
Career Crafter

Project Overview

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The **Carrier Crafter** project focuses on revolutionizing the career counseling process using a machine learning-powered platform. This system interacts with students through a chatbot interface, asking them a series of questions regarding their academic history, personal interests, and family background. Based on their responses, the platform provides real-time, personalized recommendations on career fields, college options, and job prospects.




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Navigate Your Career Journey

Discover your potential, explore opportunities, and chart your path to success with CareerCompass.

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Need Personalized Career Advice?

Our AI-powered Career Assistant is here to help you 24/7. Start a conversation now!

[Chat with Career Assistant](#)

ChatBot-YOURBUDDY:

YOUR-BUDDY

Hello! 🌟 I'm here to support you on your career journey. Let's start by getting to know you better!

Could you please let me know if you completed 10th or 12th grade? I'm here to help you find your path.

Fantastic! Since you completed 12th grade, let's go further.

Do you have any family business?

That sounds interesting! Could you share more about the type of business?

It is a medical shop

Hi

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Yes

Full screen screen-shot:

CareerCrafter

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About CareerCompass

Our Mission

At CareerCompass, our mission is to empower students and recent graduates to navigate the complex world of career development with confidence and clarity. We believe that every individual has unique talents and potential, and we're dedicated to helping you uncover and leverage these strengths in your professional journey.

Our Approach

We take a holistic, personalized approach to career guidance. Our team of experienced career counselors and industry experts work closely with you to understand your aspirations, skills, and values. We then provide tailored advice, resources, and support to help you make informed decisions about your career path.

What Sets Us Apart

- Expertise**
Our team consists of certified career counselors and professionals with diverse industry experience.
- Personalization**
We offer individualized guidance tailored to your unique needs and goals.
- Data-Driven Insights**
We use the latest labor market data and trends to inform our advice and strategies.
- Comprehensive Support**
From career exploration to job search strategies, we support you at every stage of your career journey.

Success Stories

John Doe -Software Engineer at Tech Corp

"CareerCompass helped me discover my true passion and land my dream job. I'm forever grateful for their guidance."

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Frequently Asked Questions

What services does CareerCompass offer?

How can I schedule a career counseling session?

Are your services confidential?

Do you offer services for alumni?

Get in Touch

Name

Email

Message

Send Message

CareerCompass

Guiding students towards successful careers.

Quick Links

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Why Carrier Crafter?

Traditional career counseling methods often lack personalization, are time-consuming, and may not fully consider all factors influencing a student's future.

Carrier-Crafter seeks to change that by using data-driven techniques to guide students, offering them tailored suggestions backed by machine learning models trained on real-world data.

Problem

Statement

Students often feel overwhelmed by the variety of career options available, especially without proper guidance. The goal of CounselMe is to reduce this burden by leveraging technology that assists students in making better, data-informed decisions regarding their future.

Technical Overview

1. Introduction

The **Carrier Crafter** platform is designed to provide intelligent career counseling by leveraging advanced technology to analyze student data through an interactive chatbot interface. This user-friendly chatbot engages with students, collecting essential information about their academic performance, interests, and family background.

