



**PUCIT**  
Punjab University College of Information  
Technology

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## **Career Counselling Portal**

**Version 1.0**

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## TABLE OF CONTENTS

<b>CAREER COUNSELLING PORTAL .....</b>	<b>2</b>
1. INTRODUCTION .....	3
1.1 PROJECT TITLE .....	3
CAREER COUNSELLING PORTAL.....	3
1.2 PROJECT OVERVIEW STATEMENT .....	3
1.4 PROJECT GOALS & OBJECTIVES.....	4
1.5 HIGH-LEVEL SYSTEM COMPONENTS.....	4
1.6 LIST OF OPTIONAL FUNCTIONAL UNITS .....	4
1.7 EXCLUSIONS .....	4
1.8 APPLICATION ARCHITECTURE .....	4
1.9 GANTT CHART .....	5
1.10 HARDWARE AND SOFTWARE SPECIFICATION.....	5
1.11 TOOLS AND TECHNOLOGIES USED WITH REASONING.....	6

## Career Counselling Portal

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## 1. Introduction

### 1.1 Project Title

Career Counselling Portal

### 1.2 Project Overview Statement

The "Career Counselling Portal" project aims to create a user-friendly online platform that provides comprehensive career guidance and counseling services using an **AI Chatbot** to individuals at Bachelors level of their career development. This portal will serve as a one-stop destination for users to access valuable resources, including educational information and personalized counseling sessions. By leveraging cutting-edge technology and expert guidance, the project seeks to empower individuals in making informed career choices and ultimately achieving their professional goals.

Project Title: Career Counselling Portal			
Group Leader: Ramsha Farrukh			
Project Members:			
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Project Goal: To provide a platform to students where they can interact with experts and an AI Chatbot to seek guidance about their careers.			
Objectives:			
Sr.#			
1	Online platform for students and experts related to career counselling.		
2	AI Chatbot for creating a seamless interaction between students and system.		
3	Blogs of experts related to educational information.		
4	Benefits of personalized counselling sessions.		
Project Success criteria: When the system is complete, it will become easier for the students to seek career guidance that suit their interests.			
Assumptions, Risks and Obstacles:			
1- Extensive data gathering for career advice.			
2- Common career fields are covered in the system but ideally some minor fields may be missed.			
Organization Address (if any):			

Type of project:	<input type="checkbox"/> Research	<input checked="" type="checkbox"/> Development
Target End users:	1- Intermediate level Students	
Development Technology:	<input checked="" type="checkbox"/> Object Oriented	<input type="checkbox"/> Structured
Platform:	<input checked="" type="checkbox"/> Web based	<input type="checkbox"/> Distributed
	<input type="checkbox"/> Desktop based	<input type="checkbox"/> Setup Configurations
	<input type="checkbox"/> Other _____	
Suggested Project Supervisor:	Ma'am Sanam Ahmad	
Approved By:	Ma'am Sanam Ahmad	
Date:	September 27, 2023	

## ***1.4 Project Goals & Objectives***

### **Goal**

Our main goal is to provide a platform to students where they can interact with experts and an AI Chatbot to seek guidance about their careers.

### **Objectives**

- Online platform for students and experts related to career counselling.
- AI Chatbot for creating a seamless interaction between students and system.
- Blogs of experts related to educational information.
- Benefits of personalized counselling sessions.

## ***1.5 High-level system components***

The high-level system components for our application are.

- Authentication module.
- Chatbot module.
- Admin module.
- Experts module.
- Communication module.
- Reviews module.

## ***1.6 List of optional functional units***

- Premium Service for career advice from experts.

## ***1.7 Exclusions***

- The system will not provide career counselling after bachelor's and before intermediate level.

