#### **GUJARAT TECHNOLOGICAL UNIVERSITY**

Chandkheda, Ahmedabad Affiliated





# NEW L J Institute of Engineering and Technology

# A Project Report On "Career Prediction and Consultance"

Under subject of DESIGN ENGINEERING – 2B

B.E., Semester – VI (Information Technology)

Submitted by: Group ID: 412938

Sr	Name of student	Enrollment
•		No.
1	Akhilesh Gajjar	201430116011
2	Athary Trivedi	201430116033
3	Neel Bokil	201430116080
4	Smit Patel	201430116037

Prof. Ankita Rathod

(Faculty Guide)

Dr. Gayatri S Pandi

(Head of Department)

Academic Year (2022-2023)

#### **CERTIFICATE**

This is to certify that project work embodied in this report entitled "Career Prediction and Consultance" was carried out by below mentioned students at department of Information Technology, New L.J. Institute of Engineering and Technology, Ahmedabad for partial fulfillment of the subject Design Engineering 2B. This project work has been carried out under my supervision and is to the satisfaction of the department.

Sr.	Name of student	Enrollment No.
1	Akhilesh Gajjar	201430116011
2	Atharv Trivedi	201430116033
3	Neel Bokil	201430116080
4	Smit Patel	201430116037

#### **ACKNOWLEDGEMENT**

I cannot express enough thanks to my support members for their continued support and encouragement: **Dr. Gayatri S Pandi** (HOD), **Prof. Ankita Rathod**. I offer my sincere appreciation for the learning opportunities to my support members.

The completion of this project could not have been accomplished without the support of the team members. A special thanks goes to my team members. They helped me to assemble the parts and gave suggestions about the project.

Besides, we would like to thank all the teachers who helped us by giving us advice and providing the material required. I would like to thank my family and friends for their support. Without that support we couldn't have succeeded in completing this project. In the end, we would like to thank everyone who helped and motivated us to work on this project.

#### **ABSTRACT**

- As Students are going through their academics, they don't know what career should they choose, so it is important to assess their capabilities so that they can get well settled in their career which best fits them.
- While our team was at the educational institute, we found some students who were discussing about what career they should pursue. They feared that if they took the wrong career, as that would ruin their career. Some students were confident about their choice of career but had financial problems. Some students didn't know what career they should pursue.
- To clear their doubts, we decided to provide a platform from which they get answers regarding career selection related doubts.

# LIST OF TABLES

Table 1.1 Design Specifications	[2]
Table 2.1 Project Summary	[3]
Table 3.1 Data Dictionary	[27]

# LIST OF FIGURES

Figure 1.1 Expertrons App	[01]
Figure 1.2 Infigon App	[01]
Figure 3.1 AEIOU Canvas	[05]
Figure 4.1 Mind Map	[06]
Figure 5.1 Users (Empathy Canvas)	[07]
Figure 5.2 Stakeholders (Empathy Canvas)	[07]
Figure 5.3 Activities (Empathy Canvas)	[08]
Figure 5.4 Empathy Canvas	[11]
Figure 6.1 People (Ideation Canvas)	[12]
Figure 6.2 Activities (Ideation Canvas)	[13]
Figure 6.3 Situations (Ideation Canvas)	[14]
Figure 6.4 Props (Ideation Canvas)	[14]
Figure 6.5 Ideation Canvas (PDC)	[15]
Figure 7.1 Rough Prototype Model (PDC)	[16]
Figure 8.1 Purpose (PDC)	[17]
Figure 8.2 People (PDC)	[18]
Figure 8.3 Product Function (PDC)	[18]
Figure 8.4 Product Features (PDC)	[20]
Figure 8.5 Components (PDC)	[21]
Figure 8.6 Product Experience (PDC)	[22]
Figure 8.7 Customer Revalidation (PDC)	[22]
Figure 8.8 Reject, Redesign, Retain (PDC)	[23]
Figure 8.9 Product Development Canvas	[25]
Figure 9.1 Learning Needs Matrix (LNM)	[26]

# LIST OF ABBREVIATIONS

ISOInternational Organization for Standardization
RE Reverse Engineering
ISPSC Ilocos Sur Polytechnic State College
AEIOU Activities Environment Interaction Objects Users
PDC Product Development Canvas
LNM Learning Needs Matrix
ISBN International Standard for Book Number
ISSN International Standard Serial Number
VARCHAR Variable Character
BIGINT Big Integer

