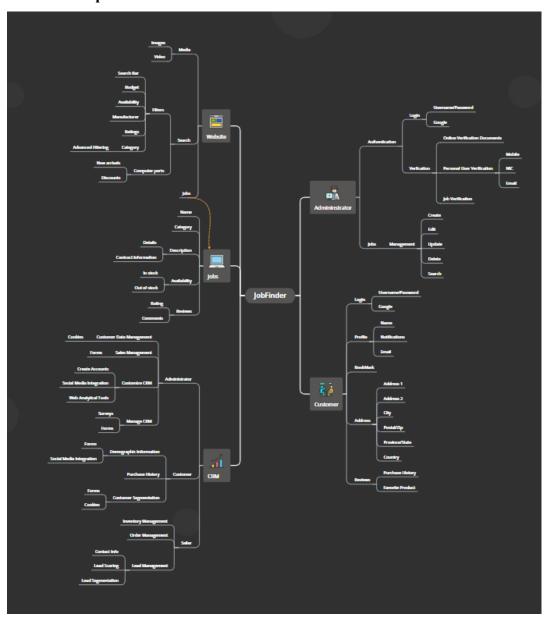
#### 1.0.Introduction

For this assignment a Customer Relationship Management (CRM) system was developed for a job finding agency called JobFinder. A web solution was proposed with the implementation of a CRM to the agency to further improve their job finding. This website solution contains 3 user roles. The business role is for companies, and it allows them to post jobs for their companies. The employer role is for job applicants who can view the jobs posted by businesses and apply to them if they want to. The administrator role is for the job agency where they can view the analytical data provided by the information available.

GitHub Link - <a href="https://github.com/KavnduKarunaratne/JobFinder.git">https://github.com/KavnduKarunaratne/JobFinder.git</a>

Mind Map Link - <a href="https://gitmind.com/app/docs/mkiue5ru">https://gitmind.com/app/docs/mkiue5ru</a>

# 2.0.Mind Map



#### 3.0.User Interfaces

#### 3.1. User Login Page

```
class="bg-gray-50 border border-gray-200 p-10 rounded max-w-lg mx-auto mt-24"
     er class="text-center">
   <h2 class="text-2xl font-bold uppercase mb-1">
      Login
   Log into your account to get started
<form method="POST" action="/users/authenticate">
      <label for="email" class="inline-block text-lg mb-2"</pre>
          >Email</label
         type="email"
         class="border border-gray-200 rounded p-2 w-full"
         name="email"
          value="{{ old('email') }}"
          {{ $message }}
          Password
          type="password"
         class="border border-gray-200 rounded p-2 w-full"
         name="password"
          value="{{ old('password') }}"
          {{ $message }}
          type="submit"
          class="bg-laravel text-white rounded py-2 px-4 hover:bg-black"
         Don't have an account?
          <a href="/register" class="text-laravel"</pre>
             >Register</a
```

## 3.2. User Register Page

```
ass="mb-6">
bel for="email" class="inline-block text-lg mb-2"
>Email</label
```

#### 4.0.Partial

#### 4.1. Hero Partial

#### 4.2. Search Partial

## 5.0.Job Pages

### 5.1. Show All Job Post Page

```
4 @include('partials._hero')
   @include('partials._search')
7 <div class="lg:grid lg:grid-cols-2 gap-4 space-y-4 md:space-y-0 mx-4">
9 @unless(count($listings) == 0)
11 @foreach($listings as $listing)
       <x-listing-card :listing="$listing"/>
    No listings found
21 <div class="mt-6 p-4">
       {{\$listings->links()}}
```

## **5.2.Show Single Job Post Page**

```
horf-"((Silsting-webiste))"
ronget=_blank"
class=block bg black text-white nt.6 py-2 rounded xl hoverropacity 80"
Nc (coss="d=solid fa=glob=3cf.3 Visit
Mebsites).
```

## **5.3.Show Create Job Post Page**

## 5.4. Show Edit Job Post Page

#### 5.5. Show Manage Job Post Page

```
<x-layout>
     <div class="bg-gray-50 border border-gray-200 p-10 rounded">
              class="text-3x1 text-center font-bold my-6 uppercase"
              Manage Jobs
              class="text-3x1 text-center font-bold my-6 uppercase"

    @unless($listings->isEmpty())
              class="px-4 py-8 border-t border-b border-gray-300 text-lg"
                     <a href="show.html">
                     class="px-4 py-8 border-t border-b border-gray-300 text-lg"
                         href="/listings/{{$listing->id}}/edit"
                            class="fa-solid fa-pen-to-square"
                     class="px-4 py-8 border-t border-b border-gray-300 text-lg"
                     <form method="POST" action="/listings/{{$listing->id}}">
                         <button class="text-red-500"><i class="fa-solid fa-trash"></i>Delete/button>
              No Jobs Found
```

