# A Mini-Project Report on

### E-CAREER CARE

Submitted in partial fulfillment of the requirements for the degree of BACHELOR OF ENGINEERING

IN

Computer Science & Engineering

Artificial Intelligence & Machine Learning

By

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2022-2023



# A. P. SHAH INSTITUTE OF TECHNOLOGY

### **CERTIFICATE**

This is to certify that the project entitled "E-CAREER CARE" is a bonafide work of Atul Gupta (21106006), Siddhesh Dige (21106017), Ajay Chaurasiya (21106045), Amil Gauri (21106004) submitted to the University of Mumbai in partial fulfillment of the requirement for the award of Bachelor of Engineering in Computer Science & Engineering (Artificial Intelligence & Machine Learning).

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# A. P. SHAH INSTITUTE OF TECHNOLOGY

# **Project Report Approval**

This Mini project report entitled "E-CAREER CARE" by Atul Gupta, Siddhesh Dige, Ajay Chaurasiya and Amil Gauri is approved for the degree of Bachelor of Engineering in Computer Science & Engineering, (AIML) 2022-23.

External Examiner:	
Internal Examiner:	

Place: APSIT, Thane

Date:

### **Declaration**

We declare that this written submission represents my ideas in our own words and whereothers' ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that We have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission hasnot been taken when needed.

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#### ABSTRACT

Career guidance plays an important role in helping product markets work and education systems to meet their goals. Because the choice of a career is undeniably one of the most crucial decisions one makes in life. The irony is that such an important decision is often made quite early in the life of an individual and is sometimes made without giving much thought to it. A career should be chosen with utmost care, thought, and planning. Individual have different innate capacities and abilities and hence aptitudes for different kind of work. The purpose of Career Guidance is to match the individuals and the occupation optimally for mutual benefits. It also promotes equity. Recent evidence suggests that social mobility relies on wider acquisition not just of knowledge and skills, but also understanding how to use them. In this context, the mission of career guidance is very vast, to become part of lifelong learning. In this paper, we become to know about the needs and importance of Career Guidance and its proper implementation. And we know how to improve Career Guidance for making children's beautiful life as well as for all of us. But today in some places of our country this service is already started and adapted, departing from a traditional model of occupational interviewing students about to leave school.

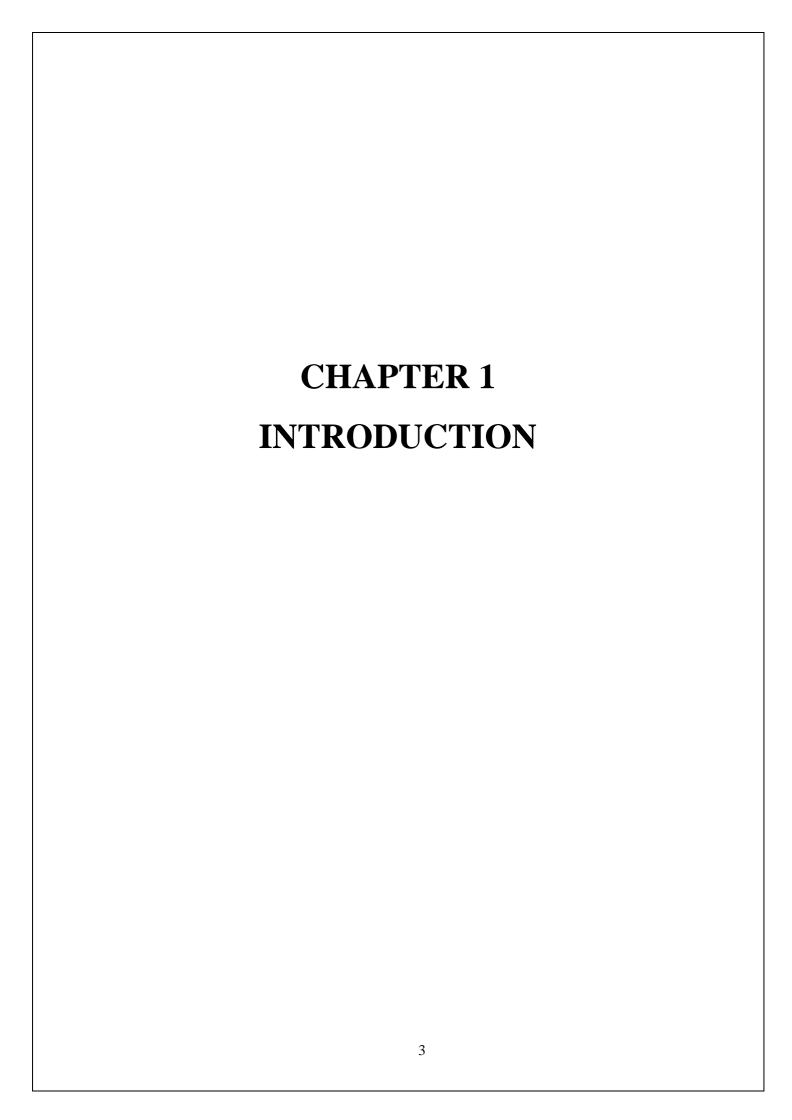
**Keywords:** Career Guidance, Innate capacities, Social Mobility, Life Learning, and Traditional Model

