

NEXTSTEP NETWORK

A MINI-PROJECT REPORT

Submitted By

NANDHA KUMAR P

2116220701180

**In partial fulfilment for the award of the degree of
BACHELOR OF ENGINEERING
IN
COMPUTER SCIENCE AND ENGINEERING**



**RAJALAKSHMI
ENGINEERING COLLEGE**
An AUTONOMOUS Institution
Affiliated to ANNA UNIVERSITY, Chennai

**RAJALAKSHMI ENGINEERING COLLEGE
(AUTONOMOUS) THANDALAM
CHENNAI-602105**

NOV/DEC, 24

BONAFIDE CERTIFICATE

Certified that this project report “ **NEXTSTEP NETWORK** ” is the bonafide work of “ **Nandha Kumar P (220701180)** ” who carried out the project work under my supervision.

SIGNATURE

Mrs.JANANEE.V
Assistant Professor ,
Computer Science and Engineering,
Rajalakshmi Engineering College
(Autonomus)
Thandalam, Chennai - 602 105.

Submitted for the Practical Examination held on _____

INTERNAL EXAMINER

EXTERNAL EXAMINER

ACKNOWLEDGEMENT

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My sincere thanks to my family members, friends and other staff members of Computer Science and Engineering.

NANDHA KUMAR P

2116220701180

ABSTRACT

Nextstep Network is a vital process that helps individuals make informed decisions about their education, career paths, and professional development. It involves self-assessment to identify personal interests, strengths, and values, which forms the foundation for exploring various career options. Through personalized counseling and access to resources, individuals gain insights into different industries, roles, and educational pathways, helping them align their aspirations with realistic opportunities.

Additionally, career guidance provides valuable information on labor market trends, including in-demand skills, job availability, and salary expectations, which aids in making strategic decisions. It also supports skill development by identifying gaps and offering ways to improve or acquire new competencies.

Ultimately, career guidance helps individuals navigate key decision-making moments, such as selecting a college major, transitioning between jobs, or planning long-term career objectives, ensuring they are better prepared for professional success and personal fulfillment.

the importance of career guidance has grown significantly. It not only helps individuals understand their current skill sets but also provides a roadmap for future growth, adapting to the evolving demands of industries. Through continuous support, career guidance ensures that people are equipped to handle career transitions, whether due to personal goals or shifts in the global economy.

By fostering both short-term and long-term career planning, it empowers individuals to pursue fulfilling careers that align with their personal values and ambitions.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

career guidance plays a crucial role in helping individuals make informed decisions about their professional paths. This project aims to develop a **web-based career guidance platform** that enables students, job seekers, and professionals to explore career options, align their skills with industry demands, and set achievable goals. The platform will serve as a **personalized tool** for career planning by leveraging a combination of modern web technologies like **HTML, CSS, JavaScript, PHP, MySQL, and Bootstrap** to provide a robust, scalable, and interactive solution.

The use of **Bootstrap** ensures a responsive design that is accessible across devices, allowing users to access career resources anytime, anywhere. **PHP and MySQL** will power the back-end, supporting secure data storage, user authentication, and dynamic interactions with the system, while **JavaScript** will enable real-time updates, such as personalized recommendations and notifications.

Through this project, the goal is to provide a **comprehensive career guidance platform** that empowers users to navigate career decisions with confidence. Whether individuals are exploring careers, seeking professional development, or preparing for interviews, the system will act as a reliable companion in their career journey.

The combination of **front-end and back-end technologies** ensures an efficient, scalable, and engaging user experience, with the potential for future enhancements like integration with **AI-driven career predictions** and **collaborative learning modules**.

1.2 SCOPE OF THE WORK

The platform will include a **career assessment feature** to help users identify suitable career options and align their strengths with relevant industries. A **dashboard will present career paths**, educational resources, and potential job roles, enabling users to explore and set career goals. Users will also receive **real-time notifications about upcoming career events, deadlines, or relevant job listings**, ensuring that no opportunity is missed. The system will allow **mentorship access**, where users can connect with professionals for one-on-one career guidance.

Using **Bootstrap**, the platform will provide a responsive design, ensuring accessibility on desktops, tablets, and smartphones. **JavaScript** will enable real-time interactions, such as updating progress bars and displaying personalized recommendations without reloading pages. **PHP and MySQL** will manage user data securely, offering role-based access to ensure appropriate levels of control for users, mentors, and administrators.

This platform is designed for **flexibility and scalability**, serving diverse users such as students, job seekers, and professionals. With the potential for future enhancements, such as **AI-driven career suggestions** and **integration with LinkedIn or job portals**, the system can evolve to meet the changing needs of its users. The goal is to provide **an intuitive, interactive, and reliable tool** that supports continuous learning and career development, helping users stay informed and achieve their career objectives.

In summary, the **career guidance system** aims to deliver a **comprehensive and user-friendly solution** for career exploration, planning, and management.

