



**NEW HORIZON
COLLEGE OF ENGINEERING**

Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC
Accredited by NAAC with 'A' Grade, Accredited by NBA

A MINI PROJECT REPORT

for

Mini Project in Web Frameworks or Operating System (20CSE68)

on

JOB HUB

Submitted by

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USN:1NH20CS267, Sem-Sec: 6-E

In partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE AND ENGINEERING

Academic Year: 2022-23(EVEN SEM)



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CERTIFICATE

This is to certify that the mini project work titled

JOB HUB

submitted in partial fulfillment of the degree of Bachelor of Engineering in
Computer Science and Engineering by

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DURING

EVEN SEMESTER 2022-2023

for

*Course: Mini Project in Web Frameworks or
OperatingSystem-20CSE68*

Signature of Reviewer

Signature of HOD

SEMESTER END EXAMINATION

Name of the Examiner

Signature with date

1. _____

2. _____

ABSTRACT

A web-based application called the Job Hub project aims to connect job seekers and potential employers through a job portal. HTML, CSS, PHP, and MySQL are used to build the application, which makes it a sturdy and scalable platform for job search and recruitment processes. The Work Center point entrance extends to an easy-to-understand interface that permits employment opportunity searchers to make profiles, transfer continues, and quest for important open positions. On the other hand, employers are able to post job openings, examine the profiles of applicants, and communicate with potential candidates. To make the job search process easier, the project includes essential features like job search filters, advanced search options, and a matching algorithm. In addition, the system has mechanisms for user authorization and authentication to safeguard user information and guarantee safe access. Additionally, the Job Hub project makes use of a MySQL database for the storage and administration of application data, user profiles, and job listings. The database makes it possible to quickly retrieve, store, and manipulate data, making sure that the application and its users can work together seamlessly.

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CHAPTER 1

INTRODUCTION

1.1 PROBLEM DEFINITION

Both job seekers and employers often must put in a lot of time and effort during the traditional job search and recruitment process. Work searchers battle to secure pertinent position valuable open doors during a huge pool of postings, while businesses face difficulties in sifting and dealing with an enormous number of candidates.

By developing a web-based job portal that is both user-friendly and effective, the Job Hub project hopes to address these issues. The project aims to provide a centralized platform where employers can efficiently post job listings and review applicant profiles and where job seekers can easily search for relevant job opportunities and showcase their qualifications.

1.2 OBJECTIVES

- Foster an easy-to-use work entry: The primary goal is to develop a web-based application that is easy to use and provides job seekers and employers with a seamless experience. The design of the portal ought to be simple and responsive, making it simple to use and navigate.
- Facilitate effective job search: Include filters based on job title, location, salary, experience level, and other relevant criteria in advanced search functionality. The purpose of this objective is to assist job seekers in quickly and effectively locating relevant job opportunities.
- Make comprehensive job listings easier: Provide a platform for employers to post in-depth job listings with information about application deadlines, required qualifications, and job descriptions. This goal makes certain that job seekers have access to accurate and comprehensive job listings.
- Set up user profiles and manage resumes: Empower work searchers to make profiles, transfer continues, and deal with their data effectively. Employers will be able to effectively review applicant profiles and qualifications with the assistance of this objective, which aims to provide job seekers with a personalized experience.

1.3 METHODOLOGY

- Front-end is created by **HTML , CSS .**
- Back-end management: **PHP.**
- Database: **MYSQL**

1.4 EXPECTED OUTPUT

- A completely useful and responsive site: The finished product of the project ought to be a website that looks good and is easy to use, and it ought to be compatible with a variety of screen sizes and devices.
- Authentication and registration of users: To access their personalized profiles and features, users should be able to securely create accounts, register, and log in.
- Work posting the executives: Job listings should be able to be posted, edited, and removed by employers. The job title, description, qualifications, location, and application deadline should all be included in every listing.