# **INDEX**

Sr. No.	Title	Page
		No.
	Introduction	1
	Phase 1: Reverse Engineering (RE): Selection and disassembling of art fact/component)	
	Phase 2: Disassembly / Analysis of the component / product / art fact / program and learning about the topic	
2	Project Summary	3
3	AEIOU Canvas	5
4	Mind Map Canvas	6
5	Empathy Canvas	7
6	Ideation Canvas	12
7	Rough prototype model	16
8	Product Development Canvas	17
9	Learning Needs Matrix	26
10	Data Dictionary	27
11	Working Prototype Model (Implementation)	28
12	Feedback Analysis	33
13	Conclusion	34
14	References	35

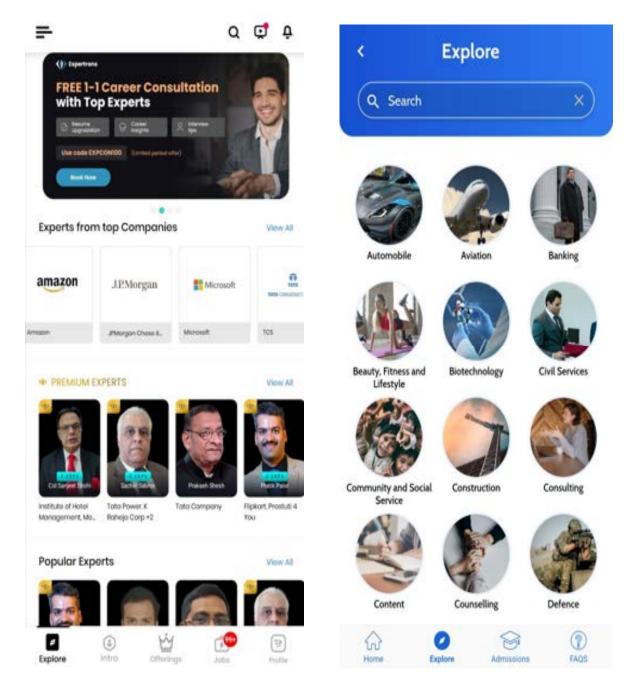
#### Introduction

#### Phase 1:

Reverse Engineering (RE): Selection and disassembling of art facts/components

#### **Expertrons app**

Infigon app



**Figure (1.1)** 

**Figure (1.2)** 

#### Phase 2:

Disassembly / Analysis of the component/ product/ art fact/ program and learning about the topic.

#### 1. List of Observed Features:

- o AI based career and education counselling platform
- o Overall Academic analysis through Tests
- Subject wise analysis
- o Career explorer
- Provides exams to perform well and also provides notification regarding upcoming exams
- o Furnish resources related to your choices
- o Gives detailed info with live updates
- o Provides 1-1 consultation by experts
- o Career Guidance provided by the experts
- o Also provide opportunities to become the next Career Influencer

### 2. Design Specifications:

Menu	Search				
Conte	ent relative	to your s	search		
Home	Explore	FAQ	Profile		

**Table (1.1)** 

# **Project Summary**

Sr.	Paper Title	Paper	Published	Summary
no.		Author	Year	
1	Ability and Aptitude Assessment in Career Counseling	A. J. Metz and Janice E. Jones	2013	This research paper highlights the use of abilities, aptitudes, skills in career, assessment strategies, methods and tools which define important constructs and review the structure and stability of these constructs, with special attention to gender and cultural differences.
2	Is It Essential to Measure Intelligence Along with Aptitude Test for Career Guidance	Dr. Gopal Chandra Mahakud	2013	This research paper is about the study which was planned to find out the relationship of Aptitude, IQ, personality and interest tests for better career guidance.
3	Career Confusion of ISPSC Freshmen College Students: A Phenomenological Analysis	Tanya Sue D. Barayuga, Daniel Juan B. Ramirez	2021	This Research paper explored and investigated the career confusion as experienced by students. It shows that parents, peers, and teachers have impacted the students in a way that makes them choose an affordable course, be successful in those courses, and be easily employed in the future.
4	Understanding the World of Industry and Business from the perspective of Career Guidance and Counseling	Salim Korompot, Tuti Wantu, Nurul Maulida Alwi	2022	This research paper helps us understand of how career guidance and counseling services can open up horizons of thinking as basic knowledge for the world of industry and business that can be understood.
5	Career Guidance and Counseling needs in a Developing	Zehra Keshf, Saeeda Khanum	2021	This research paper enlightens us about potential implications for students and career