1.3 AIM AND OBJECTIVES OF THE PROJECT

The aim of this project is to develop a comprehensive web-based career guidance platform designed to support individuals in making informed career decisions and advancing their professional development. By utilizing modern web technologies, this platform will offer a user-friendly interface where users can explore various career paths, set and track professional goals, and access resources tailored to their skills and interests.

To achieve this, the project will include secure user authentication for personalized profiles, allowing users to explore resources and track their career goals safely. Additionally, it will incorporate career assessment tools, including skills and interest assessments, to provide personalized career recommendations. A resource library will be available, containing valuable information on job descriptions, industry insights, and educational content relevant to diverse careers.

Users will also have the ability to set career goals with specific deadlines and milestones, along with tracking progress over time. A notification system will remind users of important activities, such as application deadlines or upcoming career workshops, ensuring they stay on track with their objectives. The platform will be designed with a responsive layout using frameworks like Bootstrap to provide an optimal experience across various devices.

For secure and reliable data management, MySQL will be used to store user information and facilitate access to customized recommendations. Ultimately, this project aims to create a user-focused platform that empowers individuals to explore, plan, and achieve their career goals, providing value for users at different stages of their professional journeys. Future enhancements could include a career matching feature, resume-building tools, and options for connecting with mentors and industry professionals.

CHAPTER 2

SYSTEM SPECIFICATIONS

2.1 HARDWARE SPECIFICATIONS

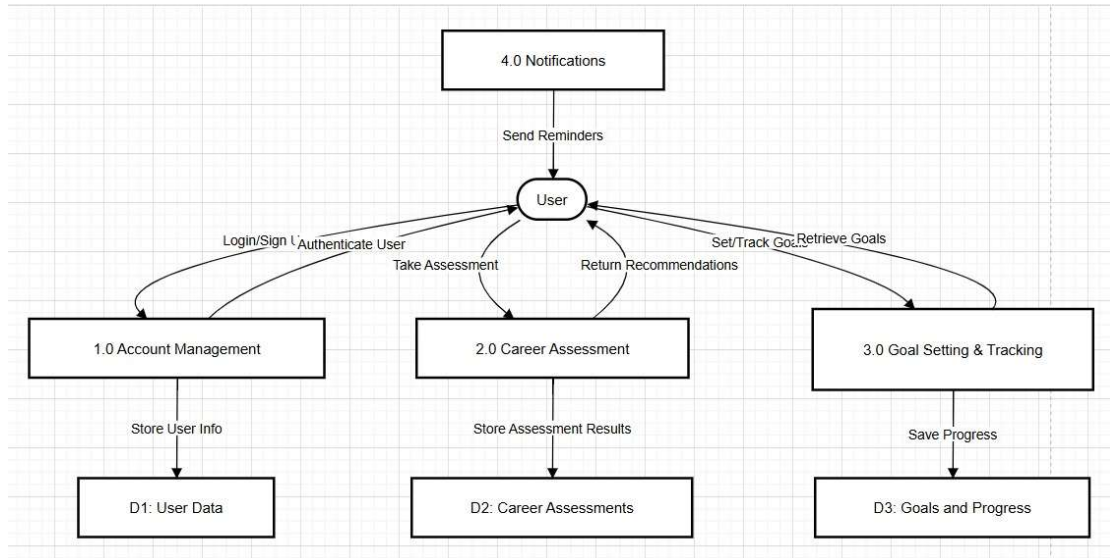
The hardware specifications for this career guidance platform include a server or local machine capable of hosting the database (MySQL) and web server (e.g., Apache) to ensure reliable performance for users accessing career resources and tools. Standard hardware with at least 4GB of RAM and a dual-core processor will be sufficient to manage the data processing and user interactions smoothly. A stable internet connection is required to support real-time data fetching, notifications, and seamless user engagement with the platform's web interface. Users can access the system from any device, including PCs, laptops, tablets, or smartphones, as long as they have a modern web browser. No specialized hardware is needed beyond the hosting server and the user's access devices, making the platform accessible and easy to deploy.

2.2 SOFTWARE SPECIFICATIONS

The Career Guidance System is built with a robust technology stack to ensure a smooth and engaging user experience. The front end leverages HTML for structuring web pages, providing a clear and organized layout. CSS, along with Bootstrap, is used to create a responsive design, allowing users to access the platform seamlessly on various devices. JavaScript adds interactivity and supports real-time updates, ensuring a dynamic interface that keeps users engaged. On the back end, PHP manages server-side processing, handling user requests and interactions with the database efficiently. A secure database (MySQL) is implemented to store user data, career assessments, and related tasks, ensuring data protection and accessibility. Together, these technologies create a dependable system that empowers individuals in their career exploration and development journey.