CHAPTER 2

FUNDAMENTALS OF THE LANGUAGES USED

2.1 HTML

The term "HTML" stands for "Hyper Text Markup Language," and the fact that it can redirect is what gives it the name "markup language." "Hyper text" refers to links with "a" anchor tags."

Simple HTML Code :

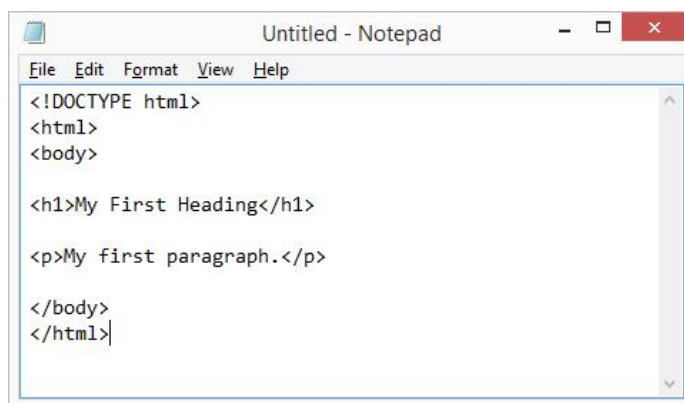


Fig 2.1.1:SIMPLE HTML CODE

As you can see the fig 2.1.1 the basic HTML structure consists of a document type declaration (`<!DOCTYPE html>`), followed by the root element `<html>`. Inside the `<html>` element, there are two main sections: the `<head>` and the `<body>`. The `<head>` section contains metadata and non-visible elements like the `<title>` element, which specifies the title of the webpage. The `<body>` section contains the visible content of the webpage, such as headings (`<h1>` to `<h6>`), paragraphs (`<p>`), images, links, and other elements that make up the webpage's actual content. The HTML structure ensures proper rendering and organization of the webpage's elements in a browser.

2.2 CSS

CSS The language known as CSS (Cascading Style Sheets) is used to style HTML documents. Its primary function is to enhance the visual appearance of webpages by providing decoration and styling.

CSS can be used in three main ways:

1. **Inline:** Using the style attribute, CSS can be applied directly to HTML elements. However, because it applies CSS only to selected HTML elements, this approach is not preferable because it makes it difficult to maintain and reuse styles across multiple elements.
2. **Internal:** Using the <style> tag in the <head> section, CSS can be embedded within an HTML document. The HTML elements that correspond to the styles that are defined within the <style> tags will be affected.
3. **External:** Creating a separate CSS file with a.css extension and linking it to the HTML document using the link> tag in the <head> section is the preferred and most effective method. With HTML defining the structure and content and CSS handling the styling, this permits a clear separation of concerns.

Simple code for CSS:

```
h1 {  
  font-family: courier, courier-new, serif;  
  font-size: 20pt;  
  color: blue;  
  border-bottom: 2px solid blue;  
}  
p {  
  font-family: arial, verdana, sans-serif;  
  font-size: 12pt;  
  color: #6B6BD7;  
}  
.red_txt {  
  color: red;  
}
```

Fig 2.2.1:SIMPLE CSS CODE

As you can see fig 2.2.1 Selectors, declarations, and properties make up CSS's fundamental structure. Tags, classes, and IDs are examples of HTML elements that can be