# Index

Index		Page no.	
Chapter-1			
	Introduction		3
Chapter-2			
	Literature Survey		6
	2.1	History	7
	2.2	Review	8
Chapter-3			
	Prob	lem Statement	10
Chapte			
	Expe	erimental Setup	12
	4.1	Hardware setup	13
	4.2	Software Setup	13
Chapter-5			
	Proposed system and Implementation		14
	5.1	Block Diagram of proposed system	15
	5.2	Description of Block diagram	15
	5.3	Implementation	15
Chapte	er-6		
	Conc	clusion	19
References		20	

# **List of Figures**

1] Fig (5.3.1) Homepage	15
2] Fig (5.3.1) Career after 10 <sup>th</sup>	16
3] Fig (5.3.1) Career after 12 <sup>th</sup> commerce	16
4] Fig (5.3.1) Career after 12 <sup>th</sup> arts	16
5] Fig (5.3.1) Career after 12 <sup>th</sup> science	17



### 1. INTRODUCTION

Career care helps us to reflect on our interests, ambitions, abilities, qualifications, etc. It helps us to understand the product market and education system and relate this to how we know about ourselves. Overall, career care is trying to teach us to plan and make decisions about work and learning. Career care is giving us information about the product market and making educational opportunities more accessible by organizing it, systematizing it, and making it available when and where we need it. In its contemporary forms, career care elicited upon a number of disciplines, like education, sociology, psychology, and labour economics, etc.

Today in most countries, career guidance is provided by people with a very wide range of training and academic qualifications. But some are specialists, some are not and some are very extensive and expensive training. This type of career guidance training programs is still heavily based upon developing skills with help in one-to-one interviews. On the other side, psychological testing is now received to reduced emphasis in many countries as counselling theories have moved from the practitioner as an expert and as facilitators of individual choice and development.

It is a process, through which individuals are assisted in making adequate adjustments to life's situations. It is a service which aims to help the individual understand themselves, it means enabling them to know their needs, aptitudes, abilities, interests, perceptions, purposes and their own limitations. It is a process which also aims to provide the individuals necessary and relevant information about himself/herself and also about the world around him.

Philosophical Foundations of Guidance - Uniqueness of a person, the nature of man, Supremacy of the Dignity of the Individual, Freedom of choice or free will, Chaos and Confusion in life, all-round development, to achieve maximum growth, Value system.