## 6.0.Components

#### **6.1. Card**

## 6.2. Flash Message

```
### Image: Image:
```

#### 6.3. Job Card

#### 6.4. Job Tags

```
### Image: Image:
```

#### 6.5. Layout

```
• • •
                        nk
"rel="stylesheet"
| href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.1.1/css/all.min.css"
| integrity="sha512-Kfkfw7DslkflwQp6LFnl8zNdL6xu9YAA1QvwINks4PhcElQSvqcyVLLD9aWhXd13uQjoXtEKNosQWaZqXgel@g=="
                      hover: "#004d4f",
},
},
};
</script>

</script>

</next</li>
<
                                                     <span class="font-bold uppercase">
    Welcome {{auth()->user()->name}}
</span>
                                        href="/listings/create"
class="absolute top-1/3 right-10 bg-black text-white py-2 px-5">
Post Jobs/#>
```

## 7.0. Employee

## 7.1. Profile Page

```
<div class="bg-gray-50 border border-gray-200 p-10 rounded">
      class="text-3xl text-center font-bold my-6 uppercase"
      BookMarked Jobs
    Update CV</a>

@unless($bookmarks->isEmpty())
     <button class="text-red-500"><i class="fa-solid fa-trash"></i>>Remove Bookmark</button>

class="text-center">
No Jobs Bookmarked
```

## 7.2. Upload CV Page

```
class="bg-gray-50 border border-gray-200 p-10 rounded max-w-lg mx-auto mt-24"
<header class="text-center">
   <h2 class="text-2xl font-bold uppercase mb-1">
       Update CV
   Upload your new CV to stay up-to-date.
<form method="POST" action="/employer/{{$user->id}}" enctype="multipart/form-data">
   @method('PUT')
   <div class="mb-6">
       <label for="cv" class="inline-block text-lg mb-2">
          CV
          type="file"
          class="border border-gray-200 rounded p-2 w-full"
          name="cv"
       {{ $message }}
       <div class="mb-6">
           type="submit"
           class="bg-laravel text-white rounded py-2 px-4 hover:bg-black"
          Update CV
```

#### 8.0.Email

### 8.1. Email Template

#### 9.0.Administrator

## 9.1. Dashboard Page

## 9.2. Analytics Page

#### 9.3. Administrator Register Page

```
• • •
                                                        eader class="text-center">
<h2 class="text-2xl font-bold uppercase mb-1">
                                                                     Register
                                                       cinput
type="text"
class="border border-gray-200 rounded p-2 w-full"
                                                                                      name="name"
value="{{ old('name') }}"
                                                      <div class="mb-6">
     <label for="email" class="inline-block text-lg mb-2"
     >Email</label</pre>
                                                                             type="email"
class="border border-gray-200 rounded p-2 w-full"
nome="email"
value="{{ old('email') }}"
                                                                         @error('email')
class="text-red-500 text-xs mt-1">{{ $message }}
                                                          <div class="mb-6">
                                                                      clabel
  for="password"
  ctass="inline-block text-lg mb-2"
                                                                      cinput
  type="password"
    class="border border-gray-200 rounded p-2 w-full"
    class="border"
    c
                                                                         @error('password')
{{ $message }}
                                                                               for="password2"
class="inline-block text-lg mb-2"
                                                                                      type= password
class='Donder border-gray-200 rounded p-2 w-full"
name='password_confirmation'
value="{{ old('password_confirmation') }}"
                                                                        @error('password_confirmation')
class="text-red-500 text-xs mt-1">{{ $message }}
        Sign Up

/button>
</form>
</div>
</fra>
/div>

/x-layout>
```

#### 9.4. Administrator Edit Page

```
class="bg-gray-50 border border-gray-200 p-10 rounded max-w-lg mx-auto mt-24"
          <header class="text-center">
              <h2 class="text-2xl font-bold uppercase mb-1">
                  Register
              Create an admin account
          <form method="POST" action="/admin/users/{{$user->id}}">
              @method('PUT')
              <div class="mb-6">
                  <label for="name" class="inline-block text-lg mb-2">
                     type="text"
                     class="border border-gray-200 rounded p-2 w-full"
                     name="name"
                     value="{{ $user->name }}"
                 @error('name')
                  {{ $message }}
              <div class="mb-6">
                     type="submit"
                     class="bg-laravel text-white rounded py-2 px-4 hover:bg-black"
                     Update User
          </form>
```