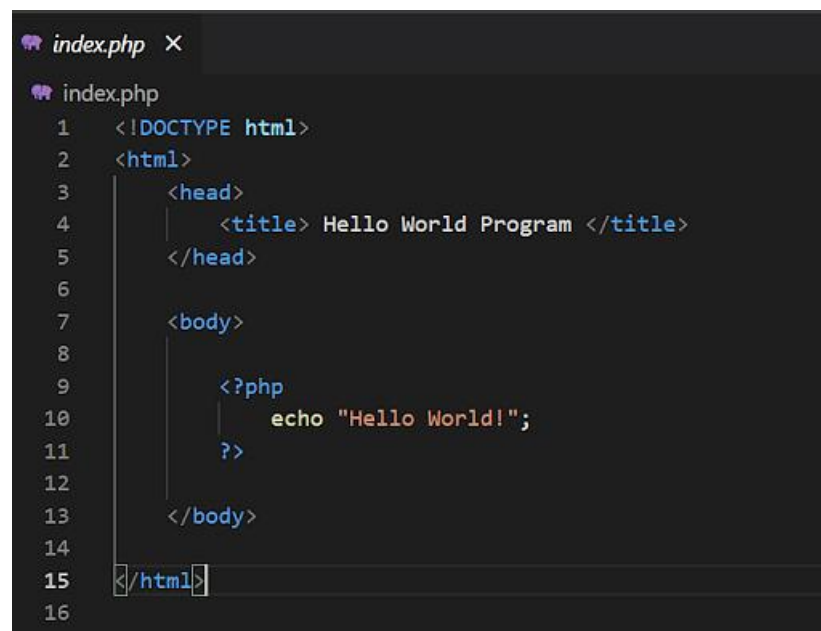
styled with selectors. Curly braces surround declarations, which are made up of one or more property-value pairs. Color, font size, and background color are examples of properties that define an element that can be styled. Values decide the qualities relegated to properties. The style attribute can be used to write CSS rules inline; they can be embedded in the <style> tags in the <head> of an HTML document, or they can be externalized into a separate CSS file and linked to the HTML file with the link> tag. CSS empowers the division of show and content, considering steady and reusable styling across different site pages.

2.3 PHP

The server-side scripting language PHP (Hypertext Preprocessor) was developed for web development. Web applications and dynamic web pages are common uses for it. PHP is briefly explained here:

1. Server-side prearranging: PHP code is processed on the server before being sent to the client's web browser because PHP is executed on the server. PHP is able to handle form submissions, generate dynamic content, and carry out a variety of server-side operations thanks to this.
2. A variety of features: For a variety of tasks, including database connectivity, file handling, session management, form handling, and more, PHP includes a vast array of built-in functions and libraries. It also allows for modular and reusable code thanks to its support for object-oriented programming (OOP).
3. Integration of databases: Connecting to databases like MongoDB, PostgreSQL, and MySQL is a breeze with PHP. It is ideal for developing database-driven web applications because it enables the retrieval, insertion, deletion, and manipulation of database data.

Simple code for PHP :

A screenshot of a code editor window titled 'index.php'. The code is written in PHP and HTML. It starts with a DOCTYPE declaration, followed by an HTML document structure. Inside the HTML body, there is a PHP code block that uses the 'echo' statement to output 'Hello World!'. The code is as follows:

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title> Hello World Program </title>
5   </head>
6
7   <body>
8
9     <?php
10      echo "Hello World!";
11    ?>
12
13   </body>
14
15 </html>
```

Fig 2.3.1:PHP CODE

As you can see in the fig 2.5.1 the fundamental construction of PHP comprises of opening and shutting PHP labels to epitomize PHP code inside a HTML document. PHP code can be embedded in HTML markup in any location. On the server side, the PHP code is processed to produce dynamic content that is then delivered to the client's web browser. PHP upholds factors, information types, control structures (if, else, circles), works, and item arranged programming. It makes it possible to seamlessly integrate with databases, processing of files, and form processing. PHP records normally have a .php expansion and are executed on the server when gotten to by a client, creating HTML yield progressively founded on the PHP code executed.

2.4 MYSQL

MY SQL is one of the fastest Relational Database Management Systems (RDBMS), also known as software used to manage a database. It supports all CRUD operations, including create, read, update, and delete. It likewise gives putting away assistance for the client applications .

Simple code for MYSQL:

```
1 CREATE TABLE countries(  
2   COUNTRY_NAME varchar(60),  
3   COUNTRY_ID varchar(2),  
4   REGION_ID decimal(10,0)  
5 );  
6  
7 DESC countries;
```



The screenshot shows a MySQL command-line interface. The top part displays a SQL query to create a table named 'countries' with three columns: 'COUNTRY_NAME' (varchar(60)), 'COUNTRY_ID' (varchar(2)), and 'REGION_ID' (decimal(10,0)). Below the query, there is a blue bar representing the execution progress. At the bottom, the output of the 'DESC countries;' command is shown in a table format.

Output	Input
COUNTRY_NAME	varchar(60) YES NULL
COUNTRY_ID	varchar(2) YES NULL
REGION_ID	decimal(10,0) YES NULL


Fig 2.4.1:SQL QUERY

SQL (Organized Inquiry Language) is a language used to speak with and control data sets. Statements written in SQL to carry out a variety of database operations are known as SQL queries. A SQL inquiry commonly comprises of catchphrases like SELECT, Supplement, UPDATE, or Erase, trailed by unambiguous provisos and conditions. The SELECT statement is used to retrieve data from a database, the INSERT statement is used to insert data, the UPDATE statement is used to update data, and the DELETE statement is used to delete data. Filtering, sorting, joining tables, and carrying out calculations to retrieve specific data from the database based on particular criteria are all options available in SQL queries.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 HARDWARE REQUIREMENTS



Processor	1 gigahertz (GHz) or faster with 2 or more cores on a compatible 64-bit processor or System on a Chip (SoC)
Memory	4 GB RAM
Storage	64 GB or larger storage device
System Firmware	UEFI, Secure Boot capable
TPM	Trusted Platform Module (TPM) version 2.0
Graphics Card	Graphics card DirectX 12 compatible graphics / WDDM 2.x
Display	Display >9" with HD Resolution (720p)
Internet Connection	Internet connection Microsoft account and internet connectivity required for setup for Windows 11 Home

Fig 3.1.1: Hardware requirements.

3.2 SOFTWARE REQUIREMENTS

FRONT-END :

- HTML
- CSS
- BOOTSTRAP

BACK-END :

- PHP
- MYSQL

A code Editor used: VSCODE.

CHAPTER 4

DESIGN

4.1 DESIGN GOALS

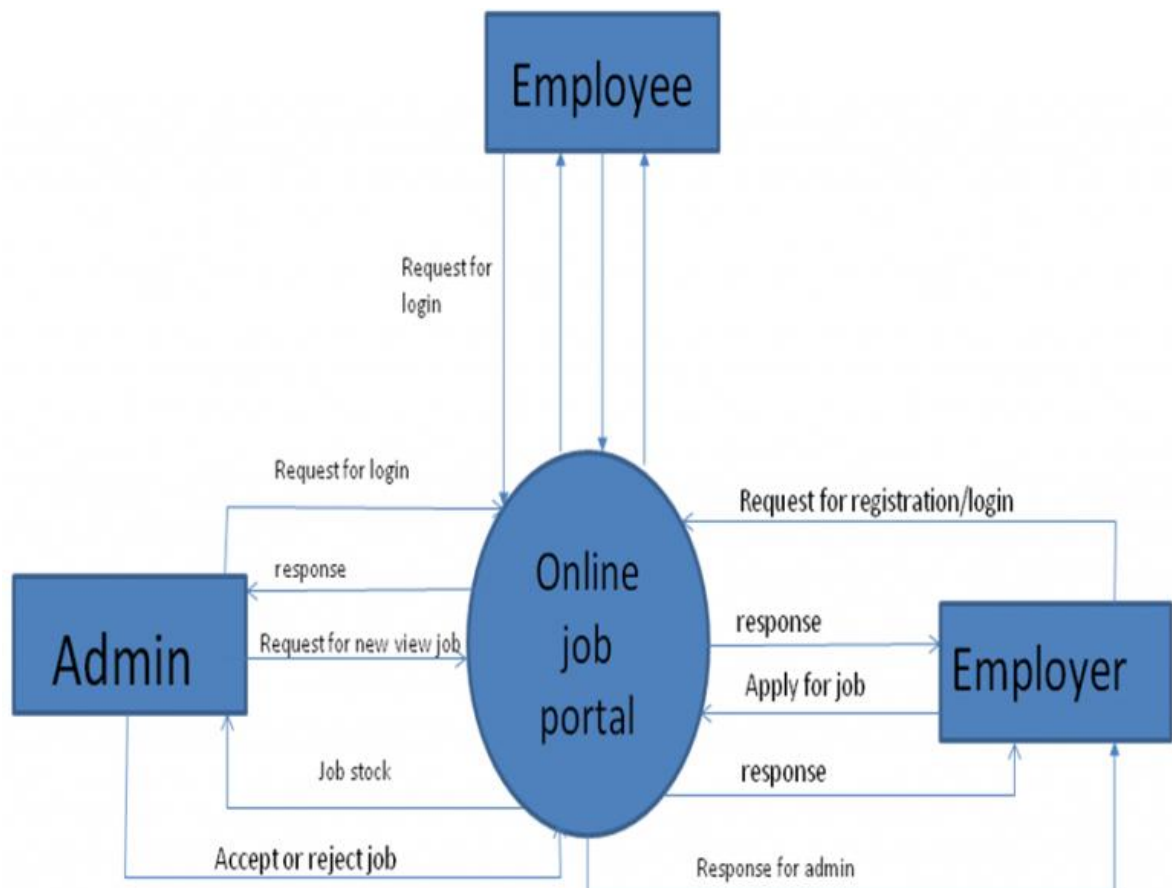


Fig 4.1.1:design goal/flowchart.

In the Job Hub project, users will begin by accessing a login page where they can enter their login credentials. Based on the provided username and password, they will be directed to either the ADMIN PAGE or the EMPLOYEE PAGE. The ADMIN PAGE grants administrators complete control and authority to manage PROJECTS, EMPLOYEES, and BUGS within the system. On the other hand, the EMPLOYEE PAGE allows employees to focus on bug-related tasks, such as reporting bugs, tracking their status (open, closed, or deleted), and submitting bug solutions. The system also provides employees with the ability to update bug information as needed. This division of responsibilities ensures efficient bug tracking and resolution, while giving administrators the necessary oversight and control over the entire project management process.

CHAPTER 5

IMPLEMENTATION

5.1 EMPLOYEE PAGE