CHAPTER 3

ARCHITECTURE DIAGRAM



CHAPTER 4

MODULE DESCRIPTION

4.1 User Registration and Login Module

The User Registration and Login Module in the Career Guidance System is designed to provide secure access for individuals seeking career support. Users can create accounts by providing necessary details and going through a verification process. Role-based access ensures that different user types—such as students, professionals, and advisors—receive appropriate access to resources and tools. This module also includes password recovery options and session management to enhance security and user convenience.

4.2 Career Resource Management Module

The Career Resource Management Module acts as the central repository for organizing and managing various career-related resources, including assessment tools, industry insights, educational pathways, and skill development programs. Administrators can add, update, or remove resources, ensuring the collection remains relevant and up to date, providing users with the most current information for their career exploration.

4.3 YOUTUBE REFERNCE LINK Module

The Progress Tracking and Management Module automates the process of monitoring users' career development activities. Users can track their assessments, set career goals, and receive automated notifications regarding milestones and recommended next steps. Administrators can view user progress, analyze patterns, and offer tailored guidance to enhance the effectiveness of the career guidance process.

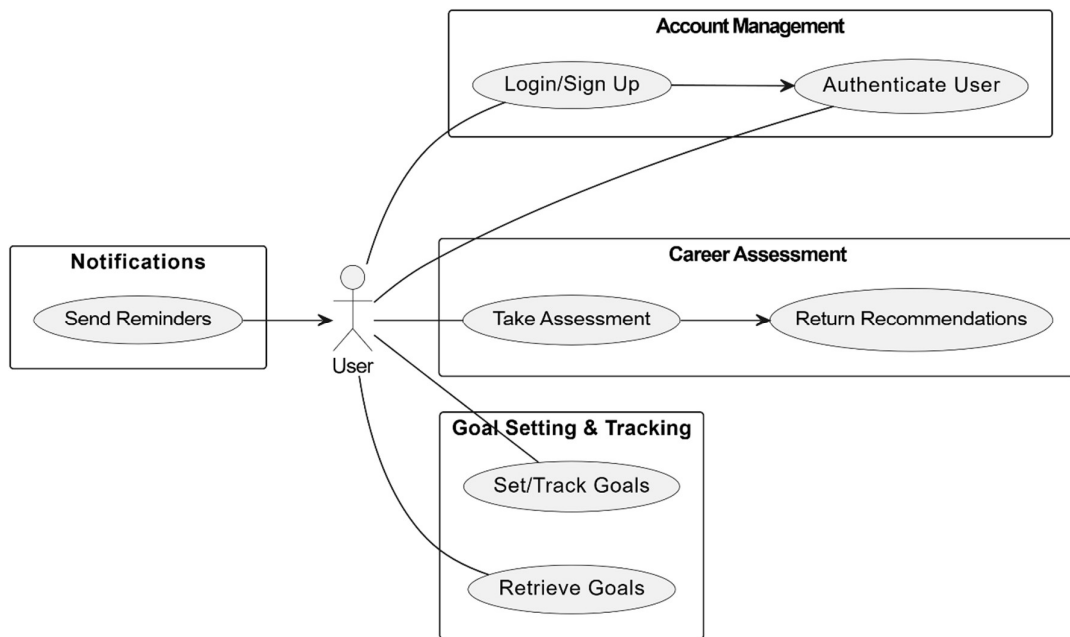
4.4 SUMBIT YOUR DOUBTS SO THAT IT WILL BE MAILED TO US

The Admin Module serves as the control center of the Career Guidance System, equipping administrators with tools to manage user accounts, resources, and system configurations. Administrators can add, modify, or deactivate user profiles with role-based permissions. The module features a dashboard that provides analytics and reports on user engagement, popular resources, and system activity, enabling data-driven decision-making to improve the overall user experience and effectiveness of the guidance provided.