	County's Context: A Qualitative Study			service providers regarding utilization, assessment, planning, and execution of career services in developing countries as well as future research in Career Guidance and Counseling.
6	The Challenge and Promise of Cognitive Career Assessment	Linda S. Gottfredson	2003	Abilities are as important as interests in career choice and development. Reviving cognitive assessment in career counselling promises to help counselees better understand their career options and how to enhance their competitiveness for the ones they prefer.
7	Career guidance, career assessment, and consultancy: Journal of career development	Fred A. Rowe, Kathy A. Mauer	1991	Career activities can positively influence students' career development, it is often impaired because they attempt to provide the same services to all students at the same time. A primary focus of refining programs must be the individualization of services to meet a wide variety of student needs.
8	Design Decision Taking System for Student Career Selection for Accurate Academic System	Saiteja Myla, Surya Teja Marella, A Swarnendra Goud	2019	For selecting a career, the faculty members of an institution must give advices to the student in which branch he/she should choose. The- se effective advising consists of providing current information.

Table (2.1)
Project Summary Research Papers.

# **AEIOU Canvas**

AEIOU Summary :	Group ID : 343041 Domain Name : 4444		ate   3/10/22	Version : 10
Environment :	Interactions :		Objects :	Closerman
(four	Bakina Makala & Tankay		Mil Rosm	AL WASHINGTON
	Believe Mideste & Adria W	44	Bunches	Blackboard
	Belian Laches & Hair &	144		
	Between Trackers & Breech		Carteen	Grand
Activities :		Users:	Inch	
		Show 25th	Bund	W .
Bryon Hard	aling			
				204

Figure (3.1)
The AEIOU canvas can be seen in the above image

# **Mind Map Canvas**

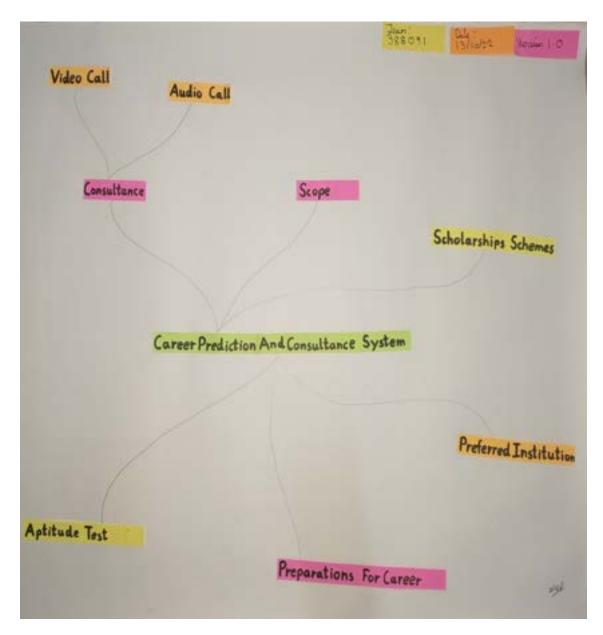


Figure (4.1)
The image above represents the Mind Map

#### **Empathy Canvas**

We have chosen an educational institute as our domain.

#### A) Users

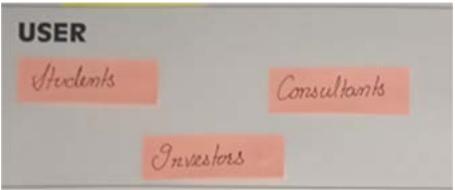


Figure (5.1)
Users in The Empathy Canvas/Mapping

#### 1. Students

The Career Prediction and Consultancy app are formed for the career selection of the students. As it is formed for students it is ultimately proven that the students are the primary users of this application. The students can use this app to know which career courses they can choose, what preparations must be done in order to get admission in the respective courses in respective institutes etc.