```

<div class="main-wrapper">
  <div class="hero" style="background-image:url('images/hero-header/W1.jpg');">
    <div class="container">
      <h1>your bright future starts here now</h1>
      <p>finding your next job or career on Nightingale Jobs</p>
    </div>
    <div class="main-search-form-wrapper">
      <form action="job-list.php" method="GET" autocomplete="off">
        <div class="form-holder">
          <div class="row gap-8">
            <div class="col-xs-6 col-sm-6 col-md-6">
              <select class="form-control" name="category" required/>
              <option value="">Select category</option>
              <?php
                require 'constants/db_config.php';
                try {
                  $conn = new PDO("mysql:host=$servername;dbname=$dbname", $username, $password);
                  $conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);

                  $stmt = $conn->prepare("SELECT * FROM tbl_categories ORDER BY category");
                  $stmt->execute();
                  $result = $stmt->fetchAll();

                  foreach($result as $row)
                  {
                    <option style="color:black" value="<?php echo $row['category'];">"><?php echo $row['category'];></option>
                  }
                  $stmt->execute();
                } catch(PDOException $e)
                {
                }
              </select>
            </div>
            <div class="col-xs-6 col-sm-6 col-md-6">
              <select class="form-control" name="country" required/>
              <option value="">Select country</option>
              <?php
                require 'constants/db_config.php';
                try {
                  $conn = new PDO("mysql:host=$servername;dbname=$dbname", $username, $password);

```

Fig 5.1.1: LOGIN PAGE

5.2 HOME PAGE