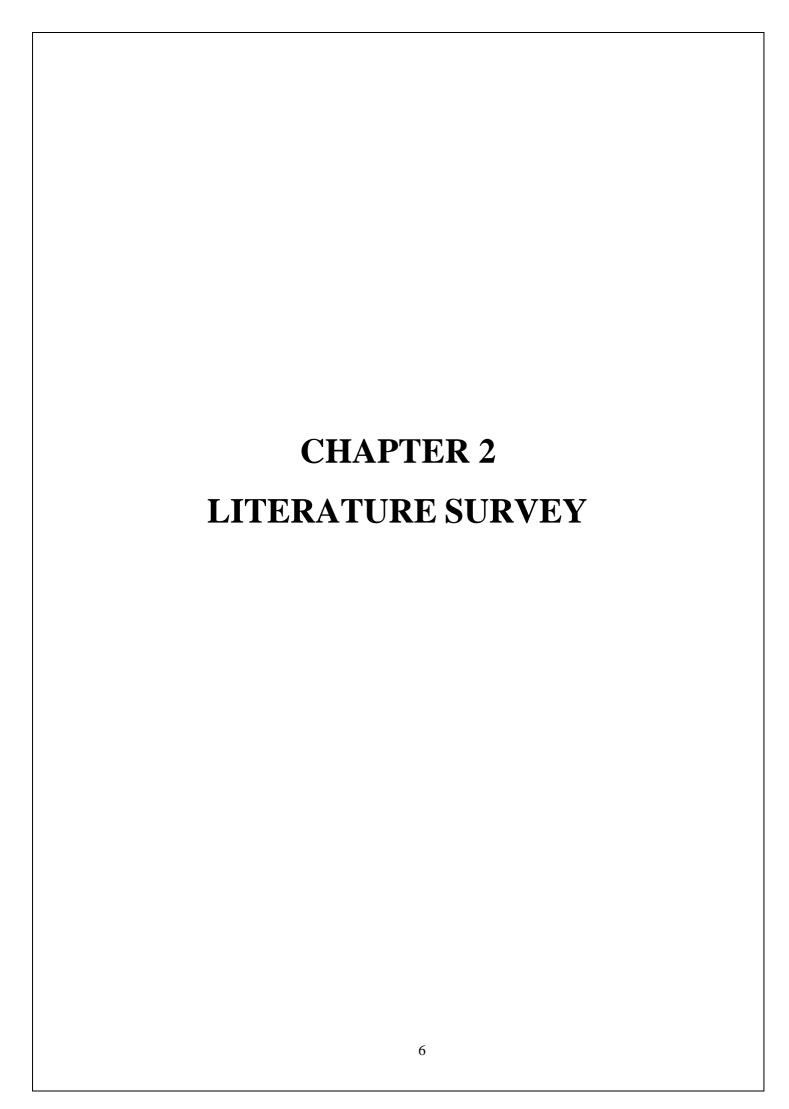
Socio-cultural Foundations of Guidance - The school, The family, Modern Complex Society, Regulation of Social behavior, Occupational Adjustment, Guidance for Societal and National Solidarity, Social change, Universalization of Elementary Education.

Psychological Needs, Individuality and Guidance - Psychological Needs, Self-Realization, Adjustment and Development, Dimensions of Individuality

#### Objectives of Career Care:

Career Care provides quality life planning education and proper career service which are classified with our developmental needs of different stages of growth. To create good career decisions according to their abilities, interests, orientations, etc. It empowered to make

responsible and informatics choices on our education, career goals and other aspects for leading to a meaningful life. It helps us to assist in adapting and managing to the transition of life from school to the workplace. Career Care prepares us for the actualization of life potential through the pursuit of our personal and career goals. It assists to understand our own career and academic aspirations. It develops positive attitudes towards learning and works. It connects our career and academic aspirations with everyone's development and life-long learning. It helps to properly utilize the acquired knowledge, attitudes and skills whenever necessary.



### 2. LITERATURE SURVEY

### 2.1-HISTORY

Career care or career counseling has a long history that dates back to the early 1900s. The first career counseling program was established in 1908 by Frank Parsons, who is considered the father of vocational guidance. Parsons believed that individuals should choose a career that matches their interests, abilities, and values. He developed a three-step process, known as the Parsons' model, to help individuals make informed decisions about their career path.

In the 1920s, vocational guidance became more popular, and many schools and colleges began to offer career counseling services to their students. During World War II, the demand for career counseling increased, as many soldiers returned home and needed help finding employment.

In the 1950s, Donald Super, a prominent figure in the field of career counseling, developed a theory of career development that emphasized the importance of self-concept in career decision-making. Super's theory, which focused on the stages of career development, continues to be influential in the field of career counseling today.