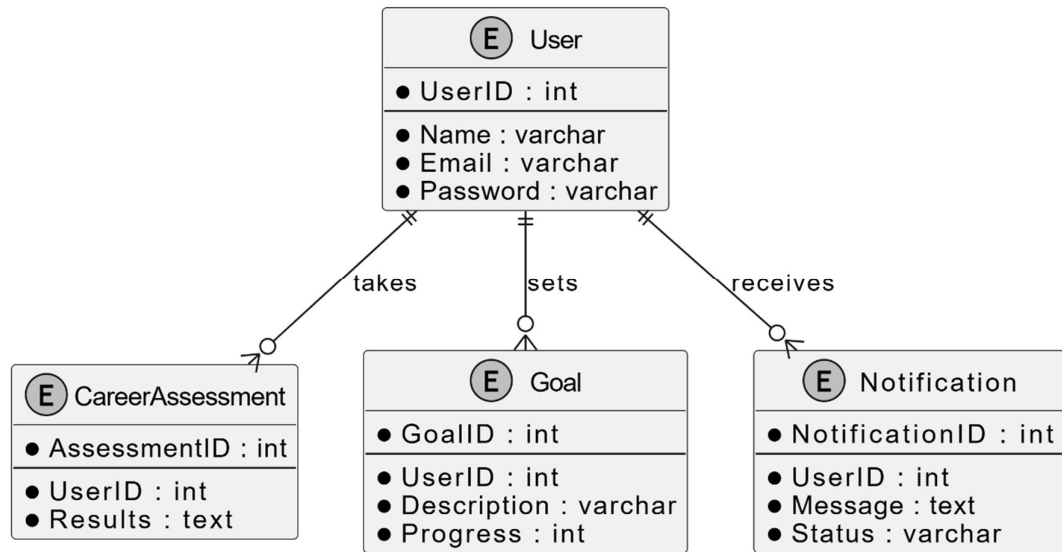
CHAPTER 5

SYSTEM DESIGN

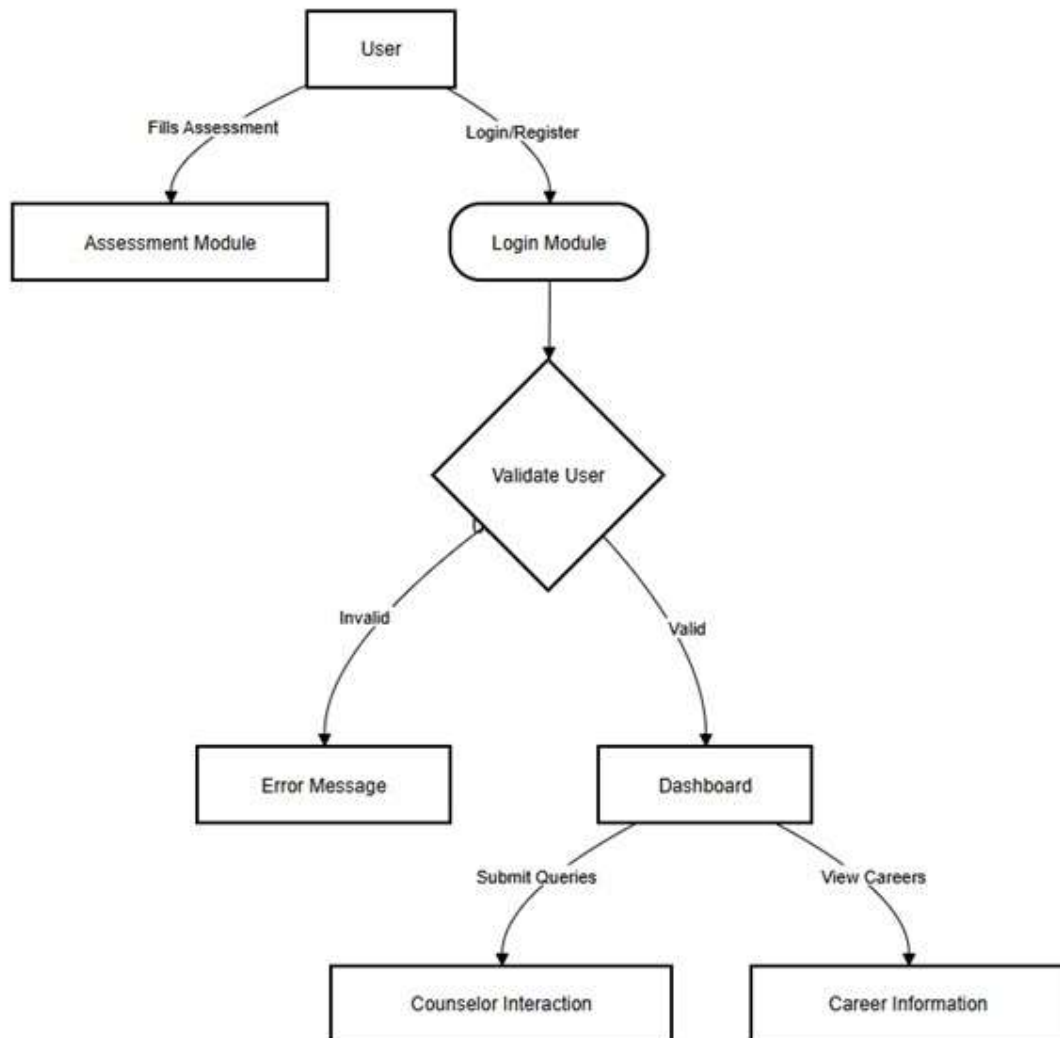
5.1 USE CASE DIAGRAM



5.2 ER DIAGRAM



5.3 DATA FLOW DIAGRAM



CHAPTER 6

SAMPLE CODING

LOGIN PAGE :