#### 10.0. Eloquent Models

#### 10.1. User Model

```
3 namespace App\Models;
6  use Illuminate\Database\Eloquent\Factories\HasFactory;
 7 use Illuminate\Foundation\Auth\User as Authenticatable;
8 use Illuminate\Notifications\Notifiable;
   use Laravel\Sanctum\HasApiTokens;
11 class User extends <u>Authenticatable</u>
         'name',
'email',
            'remember_token',
           'email_verified_at' => 'datetime',
            'password' => 'hashed',
        public function listings() {
           return $this->hasMany(Listing::class, 'user_id');
```

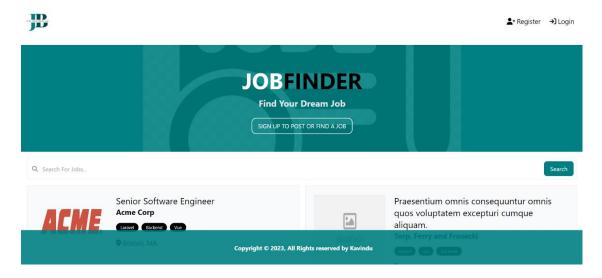
#### 10.2. Job Model

```
namespace App\Models;
5 use Illuminate\Database\Eloquent\Factories\HasFactory;
6  use Illuminate\Database\Eloquent\Model;
7 use Illuminate\Support\Arr;
9 class Listing extends <u>Model</u>
         protected $fillable = ['title', 'company', 'location', 'website', 'email',
         'tags', 'description', 'logo', 'user_id'];
         public function scopeFilter($query, array $filters) {
             if($filters['tag'] ?? false) {
                  $query->where('tags', 'like', '%' request('tag') '%');
                  $query->where('title', 'like', '%' . request('search') . '%')
->orWhere('description', 'like', '%' . request('search') . '%')
->orWhere('tags', 'like', '%' . request('search') . '%');
         // Relationship to user
         public function user() {
             return $this->belongsTo(User::class, 'user_id');
```

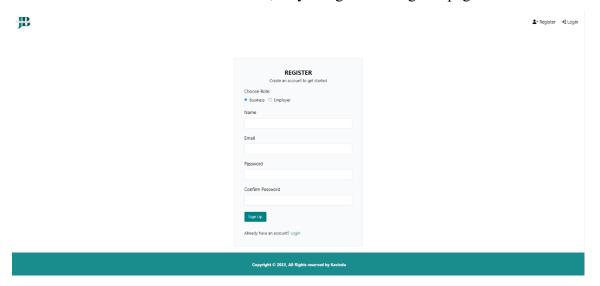
#### 10.3. Bookmark Model

#### 11.0. Process

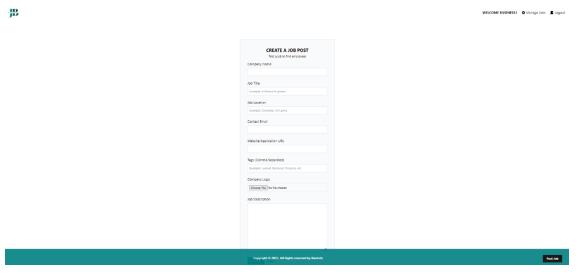
• When the user visits the site, they are directed to the landing page.



• If the user does not have an account, they can go to the register page to make an account.



• If the user registers as a business, they can post jobs.

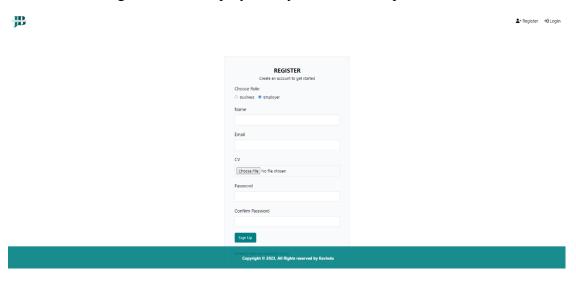


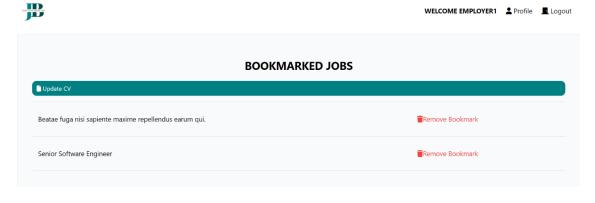
• After they post jobs, they can manage them by editing or deleting the post.





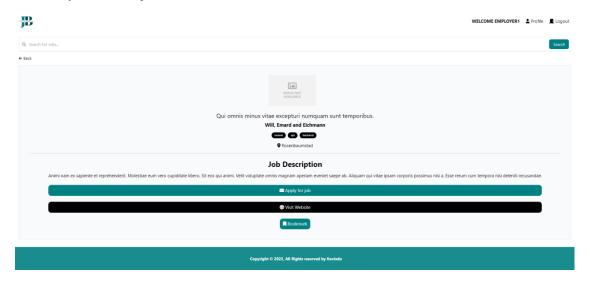
• If the user registers as an employer, they can bookmark jobs to view them later.