During the 1960s and 1970s, the field of career counseling expanded, and new approaches to counseling were developed. One such approach was the use of career assessments, such as aptitude and interest tests, to help individuals identify their strengths and weaknesses.

In recent years, career counseling has become more specialized, with counselors working in specific areas, such as executive coaching or career transitions. Technology has also played a role in the evolution of career counseling, with online resources and tools making it easier for individuals to access career information and guidance.

Overall, the history of career counseling has been characterized by a focus on helping individuals make informed decisions about their career path, and the field continues to evolve to meet the changing needs of today's workforce.

### 2.2-LITERATURE REVIEW

# [1] PCRS: Personalized Career-Path Recommender System for Engineering Students (IEEE Access 8 2020) Qamhieh , Manar, Haya Sammaneh, Mona Nabil Demaidi

To address the aforementioned drawbacks, this research paper presents a Personalized Career path Recommender System(PCRS) to provide guidance and help high school students choose engineering discipline. The design of PCRS is based on fuzzy intelligence of N-layered architecture and uses student's academic performance, personality type and extra-curricular activities. [1]

# [2] Generating unified candidate skill graph for career path recommendation (IEEE XPLORE 2019) Gugnani, Akshay, Vinay Kumar Reddy Kasireddy and Karthikeyan Ponnalagu

Skill graphs which capture both spatial and temporal relationships aid is generating precise career path recommendations. [2]

# [3] Skill-based career path modeling and recommendation (IEEE XPLORE 2021)Ghosh, Aritra, Beverly Wool, Shlomo Zilberstein, Andrew Lan

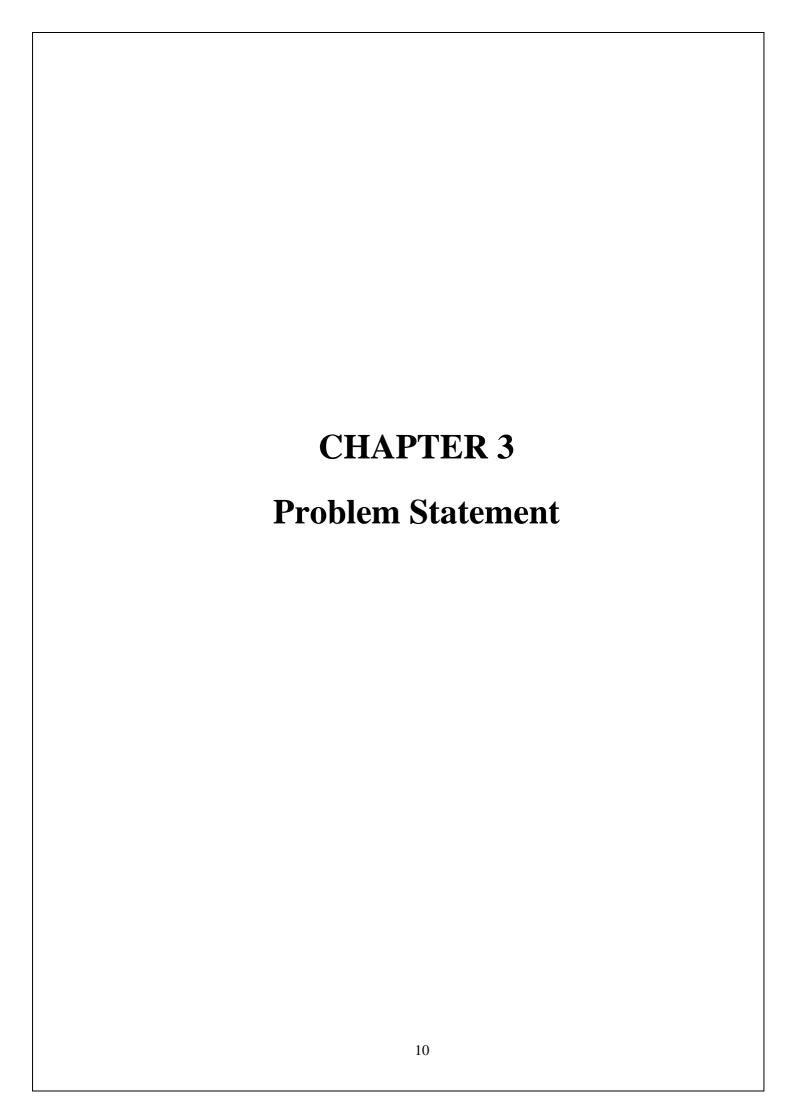
They have made a model which is interpretable and can be used for other important tasks including skill gap identification and career path planning. Using a series of case studies, show that our model can provide 1) actionable feedback to users and guide them through their upskilling and reskilling processes and 2) recommendations of feasible paths for users to reach their career goals. [3]