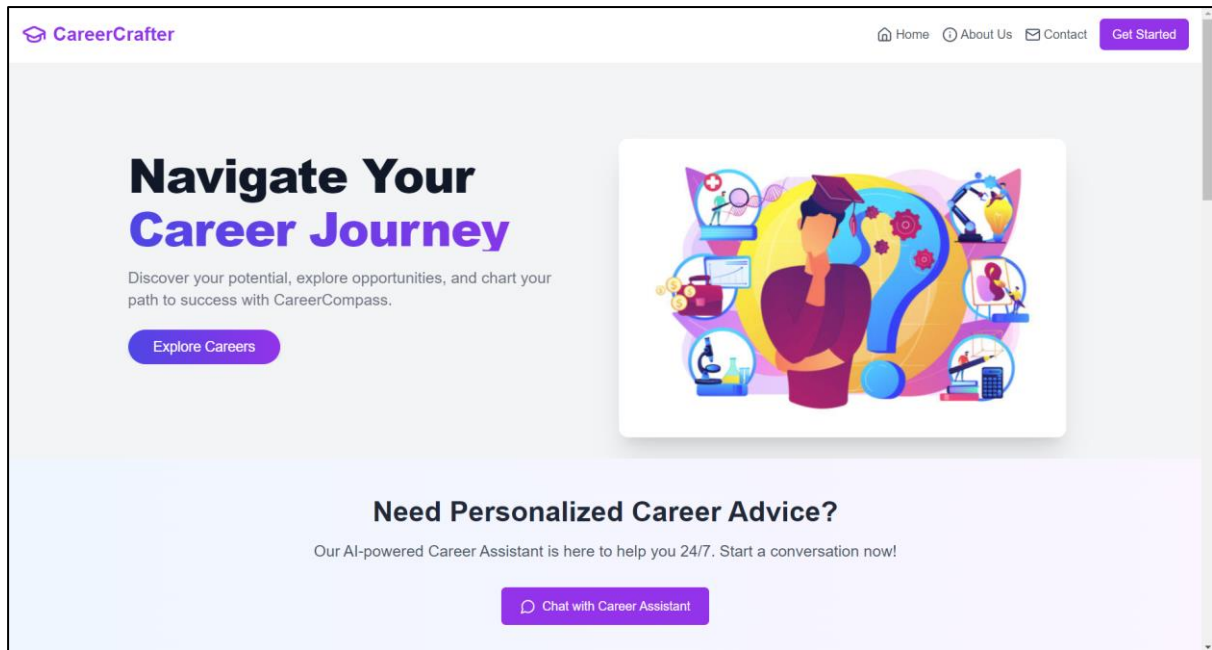
Powered by a sophisticated machine learning model, **CounselMe** processes this data to deliver tailored career recommendations that align with each student's unique profile. The platform considers various factors, such as individual strengths, potential career paths, and the current job market landscape, ensuring that students receive personalized guidance. This approach not only helps students make informed decisions about their educational journeys but also empowers them to explore career options that resonate with their aspirations and circumstances.

By integrating data-driven insights into the counseling process, the **CounselMe** platform aims to enhance the overall experience for students, making it easier for them to navigate their future career opportunities with confidence.

2. Flow of the Platform

Home Page

Upon entering the platform, users are greeted by the Home Page, which serves as the initial point of interaction.



Tabs on the Home Page:

- **Scholarships:**

- This section lists various scholarships available for students based on their academic history and eligibility criteria. Users can filter scholarships by category, such as merit-based, need-based, or field-specific scholarships.

- **Employment Ratio:**

- Here, users can access statistics on employment rates for different career fields. The platform provides insights into job availability, salary expectations, and industry growth trends, enabling students to make informed decisions about their career paths.

- **Explore Services:**

- This tab showcases the comprehensive range of services offered by CounselMe, including career counseling sessions, personalized guidance, college selection help, and access to resources for skill development.

Login Page

After exploring the homepage, the user will proceed to the Login Page. Users can log in using their email and password or register as new users. The login system is designed for user security, ensuring personal data is protected.

Chatbot Interaction

Once logged in, users are directed to the Chatbot interface, which serves as the primary tool for collecting user input and providing career guidance.

- **Chatbot Functionality:**

- The chatbot is designed to be user-friendly and engaging, guiding students through a series of questions aimed at gathering essential information for personalized recommendations.
- **The chatbot will inquire about:**
 1. **Academic Background:** Understanding whether the user has completed 10th or 12th grade, which helps tailor recommendations to their current educational level.

2. **Family Business Involvement:** Identifying if the user has an interest or background in a family business can influence career suggestions.
3. **Personal Interests and Preferences:** Gathering information about the student's hobbies, subjects they enjoy, and potential career interests.
4. **Merit and Marks:** Collecting academic performance data to evaluate eligibility for specific career paths and educational institutions.

- **Personalized Recommendations:**

- Based on the user's responses, the chatbot leverages a machine learning model trained on historical student data to provide tailored career field suggestions. For instance, a student from a science background with high merit may receive recommendations for engineering, medicine, or biotechnology fields.

2. Flow of the Platform

In this section, we'll walk through the user experience, highlighting the flow of the CounselMe platform from entering the home page to receiving personalized career recommendations through the chatbot.