#### 2. Consultants

As this app is for securing the future and predicting careers for any individual, it becomes necessary to give proper advice and guidance regarding the doubts arising in student's minds. In order to do that we are having secondary users which help the primary users. These secondary users are Consultants.

#### 3. Investors

This app is also having many institutes associated with it and also many scholarship schemes for students. With a view to overcome the obstacle of these financial processes there are Investors who financially supports the app.

#### B) Stakeholders

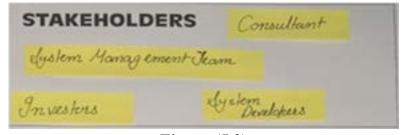


Figure (5.2)
Stakeholders in Empathy Canvas/Mapping

#### 1. Consultants

These stake holders are the ones who help the students when they are in need of proper guidance. As they are a important part of this system, they deserve payments for their service.

#### 2. System Management Team

As this is an application, it requires continuous watch over its functions and features. In order to let the application, run smoothly and also give the desired results and to provide good service to the users the management of this app is a necessity, and it is done by the system management team. As they're also providing fine service and utmost priority to users, they too become a part of the stake holders.

#### 3. System Developers

Just as seen above, this is an application platform, hence, it required constant management, but not only it requires constant management but also constant growth. This growth is also known as development. This constant development is done by the System Developers. As they also provide their service to users, they get paid for it for their hard work.

#### 4. Investors

The financial processes and entities are looked out by the Investors. They invest their money here in order to grow their approach over the academic world. Many companies and institutes invest in this platform for the students so that they deserve a better future.

#### C) Activities:

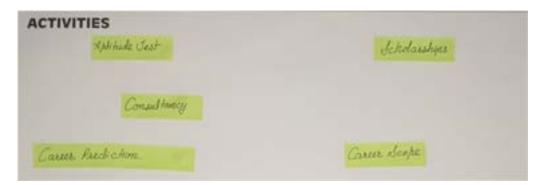


Figure (5.3)
Activities in Empathy Canvas/Mapping

#### 1. Aptitude test

This test can be taken by the students in order to know their approach in the academics, also by using these tests the individual can get an idea of what courses can he/she choose in the respective institutes or colleges. It basically gives the idea to the students regarding their career selection etc.

#### 2. Scholarship Schemes

There are various scholarships for the students in need. The students who are belonging to financially weak families, by such scholarships they are able to go for their dream and also support their family. Each and every student who are eligible for these scholarships can apply for them and then the ones who are most fit to get the scholarship are chose.

#### 3. Consultancy

As seen earlier, the consultancy is a basic need on this platform as it helps the students to choose their career with a better understanding and also it provides the idea to students about their academic approach.

#### 4. Career Prediction

This application is basically an app which by taking your initial records and performance in the exams you gave and also by evaluating the Aptitude test results predicts the best outcome for the individual. By this the student can know which are the careers he can do with respect to the institutes and can choose any career of his/her interest from it.

#### 5. Career Scope

It also gives the student the information in brief regarding the career he/she chooses. It describes the scope of the career in the future and also it the possible future changes in the career scope. It basically shows the demand of that career in the near future.

### **D)Story Boarding:**

#### 1. Happy Story 1

Het was a student who was about to give his 10<sup>th</sup> board exam. He knew the subject of his interest was Computer Science, but he was confused if he should do Diploma in it or study further in 11<sup>th</sup> and 12<sup>th</sup>. In between when he was confused, he came to know about the Career Prediction and Consultancy app. He took the opportunity and by taking the help of the app he got a detailed idea regarding the difference between Diploma and Degree. By further use of this app he also came to know his own potential by taking the Aptitude test. After using it very often, he searched for the institutes that which teach the Computer Science. He not only searched but also used the Consultancy feature of the app and with a proper view regarding his career selection he chose Diploma in his subject of interest. After giving the boards as his objective was clear than before and he had a clear goal set ahead he chose the career of his interest and made his life successful.

#### 2. Happy Story 2

Mithilesh was a boy who was going to give his 12<sup>th</sup> board exams, and was from a financially weak family. He had a clear desire of supporting his family but also wanted to study further so that he could support his family in near future. He also had chosen his career of interest which was Mechanical Engineering but wanted to do it in a well renowned college so that he would be able to complete all the dreams of his family when he gets a job. In the middle of his studies he came to know about the Career Selection and Consultancy app. So he used it in order to get a better view regarding his future. After using it, he came to know about the scholarship schemes in the app. As he was smart and was totally eligible for the scholarship, he applied for it and after when the result regarding the scholarship was declared he was selected. As a result, all of his dreams came true.