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <link
href="//maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.cs
s" rel="stylesheet" id="bootstrap-css">
  <link rel="stylesheet" href="CSS/login.css">
  <script
src="//cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js"></scri
pt>
  <script
src="https://cdn.jsdelivr.net/jquery.validation/1.15.1/jquery.validate.mi
n.js"></script>
<title>Login and Signup</title>
</head>
<body>
  <div class="container">
    <div class="row">
      <div class="col-md-5 mx-auto">
        <!-- Login Form -->
        <div id="loginForm" class="myform form">
          <div class="logo mb-3">
            <img alt="Logo" data-bbox="240 680 280 720"/>
          </div>
          <div class="form-group">
            <label for="loginEmail">Email address</label>
            <input type="email" name="email" class="form-control"
id="loginEmail" placeholder="Enter email" required>
          </div>
          <div class="form-group">
            <label for="loginPassword">Password</label>
```

```

        <input type="password" name="password" class="form-
control" id="loginPassword" placeholder="Enter Password"
required>
    </div>
    <div class="col-md-12 text-center">
        <button type="submit" class="btn btn-block mybtn btn-
primary tx-tfm">Login</button>
    </div>
    <div class="form-group text-center">
        <p>Don't have an account? <a href="javascript:void(0);"
id="showSignup">Sign up here</a></p>
    </div>
</form>
</div>

<!-- Signup Form -->
<div id="signupForm" class="myform form" style="display:
none;">
    <div class="logo mb-3">
        <div class="col-md-12 text-center">
            <h1>Signup</h1>
        </div>
    </div>
    <form method="post" action="process.php">
        <input type="hidden" name="form_type" value="signup">
        <div class="form-group">
            <label for="firstName">First Name</label>
            <input type="text" name="firstname" class="form-control"
id="firstName" placeholder="Enter First Name" required>
        <div class="form-group">
            <label for="confirmPassword">Confirm Password</label>
            <input type="password" name="confirm_password"
class="form-control" id="confirmPassword" placeholder="Confirm
Password" required>
        </div>
        <div class="col-md-12 text-center">
            <button type="submit" class="btn btn-block mybtn btn-
primary">Signup</button>
        </div>
        <div class="form-group text-center">
            <p>Already have an account? <a href="javascript:void(0);"
id="showLogin">Login here</a></p>
        </div>
    </form>
</div>

```



```
</body>
</html>
```

INDEX PAGE :

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Career Guidance</title>
  <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap
.min.css">
  <link rel="stylesheet" href="CSS/styles.css" type="text/css">
</head>

<body>
  <nav class="navbar navbar-expand-lg navbar-light">
    <div class="container-fluid">
      <a class="navbar-brand" href="#">Nextstep Network</a>
      <button class="navbar-toggler" type="button" data-bs-
toggle="collapse" data-bs-target="#navbarContent">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarContent">
        <ul class="navbar-nav ms-auto">
          <li class="nav-item"><a class="nav-link active"
href="#">HOME</a></li>
        </ul>
      </div>
    </div>
  </nav>
  <section class="hero">
    <h2>Tomorrow Looks Better Because We're <span>Here to Help
You</span> Choose Your Career Track.</h2>
    <a href="#about"><button class="btn btn-primary">About
Career Guidance</button></a>
  </div>
</div>
</div>
```

</section>

<section id="about" class="my-5">

<div class="container">

<h2>Who We Are</h2>

<p>Career Guidance offers insights into life, social, and school skills. We provide world-class advice on career choices based on interests and intelligence. Join us for a great experience navigating life after high school.</p>

<button class="btn btn-dark">Let's Begin</button>

</div>

</section>

<section id="contact" class="my-5">

<div class="container">

<h2>Contact Info</h2>

27, Kabilar St, Chennai, 602105

<h2>Send A Message</h2>

<form action="https://formspree.io/f/mb1jlkgl" method="POST">

<div>

<input type="text" name="first_name" placeholder="First Name" required>

<textarea name="message" placeholder="Write your message here..." required></textarea>