# [4] Understanding what affects career progression using linked-in and twitter data (IEEE XPLORE 2018) Pan, Yimimg, Xuefen Peng, Tianran Hu, Jiebo Luo

They presented a novel methodology to determine a carer stage based on job title and company information, so that a career path that consists of several stages could represent the occupational growth. [4]

### [5] Career and life assessment (IEEE XPLORE 2020) Kostek, P.J.

Companies are not only downsizing, they are also permanently eliminating levels of their organizations. Career planning is becoming an individuals's responsibility. Flexibility and adaptability play a key part in careers of both new graduate engineers and experienced practitioners. [5]

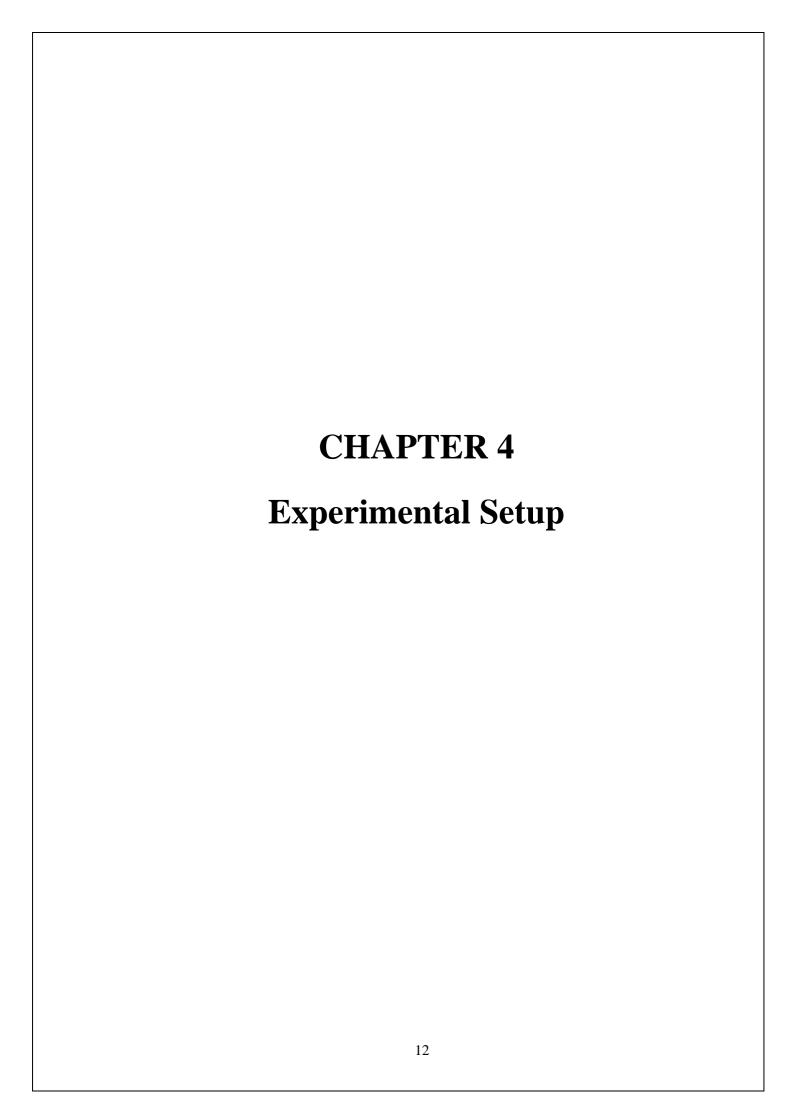


### 3. Problem Statement

In today's world many individuals may not have access to comprehensive information about different career paths, leading to limited awareness about the range of opportunities available to them. Insufficient guidance or counseling resources, both in educational institutions and in the community, may result in individuals receiving limited or inadequate support in exploring their career options, setting goals, or making informed decisions. Societal or cultural expectations and pressures may influence individuals' career choices, leading them to pursue careers that are not aligned with their true interests or aptitudes.