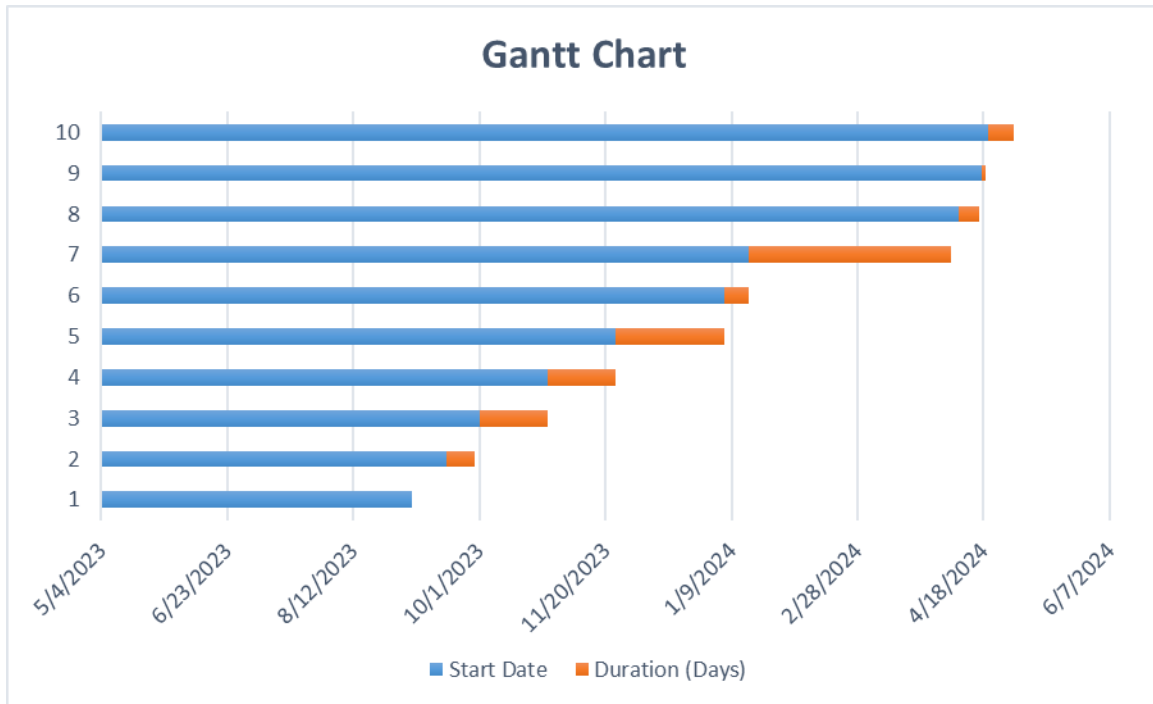
## ***1.8 Application Architecture***

We will follow 3-tier Architecture.

- Reactjs (Front End)
- Python (Back End)
- MongoDB (Database)

### 1.9 Gantt chart

Sr#	Task Name	Start Time	End Time	Duration (Days)
1	Orientation	04/09/2023	04/09/2023	0
2	Proposal Submission	18/09/2023	28/09/2023	11
3	1 <sup>st</sup> Del	01/10/2023	27/10/2023	27
4	2 <sup>nd</sup> Del	28/10/2023	23/11/2023	27
5	P I	24/11/2023	05/01/2024	43
6	GUI Design	06/01/2024	15/01/2024	10
7	Coding	16/01/2024	07/04/2024	80
8	Testing	08/04/2024	16/04/2024	8
9	Deployment	17/04/2024	19/04/2024	2
10	Maintenance	20/04/2024	30/04/2024	10



### 1.10 Hardware and Software Specification

#### Hardware: (Recommended)

- 2.7 GHz Quad-core Processor
- 8 GB Ram
- 500 GB Storage

#### Software: (Recommended)

- Windows 7+

## ***1.11 Tools and technologies used with reasoning***

### **Tools:**

- **Visual Studio Code**

VS Code is a versatile and lightweight code editor that simplifies coding tasks, enhances collaboration among developers, and provides a rich ecosystem of extensions. Its user-friendly interface, integrated debugging tools, and support for various programming languages make it an ideal choice for building and maintaining the portal efficiently.

- **Google Colab**

Google Colab offers a cloud-based environment with free access to GPUs and TPUs, making it ideal for machine learning and deep learning tasks. Its ability to save work on Google Drive ensures data persistence and easy sharing among team members, enhancing productivity during the model training process.

### **Technology:**

- **Reactjs**

This provides users with a seamless experience, enabling them to access career guidance and counseling services on both web browsers and mobile devices, enhancing accessibility and user engagement.

- **Python**

Because of its emphasis on code readability and its vast libraries and frameworks, Python is an ideal backend language when it comes to this area of technology. Moreover, Python has a vast set of libraries specific to machine learning tasks.

- **MongoDB**

As a NoSQL database, MongoDB offers flexibility in handling diverse data types, making it suitable for storing user data, educational content, and counseling records.