

# **BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT**

Autonomous Institute under VTU, Belagavi, Karnataka - 590 018

Yelahanka, Bengaluru, Karnataka - 560 119



A Synopsis Report on

## **PathFinder AI: [An AI Chatbot for Career Guidance]**

Submitted in partial fulfilment of the requirements for the major Project Phase -I of  
6<sup>th</sup> Semester (2022 Scheme)

**BACHELOR OF ENGINEERING**

in

**INFORMATION SCIENCE AND ENGINEERING**

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# **A Major Project Synopsis - Review-0**

## **ABSTRACT**

In today's fast-paced job market, both students and professionals often find it challenging to navigate their way to the right career that aligns with their skills and passions. This project is all about creating an AI-driven chatbot that offers tailored career advice based on what users ask. By leveraging Natural Language Processing (NLP) and Machine Learning (ML) techniques, the chatbot will sift through user inputs, recommend suitable career paths, and share helpful resources like job listings and courses for skill development. The goal is to make this system user-friendly, accessible, and capable of delivering precise career suggestions, turning it into a go-to resource for students and job seekers alike.

## **INTRODUCTION**

Career guidance plays a vital role in helping people navigate their future choices. However, traditional counseling methods can often be slow and hard to access for many individuals. Thanks to the latest advancements in AI and natural language processing, chatbots have stepped in as a quick and effective way to deliver personalized career advice. This project aims to create an interactive chatbot that helps users by evaluating their interests, skills, and qualifications to recommend the best career paths. Think of it as a virtual career counselor, making career guidance easier and more efficient for everyone.

## **SCOPE/OBJECTIVES**

- Create an easy-to-use AI chatbot that can handle questions about careers.
- Use natural language processing techniques to really get what users are saying.
- Leverage machine learning models to offer tailored career advice.
- Set up a database to keep track of career information and user interactions.
- Make the chatbot available on a website or messaging app for convenient access.
- Keep enhancing the chatbot's accuracy by gathering user feedback and analysing data.

## APPLICATIONS

- **Students:** Guides students in discovering career paths that align with their interests and academic history.
- **Job Seekers:** Aids individuals in identifying the right job roles and the skills they need to succeed.
- **Educational Institutions:** Can be seamlessly added to college websites to offer automated career advice.
- **Recruitment Agencies:** Assists in connecting candidates with promising job opportunities.
- **Online Learning Platforms:** Recommends pertinent courses and certifications to boost career advancement.

**Student-Name**

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**Project Guide**