<input type="submit" value="Send">

</div>

</form>

</div>

</section>

<script

src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"></script>

</body>

</html>

PHP CODE OF SENDING MAIL:

```
<?php
session_start();
include 'config.php'; // Database connection

if ($_SERVER['REQUEST_METHOD'] === 'POST') {
    $formType = $_POST['form_type'];

    if ($formType === 'login') {
        // Handle Login
        $email = $_POST['email'];
        $password = $_POST['password'];

        $query = "SELECT * FROM users WHERE email='$email' AND
password='$password'";
        $result = mysqli_query($conn, $query);

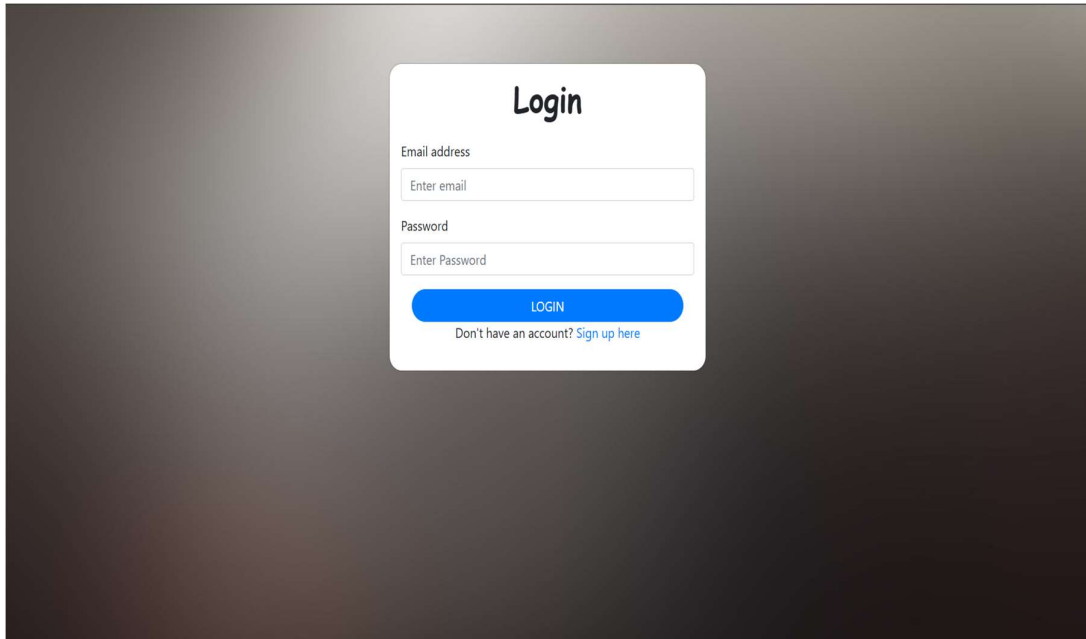
        if (mysqli_num_rows($result) > 0) {
            $_SESSION['email'] = $email;
            header('Location: interest.html'); // Redirect to dashboard
        } else {
            echo "Invalid email or password!";
        }
    } elseif ($formType === 'signup') {
        // Handle Signup
        $firstname = $_POST['firstname'];
        $lastname = $_POST['lastname'];
        $email = $_POST['email'];
        $password = $_POST['password'];
        $confirm_password = $_POST['confirm_password'];

        if ($password !== $confirm_password) {
            echo "Passwords do not match!";
        } else {
            $query = "INSERT INTO users (firstname, lastname, email,
password) VALUES ('$firstname', '$lastname', '$email', '$password')";
            if (mysqli_query($conn, $query)) {
                echo "Signup successful!";
                header('Location: login.html');
            } else {
                echo "Error: " . $query . "<br>" . mysqli_error($conn);
            }
        }
    }
}
}}>?n
```

CHAPTER 7

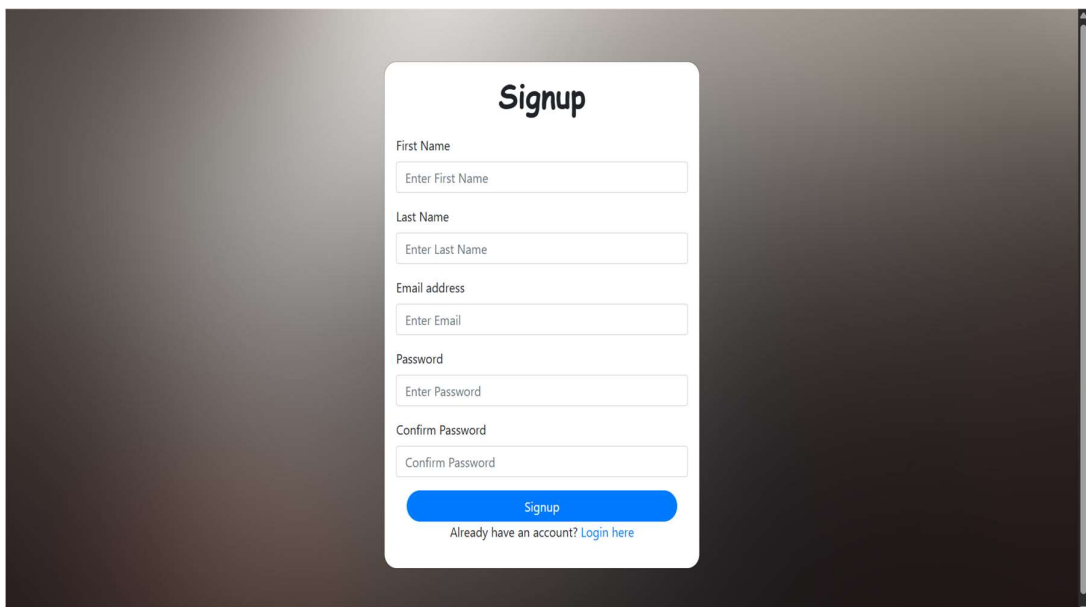
SCREEN SHOTS

LOGIN PAGE:



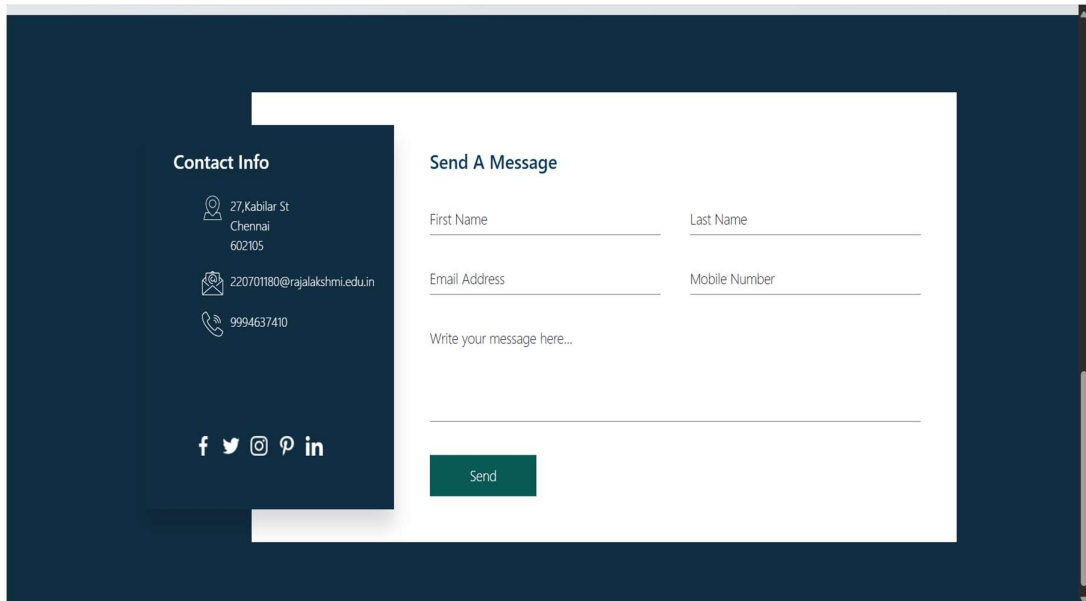
A screenshot of a login page with a dark gradient background. In the center is a white rounded rectangle containing the title "Login" in bold. Below the title are two input fields: "Email address" with placeholder text "Enter email" and "Password" with placeholder text "Enter Password". Below these fields is a blue rounded button labeled "LOGIN". At the bottom of the white box, there is a link that says "Don't have an account? Sign up here".

SIGN UP PAGE:



A screenshot of a signup page with a dark gradient background. In the center is a white rounded rectangle containing the title "Signup" in bold. Below the title are five input fields: "First Name" (placeholder "Enter First Name"), "Last Name" (placeholder "Enter Last Name"), "Email address" (placeholder "Enter Email"), "Password" (placeholder "Enter Password"), and "Confirm Password" (placeholder "Confirm Password"). Below these fields is a blue rounded button labeled "Signup". At the bottom of the white box, there is a link that says "Already have an account? Login here".

SENDING A MESSAGE TO US PAGE:



The screenshot shows a dark blue background with a white content area. On the left, a dark blue box contains 'Contact Info' with icons for location, email, and phone, followed by social media icons for Facebook, Twitter, Instagram, Pinterest, and LinkedIn. The main white area is titled 'Send A Message' and contains a form with fields for 'First Name', 'Last Name', 'Email Address', and 'Mobile Number'. Below these is a text area for the message and a green 'Send' button.