2.1 Home Page

When users first enter the platform, they are presented with a clean and intuitive **Home Page** that serves as the gateway to all of CounselMe's services.

Key Tabs:

1. **Scholarships:** A section that lists available scholarships based on the user's merit and academic performance. The user can filter scholarships based on category, location, and other criteria.
2. **Employment Ratio:** This tab provides students with statistics on employment ratios across different industries. It's aimed at helping users understand which fields are growing and offer good prospects for employment.
3. **Explore Services:** This area offers users a chance to discover the variety of services provided by CounselMe, including career counseling, college suggestions, and in-depth job market analysis.

2.2 Login Page

Once users have explored the services, they can proceed to the **Login Page**, where they will either log in or sign up for a new account.

Login Functionality:

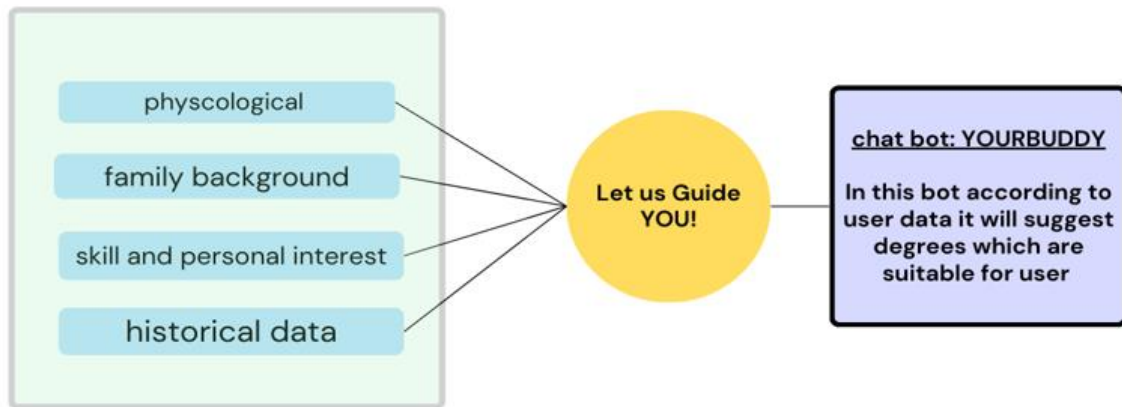
- Secure user authentication, with features to safeguard personal data.

- Users can sign in using credentials or through social login integrations (e.g., Google, Facebook).
-

2.3 Chatbot Interaction

The core feature of the CounselMe platform is its AI-driven **Chatbot**, which engages users in a personalized conversation. The chatbot is designed to simulate the role of a counselor, asking students questions such as:

1. **Academic Background:** Queries about whether the user has completed 10th or 12th grade.
2. **Family Business Involvement:** Identifies whether students come from a business family and their interests in pursuing it.
3. **Personal Interests:** The chatbot explores the student's preferences in subjects and career interests.
4. **Marks or Merit Scores:** Collects information regarding academic performance to assess eligibility for certain career paths.



The conversation is interactive, and the chatbot provides **real-time recommendations** based on the data collected. If a student is unsure about their interests, the chatbot reassures them and provides options they can explore further.

3. Machine Learning Model3. Machine Learning Model

Overview

The CounselMe platform uses a machine learning model to analyze user inputs and generate personalized career recommendations based on individual profiles. This model is trained on a comprehensive dataset, which includes historical academic data, career outcomes, and job market trends.

Prediction Mechanism

1. **Collecting User Input:** The chatbot gathers essential information from users, including academic performance and interests.

2. **Generating Recommendations:** The model analyzes this data against its training dataset to identify patterns, delivering tailored career suggestions and resources.

4. Key Features

4.1 Career Field Recommendation

Based on user input, the platform suggests various career fields that align with their academic achievements, interests, and family background. These suggestions are displayed in real-time and are supported by relevant data regarding job market trends and expected growth in the recommended fields.

☐ **Potential Job Roles:**

- **Software Engineer:** Responsible for designing, coding, and maintaining software applications. They collaborate with teams to develop innovative solutions tailored to user needs.
- **Data Analyst:** Analyzes data sets to identify trends and insights that inform business decisions. This role often involves data visualization and reporting.