```

<div class="GridLex-gap-15-wrapperr">
  <div class="GridLex-grid-noGutter-equalHeight">
    <?php
      require 'constants/db_config.php';
      try {
        $conn = new PDO("mysql:host=$servername;dbname=$dbname", $username, $password);
        $conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
        $stmt = $conn->prepare("SELECT * FROM tbl_users WHERE role = 'employee' ORDER BY first_name LIMIT $page,10");
        $stmt->execute();
        $result = $stmt->fetchAll();
        foreach($result as $row)
        {
          $empavatar = $row['avatar'];
          <div class="GridLex-col-3-sm-4-xs-6_xss-12">
            <div class="employee-grid-item">
              <div class="action">
                <div class="row gap-10">
                  <div class="col-xs-6 col-sm-6">
                    <div class="text-left">
                      <button class="btn"><i class="icon-heart"></i></button>
                    </div>
                  <div class="col-xs-6 col-sm-6">
                    <div class="text-right">
                      <a class="btn text-right" href="employee-detail.html"><i class="icon-action-redo"></i></a>
                    </div>
                  </div>
                </div>
              </div>
              <a target="_blank" href="employee-detail.php?empid=<?php echo $row['member_no'];>" class="clearfix">
                <div class="image clearfix">
                  <?php
                    if ($empavatar == null) {
                      print "<center><img class='img-circle autofit2' src='images/default.jpg' alt='image' /></center>";
                    } else {
                      echo "<center><img class='img-circle autofit2' alt='image' src='data:image/jpeg;base64, ".base64_encode($empavatar)."' /></center>";
                    }
                  </div>
                </div>
              </div>
            </div>
          </div>

```

Fig 5.2.1: HOME PAGE

CHAPTER 6

RESULTS

6.1 LOGIN PAGE

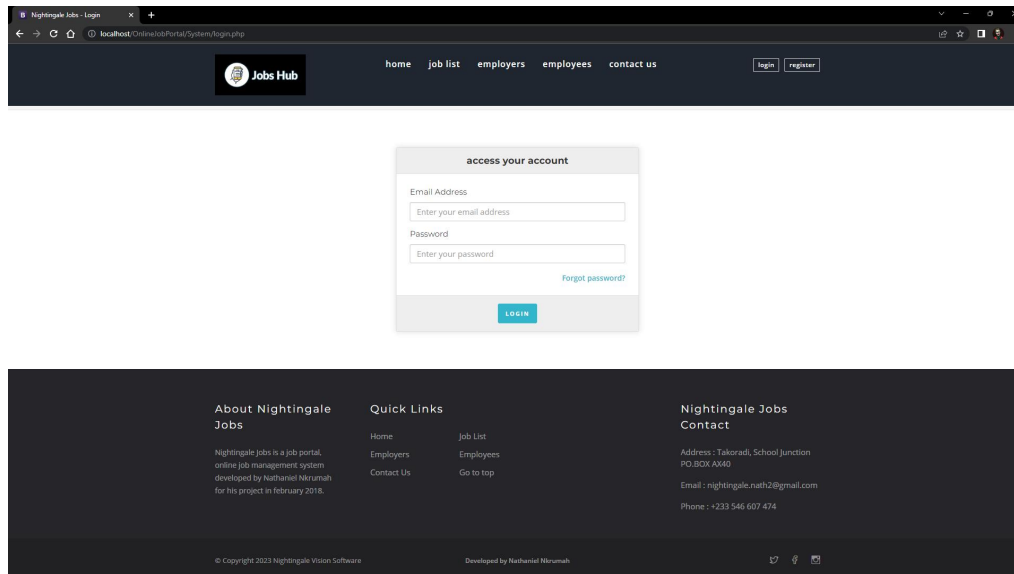


Fig 6.1.1:LOGIN PAGE

6.2 HOME PAGE

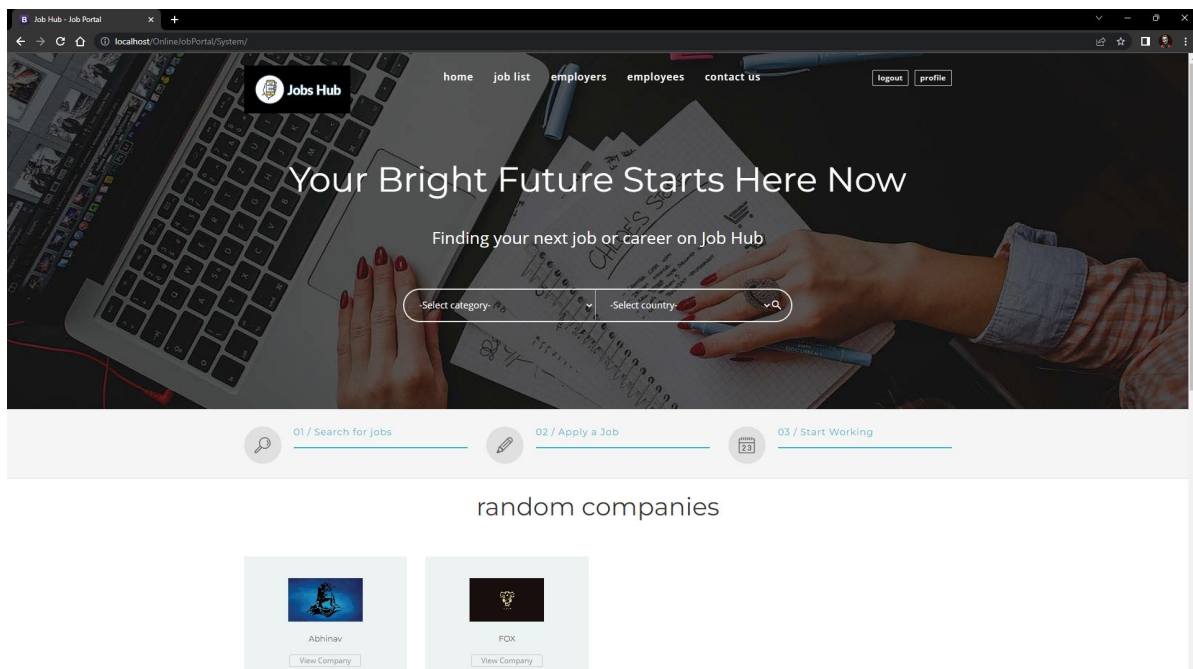


Fig 6.2.1:HOME PAGE

6.3 JOB-LIST PAGE

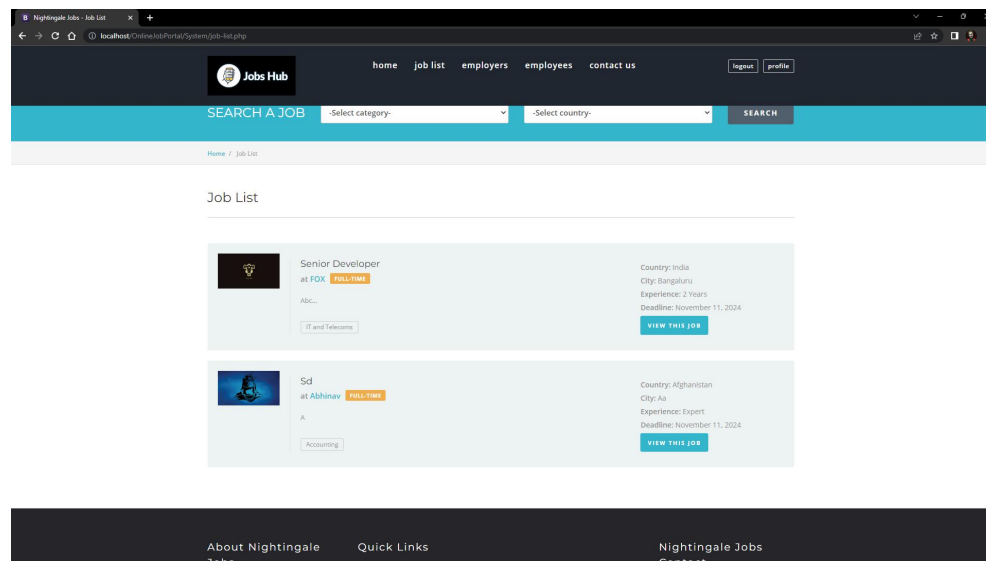


Fig 6.3.1:JOB-LIST PAGE