There are many websites available which provides resources to identify and know more about the career paths available. However these websites just gives the information about the available career path and steps to pursue it but they are unable for guiding an individual to choose a career according to his/her interest and skills. However these can be solved by a personal career counseling by an expert but it is a little expensive which everyone can't afford.

Our project E-Career Care is an website which provides information about various career path available and guides the individual to choose their career path. The main feature of our website is that it provides compatibility test for various streams which gives the information that how much compatible is the individual in that stream by an Q and A which is based on 60% skills and 40% interest. Through this our website can help an individual to choose his/her career.



# 4. Experimental Setup

## 4.1 Hardware Setup

Device name DESKTOP-2UMT1HV

Processor AMD Ryzen 7 5800H with Radeon Graphics 3.20 GHz

Installed RAM 16.0 GB (15.4 GB usable)

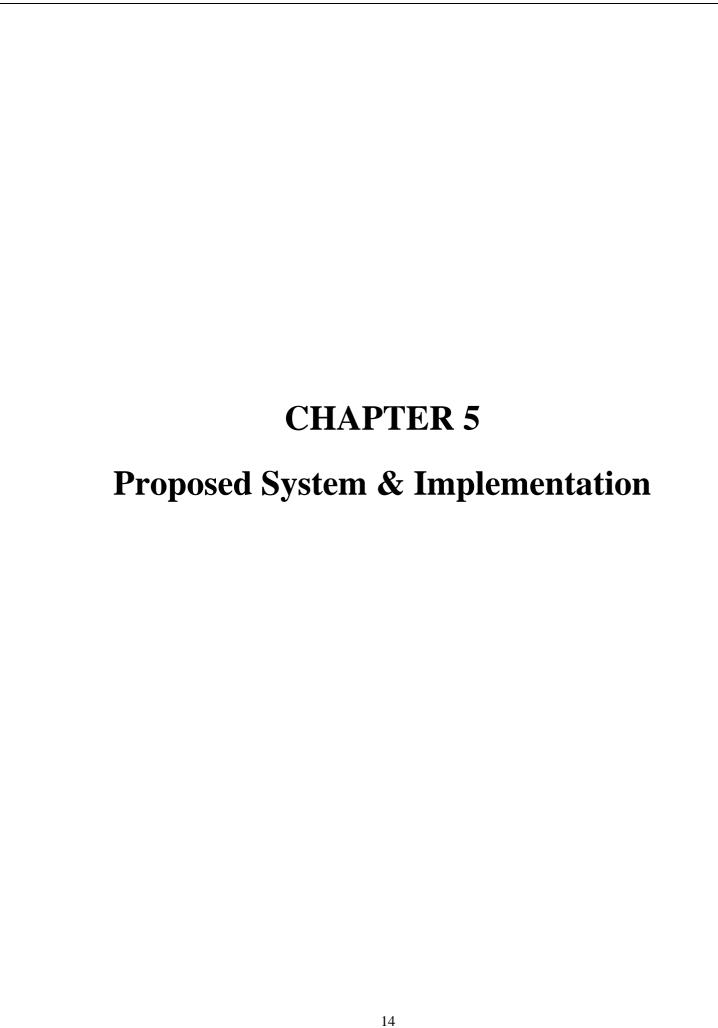
Device ID 06376B4C-CA5C-4488-817B-A746DFA73B1D