#### 3. Sad Story 1

By coming in the influence of his friends, Shyam chose the stream he wasn't even interested in. Due to lack of awareness and false hope, he never even gave a thought to his own interests and as a conclusion he demolished his career. If he were a little more aware about his future path and the stream, he liked than this could have been avoided. As he was not aware of the Career Prediction and Consultancy application and also by not focusing on his own desires and dreams this phenomenon became inevitable. If he would've realized it before than this might've not happened and he could have loved his career.

#### 4. Sad Story 2

Prem was a brilliant student and his grades were excellent as well. After getting his 12<sup>th</sup>-result he thought that there is nothing that he can't do. Due to overconfidence and also not deeply thinking about his future he chose Information Technology stream. He thought that whatever he chooses, it doesn't matter. After a few months he realized that he was not able to understand a thing in the course. He also came to know that he had no interest in the stream. Hence, with overconfidence, and lack of awareness of the app he demolished his own career.

# E) Empathy Canvas

	Design By	Akhileh Athaev
Date 13/10/22	Version	Neel Sout
USER	STAKEHO	LDERS Consultant
Stevents Consultants	System Man	zy ement Karm
Investors	Investors	System Dealthers
ACTIVITIES		
Aphthide Jast		Scholarships
Consultancy		
Career Rediction.	Ca	neer deape
НАРРУ	hss io*. As he about it and ali musiliancy app i is intass.	was intersted in Aploma, to the Castitutes segas ding ut not only came to know
STORY BOARDING HAPPY Het was compared about his fature cause after in Compared, elevence he exemped know those to by seeing the Causer frediction and of local it les also elevered admission of h  HAPPY Heldsh was belonging to a financially a  y elevening his admission in a will a  les talons a victobarding by allering the	izek family. Ok s tenoumed college	wanted to support the family in Hechanical Engineering
HAPPY Het was confused about his lature cause after on Computer. Seconce he wanted know those to by sisting the Cause Rediction and Cloud it feet also escured admission of heappy HAPPY Helsh was belowing to a Jenancially s	seek family. Ok s sinowned college : Caseer lisedke	wanted to support the family in Hechanical Engineering from and Consultances app h
HAPPY Het was confused about his fature cause after on Computer, securice he expelled from those to the same of and of the last of the cause of the	seek family. Ok s renowned college. Casee Esedic in his selecké in his selecké wheam siith his own intere dished his Juhi	wanted to stuppert the family in Hechanical Engineering from and Consultancy app to path.  Seconds . Stylam without of those the stame sheam are . If he would we

Figure (5.4)
The Empathy Canvas

#### F) Conclusion

- 1. Students need proper guidance.
- 2. Students need to be confident about them and their choice.
- 3. Students need to have a clear goal in mind.
- 4. Students should develop various skills and good personality.

#### **Ideation Canvas**

#### A) People



Figure (6.1)
People in Ideation Canvas

#### 1) Students

This whole project is for students. The students at a certain stage of their life have to take a decision where they have to choose a career that they will work on for the rest of their lives, making it the most important decision to be taken for them for the first time in their life. So, it is necessary that the student seeks to guide and consultance. That's what we are trying to do here.

#### 2) Consultants

The consultants hold a major role in our project, as they guide students and help them to pursue a career that is suitable to their skills and capabilities.

#### 3) Investors

The investors will fund us for the project prototype and everything that needs funding in the process.

#### 4) Developers

The developers are the people who will convert the idea into thoughts and then implement it on platforms, and programming languages and build an app or a website that is easy to access and use.

#### 5) Parents

The parents are the ones hoping for their children to choose the best career for themselves and settle well in their lives. Hence, they are also users or people involved.