Contact Info

27, Kabilar St
Chennai
602105

220701180@rajalakshmi.edu.in

9994637410

f t i p in

Send A Message

First Name _____ Last Name _____

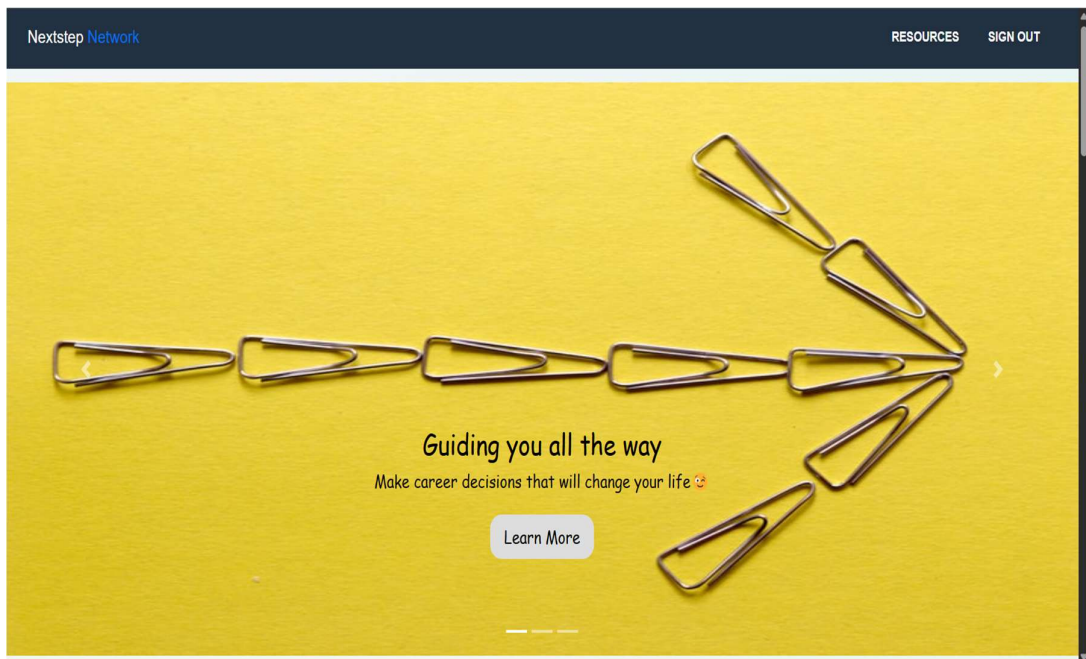
Email Address _____ Mobile Number _____

Write your message here...

Send

RESOURCES:

1.



2.

Career interests are your preferences regarding work activities and environment. Identifying your career interest helps you make a well-informed and more strategic decision on your career path. Following your career interest means you are pursuing a career that uses your talents and aligns with your passion and preferences. Understanding and being able to determine your passion helps you find fulfillment and success in your chosen profession. In this webpage we provide tools that will enable you make the right career decisions.

LET US KNOW ABOUT YOUR INTERESTS....

Business

Technology

Economics

Engineering

Humanities

Arts

3.

COURSE DETAILS: BUSINESS ADMINISTRATION

WHAT DOES AN IT CAREER ENTAIL?

Bachelor of Business Administration (BBA) degree is designed to provide in-depth knowledge of a wide-range of aspects related to business operations. The program's core curriculum typically covers topics such as accounting, marketing, finance, and more.

Career Objectives

Enrolling in the BBA program you can learn more about business theory and its real-world applications. In the end, you could gain an understanding of various aspects of business administration, including:

- Developing strategic plans using marketing information
- Understand the role of information technology systems (IT) in supporting business operations
- Learn how to solve organizational problems using human resources and management principles
- Understand how to use data tools to gather business intelligence. Proceed to use the information to make key operational decisions
- Learn to apply critical thinking concepts
- Develop the ability to apply financial management principles to ensure viability

UNIVERSITIES:

No.	University	Location	Website
1	KCA university	Nairobi, Ruaka Campus	KCA University
2	St. Paul's University	Lituru	St. Paul's University
3	Dijayar University	Mombasa road, Athi river	Dijayar University

Complimentary Certifications

1. Advanced Certificate
2. Postgraduate Certificate
3. Graduate Certificate
4. Undergraduate Certificate
5. Certificate

External Resources

1. What are the benefits of studying Business Administration
2. What is Business Administration
3. Complete Career Guide and Career Insight
4. Thoughts On a Business Administration Degree

CHAPTER 8

CONCLUSION

The implementation of a Career Guidance System is crucial for providing individuals with the support and resources needed to make informed decisions about their career paths. This system offers a structured approach to career exploration, providing tools such as assessments, personalized recommendations, and access to industry insights. With features like user-friendly interfaces, role-based access control, and real-time updates, the system ensures that users can receive tailored guidance efficiently and effectively, promoting professional growth and development.

By integrating a comprehensive Career Guidance System, educational institutions, counseling centers, and career services can enhance the accessibility and quality of career-related information. Continuous updates and feedback mechanisms ensure that the system evolves to meet the ever-changing needs of users, while the inclusion of emerging technologies like data analytics and artificial intelligence allows for personalized career recommendations and trend analysis. This not only improves user engagement but also provides meaningful insights to help individuals align their career choices with market demands.

The remote accessibility of the system ensures uninterrupted support, regardless of location, enabling users to explore career options at their own pace. In addition, the shift towards digital platforms reduces dependency on traditional, in-person career counseling, promoting scalability and greater outreach. The system fosters a more connected, informed, and future-ready workforce by providing a sustainable and adaptable solution for career development.

In summary, the Career Guidance System is an essential tool for navigating the complexities of career planning. It empowers individuals to make confident career decisions, aligns with both current and future workforce demands, and contributes to building a more informed, adaptable, and resource-efficient professional landscape.

CHAPTER 9

REFERENCES

<https://www.w3schools.com/html/default.asp>

<https://www.w3schools.com/css/default.asp>

<https://www.w3schools.com/js/default.asp>

<https://getbootstrap.com/docs/5.0/getting-started/introduction/>

<https://www.php.net/docs.php>

<https://www.timehero.com/>