Product ID 00327-35936-54203-AAOEM

System type 64-bit operating system, x64-based processor

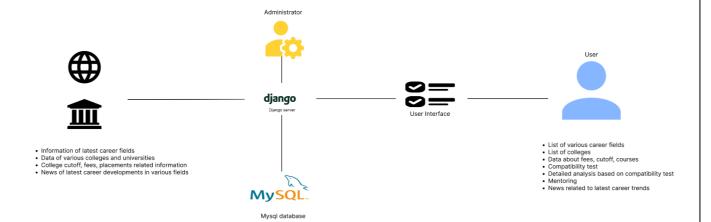
# **4.2 Software Setup**

- Html
- Css
- Javascript
- Django
- Pycharm community editor



## 5. Proposed system & Implementation

# 5.1 Block diagram of proposed system



### 5.2 Description of block diagram

- In our project we take data or information from internet and real-time colleges and institutes.
- Then we have an administrator which controls the Django server and database.
- Administrator's role is to update or enter new entries or data n database.
- Django server connects the UI with the front-end and presents it to users.
- Users then can access all the information through the UI.

# 5.3 Implementation

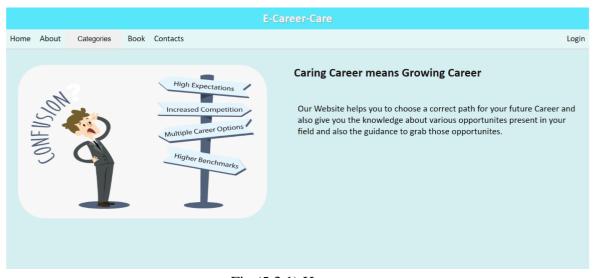


Fig (5.3.1) Homepage

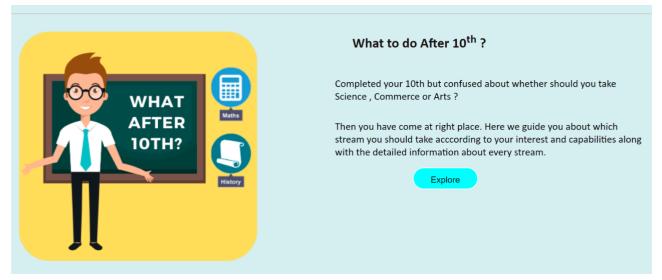


Fig (5.3.2) Career after 10th



Fig (5.3.3) Career after 12<sup>th</sup> commerce



Fig (5.3.4) Career after 12<sup>th</sup> arts

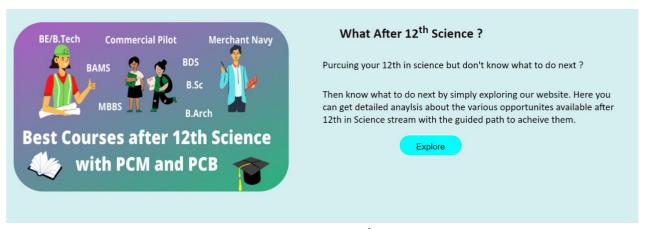
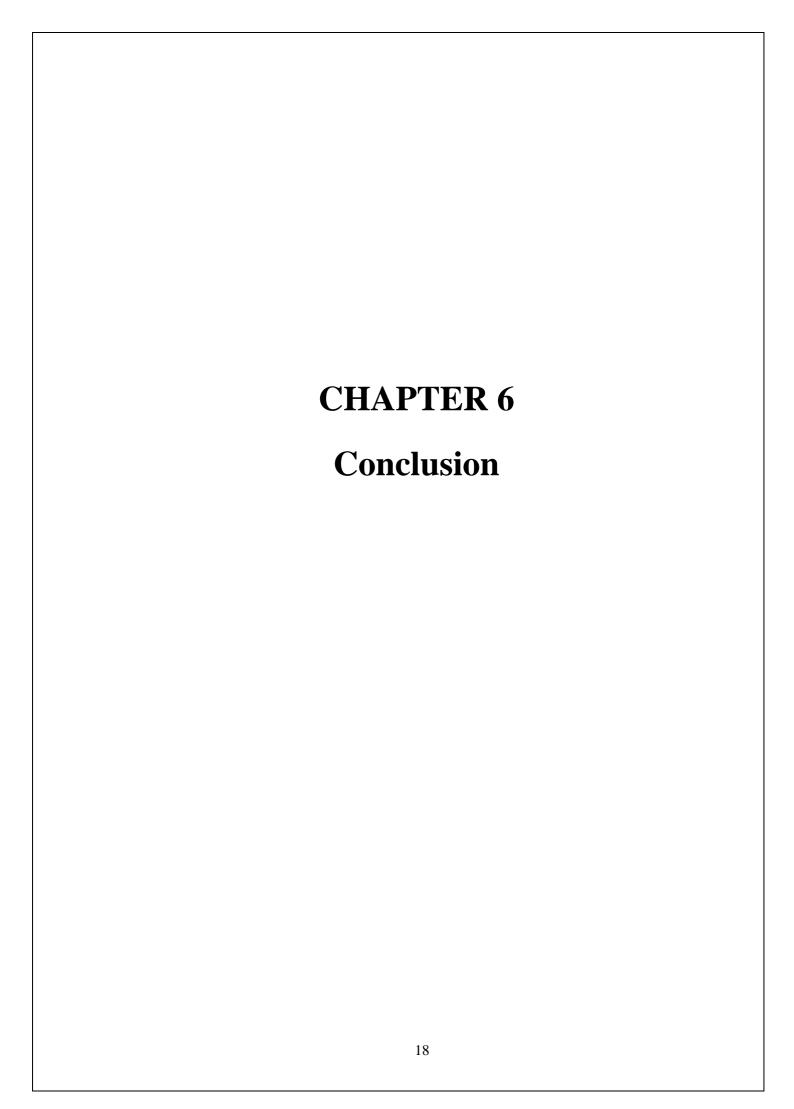