6.4 EMPLOYE PAGE

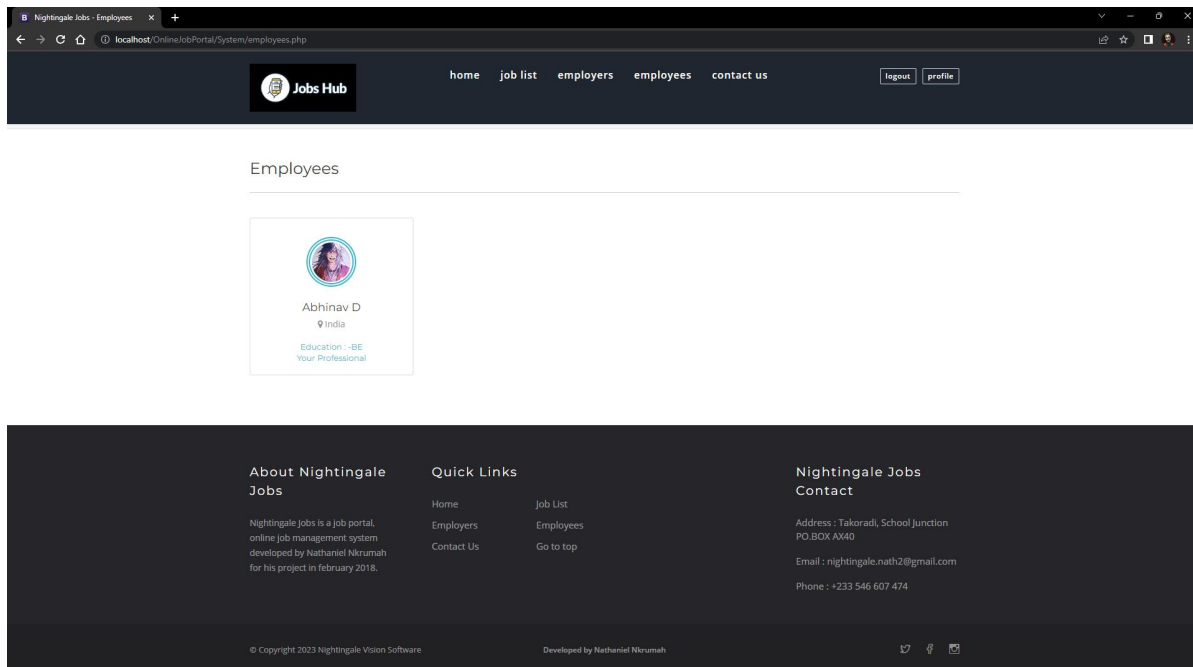


Fig 6.4.1:EMPLOYER PAGE

CHAPTER 7

CONCLUSION

In conclusion, the Job Hub project is a web-based job portal that provides a platform for users to access and manage job-related information. The project incorporates HTML, CSS, PHP, and MySQL technologies to create a dynamic and user-friendly interface. Users can login with their credentials and are directed to either the ADMIN PAGE or the EMPLOYEE PAGE based on their roles. The admin has authority over managing projects, employees, and bugs, while employees can focus on reporting bugs, tracking their status, and submitting solutions. The project aims to streamline the bug tracking and resolution process, providing a centralized platform for efficient project management. Overall, the Job Hub project enhances the job search experience and facilitates effective communication and collaboration between stakeholders.

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- [3] Bootstrap : <https://getbootstrap.com/>
- [4] youtube channel : <https://www.youtube.com/@SuperSimpleDev>