Copyright © 2023, All Rights reserved by Kavindu

• They can view jobs and mail their CV with a click of a button.

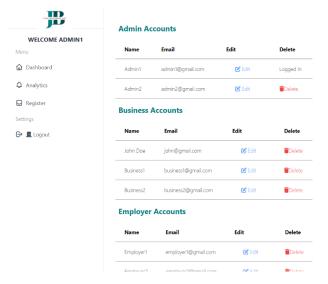


• Employers can upload their CV.



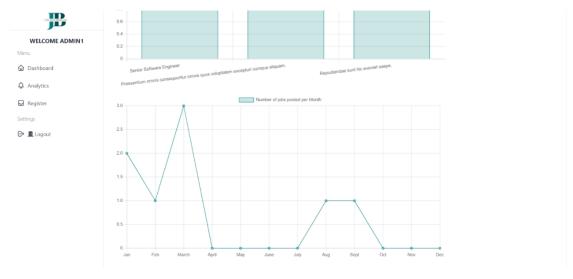
Copyright © 2023, All Rights reserved by Kavindu

- If the administrator logins, they are directed to their dashboard.
- The dashboard contains tables of all user types.



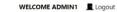
• The analytics page contains information about what's happening on the website.





• The administrator can register new administrators, edit them, and delete them.

		WEL	LCOME ADMIN1	
	REGISTER Create an admin account			
N	Name			
Er	Email			
Pa	Password			
C	Confirm Password			
	Sign Up			







Copyright © 2023, All Rights reserved by Kavindu

#### 12.0. Features

#### 12.1. Administrator

- Edit/ Delete and user.
- View analytical data of the website.
- Register more admin users.

#### 12.2. Business

• Can post, edit, and delete posts.

## 12.3. Employer

- Can bookmark jobs.
- Can update their CV.
- Can apply for jobs by mailing their CV.

## 13.0. Test Cases

Test ID	Description	Expected Output	Actual Output	Result
T-01	No role-based functions can be accessed without Login.	Redirect to Login page.	Redirected to Login page.	Pass

34

	When logged in			
	the access to	Redirect to	Redirected to	
T-02	login and	homepage with a	homepage with a	Pass
	register pages	message.	message.	
	are denied.			
	When a business			
	user tries to	Redirect to	Redirected to	
T-03	access	homepage with a	homepage with a	Pass
	functionality of	message.	message.	
	other user roles.			
	When an			
	employer user	Redirect to	Redirected to	
T-04	tries to access	homepage with a	homepage with a	Pass
	functionality of	message.	message.	
	other user roles.			
	When an admin			
	user tries to	Redirect to	Redirected to	
T-05	access	homepage with a	homepage with a	Pass
	functionality of	message.	message.	
	other user roles.			
			The delete	
	An admin user	The delete	button is not	
T-06	cannot delete an	button for that	shown and	Pass
1-00	account they are	user is not	logged is	rass
	logged in with.	available.	mentioned in	
			that field.	
T-07	Search for a job			
	by the name of	Display the job.	Displays the job.	Pass
	the job.			
T-08	Search for a job	Display all jobs	Displays all jobs	Pass
	by the tag.	with that tag.	with that tag.	1 ass

T-09	Search for a job by the description of the job.	Display a job with a description.	Displays jobs with similar description.	Pass
T-10	If a business role user has no jobs posted.	Display no jobs found.	Displays no jobs. found.	Pass
T-11	If a business role user has jobs posted.	Display the jobs and the number of jobs posted.	Displays the jobs and the number of jobs posted.	Pass
T-12	If an employer role user has no bookmarks.	Display no bookmarks found.	Displays no bookmarks found.	Pass
T-13	If an employer role user has bookmarks	Display the bookmarks in the profile and the bookmark button from that job is not available.	Displays the bookmarks in the profile and the bookmark button from that job is not available.	Pass

## 14.0. Future Upgrade Plan

The website can be further upgraded to perform better by adding,

- Jobs displayed on the home page are catered towards the employers' previous searches / applied.
- The applying button is not available after an employer has applied once.
- The employer can view the jobs he has already applied to.
- The administrator has more details in the analytics.
- The administrator can remove inappropriate jobs.
- Users can report jobs which are fake or inappropriate.
- A payment feature for businesses for posting their jobs.

## 15.0. Conclusion

In conclusion, this website will help JobFinder as it gives analytical data which will help them make decisions according to the data provided. This will help their business and can help them target companies with high demand and get them to use the website.