Fig (5.3.5) Career after 12<sup>th</sup> science

## **5.4 Advantages**

- It provides a platform for students and educators to share their knowledge in field of education.
- It provide resources for students to help them choosing their own career.
- It gives them proper well structured analysis of in which field they can choose their career
- It provides detailed information on various colleges and industries in the selected field.
- It spreads the awareness of various career fields in the society.



## 6. Conclusion

- We have now successfully completed 100 % work of our project.
- We have made a website "E-Career Care" which provides details about various career path available and is able to give the information that how much compatible is an individual in a stream through compatibility tests.
- We have successfully made the GUI in html, CSS and JavaScript and Back-end in python with Django framework with features like Google authentication and email verification.

### References

### Research paper

- [1] Qamhieh, Manar, Haya Sammaneh, and Mona Nabil Demaidi. "PCRS: personalized careerpath recommender system for engineering students." *IEEE Access* 8 (2020): 214039-214049.
- [2] Gugnani, Akshay, Vinay Kumar Reddy Kasireddy, and Karthikeyan Ponnalagu. "Generating unified candidate skill graph for career path recommendation." In 2018 IEEE International Conference on Data Mining Workshops (ICDMW), pp. 328-333. IEEE, 2018.
- [3] Ghosh, Aritra, Beverly Woolf, Shlomo Zilberstein, and Andrew Lan. "Skill-based career path modeling and recommendation." In 2020 IEEE International Conference on Big Data (Big Data), pp. 1156-1165. IEEE, 2020.
- [4] Pan, Yiming, Xuefeng Peng, Tianran Hu, and Jiebo Luo. "Understanding what affects career progression using linkedin and twitter data." In 2017 IEEE International Conference on Big Data (Big Data), pp. 2047-2055. IEEE, 2017.
- [5] Kostek, P. J. "Career and life assessment." In *Proceedings of the IEEE 1993 National Aerospace and Electronics Conference-NAECON 1993*, pp. 1037-vol. IEEE, 1993.

#### **URL**

Django: <a href="https://youtu.be/1UvTNMH7zDo">https://youtu.be/1UvTNMH7zDo</a>

Google Sign-in: <a href="https://youtu.be/E6LxUleoloU">https://youtu.be/E6LxUleoloU</a>

Compatibility test: <a href="https://youtu.be/vXXfXRf2S4M">https://youtu.be/vXXfXRf2S4M</a>