□ **Salary Expectations:**

- **Software Engineer:** Typically earns between **\$70,000 and \$120,000** annually, with entry-level positions starting around **\$60,000** and experienced professionals making upwards of **\$150,000** in tech hubs like San Francisco or New York.
- **Data Analyst:** Average salary ranges from **\$60,000 to \$90,000**, depending on experience, industry, and location.

□ **Employment Growth Rate:**

- **Software Development:** Expected to see a **22% growth** over the next decade, fueled by the continuous demand for software solutions across all industries.
- **Data Analysis:** Projected to grow by **25%**, driven by the increasing importance of data-driven decision-making in businesses.

4.2 College Analysis

The platform provides college suggestions based on the student's merit and career choice. It evaluates colleges based on cut-off marks and eligibility criteria, ensuring students are provided with suitable options.

4.3 Job Prospects

Each career suggestion comes with detailed insights into potential job roles, salary expectations, and the employment growth rate for that specific field. This ensures that students are well-informed about the future prospects of their chosen path.

FOR EXAMPLE

Software Development

- **Job Roles:** Software Engineers are key players in creating applications that improve user experiences and efficiency. Their work includes coding, debugging, and collaborating with cross-functional teams to bring projects to life.
- **Salary:** Professionals can expect to earn between **\$70,000 and \$120,000** per year, with entry-level positions starting at **\$60,000** and top earners reaching **\$150,000**.
- **Growth Rate:** With technology advancing rapidly, this field is set for **22% growth** in the next ten years, reflecting the ongoing need for software innovations in various sectors.

5. Hardware/Software Requirements

Component Description

Frontend	JavaScript, HTML, CSS ,react js for chatbot interaction and UI design
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Backend	Python
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Database	SQL for storing user data and feedback
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7. Screenshots and Illustrations

Here's a visual representation of the platform in action:

- Home Page
- Login Page
- Chatbot Interaction
- Career Suggestions

- College Analysis
 - Job Prospects
-

8. Proposed Output

The primary outcomes of the CounselMe platform are:

□ **Career Field Recommendation:**

- **Personalized Assessment:** The platform employs an advanced algorithm to assess each student's unique interests, strengths, and academic performance. This assessment results in tailored career field suggestions that align with their aspirations and abilities.
- **Dynamic Matching:** As students progress and their preferences evolve, the system continuously updates recommendations, ensuring that they receive the most relevant options based on real-time data and insights.
- **Informed Decision-Making:** By providing detailed information on potential job roles, salary expectations, and industry growth rates, the platform empowers students to make well-informed career choices that align with their long-term goals.

□ **College Suggestions:**

- **Merit-Based Evaluation:** The platform evaluates students' academic records and achievements to recommend colleges that best match their profiles and chosen career fields. This ensures that students have access to institutions that will provide them with the right education and opportunities.
- **Comprehensive College Database:** CounselMe features a vast database of colleges and universities, including information on courses offered, admission requirements, campus facilities, and student reviews. This resource allows students to explore various options and find the right fit for their educational journey.
- **Guidance on Application Process:** The platform provides step-by-step guidance on the college application process, including tips on writing personal statements, preparing for interviews, and understanding admission criteria, helping students navigate this critical phase smoothly.

□ **Career Guidance:**

- **Expert Insights:** The platform offers access to a wealth of resources, including articles, videos, and webinars led by industry experts, to provide students with valuable insights into various career paths and current trends in the job market.

- **Skill Development Resources:** CounselMe identifies essential skills and competencies required for specific careers and provides tailored recommendations for courses, certifications, and workshops that can help students build their skill sets and enhance their employability.
- **Ongoing Support:** Students receive continuous support through personalized mentoring and counseling sessions, where they can discuss their career aspirations, seek advice on overcoming challenges, and gain encouragement to pursue their goals confidently.

9. Conclusion

CounselMe is a revolutionary platform that combines the power of machine learning and personalized guidance to provide students with the best possible career counseling. By understanding their unique academic history, interests, and family background, the platform ensures students receive the most relevant advice and guidance to succeed in their chosen fields.