#### **B)** Activities

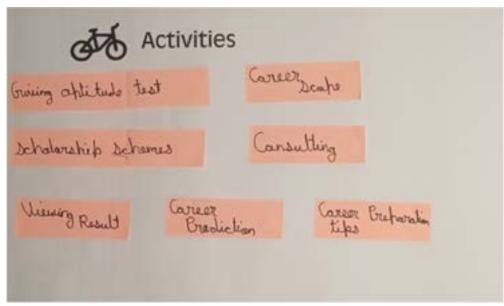


Figure (6.2)
Activities in the Ideation Canvas

#### 1) Giving Aptitude Test

This test can be taken by the students in order to know their approach in the academics, also by using these tests the individual can get an idea of what courses can he/she choose in the respective institutes or colleges. It basically gives the idea to the students regarding their career selection etc.

#### 2) Viewing Result

After the student has completed the test, the result of this test will be shown to him/her. The result will recommend what career to choose on the basis of the skills and capabilities the student holds.

#### 3) Career Prediction

Based on the result of the aptitude test, the student will be recommended a career which will be a prediction on the basis of the answers that are chosen by the student in the test.

# 4) Consulting, Scholarship Schemes, Career Preparation tips and Career Scope

These are the other activities that are possible to use in the model. Consultation by experienced professors and experts. Scholarship Schemes if any available. Career Preparation tips contain the advices for the preparation that one needs to study in their respective career courses, for example: Eligibility criteria, cut-off marks, exams to prepare for, etc. And the career scope of the predicted career.

#### c) Situation/context/location

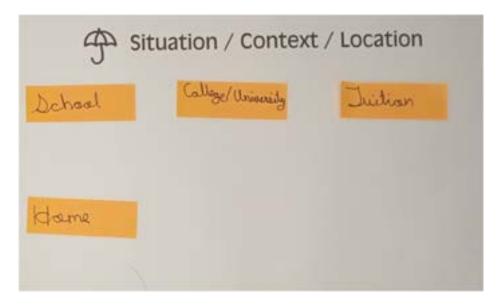


Figure (6.3)
Situation/Context/Location in the Ideation Canvas

These are the locations where a student plans, discusses and thinks about what career to choose. Schools and tuitions are the most frequent places where student thinks about his/her career. The students from small villages have difficulty thinking about where to study amongst other things. Not only the school students, but the college or university students also have a hard time deciding what to do next in their career.

#### D) Props/Possible Solution

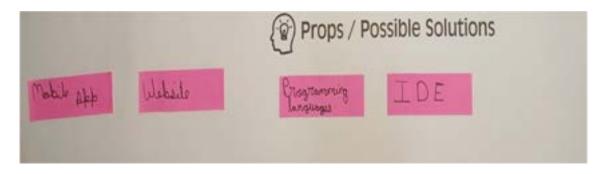


Figure (6.4)
The Props or Possible Solutions in the Ideation Canvas

#### 1) Website

Nowadays everyone uses the internet, so if the model is designed on a website, it will be easy to access to everyone, anyone, anytime and anywhere.

#### 2) System Application (Mobile App)

This is also an option for the platform for the model, one can download the application from the play store for android devices, and apple store for apple devices, hence easily available for both the users of the system.

#### 3) IDE

Swift, XCode, Anaconda, Codeblocks. These are the tools where the developers can code and program the idea. Anaconda has Python whereas Codeblocks has C, C++ as well as python.

#### 4) Programming Languages

Python and C. These are the programming languages that will be used to program the software model in the tools or open-source software like Codeblocks.

#### E) Ideation Canvas

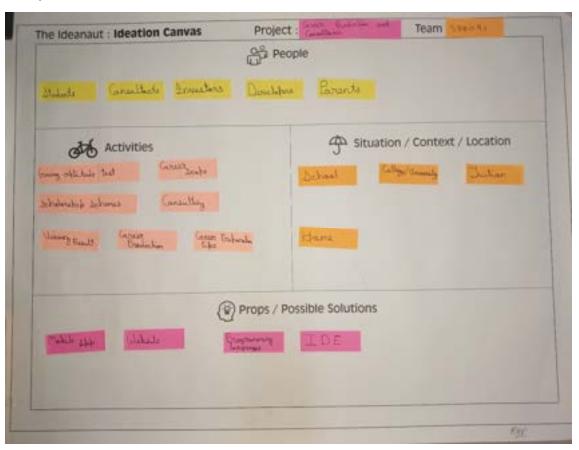


Figure (6.5)
The Ideation Canvas

# Prototype model

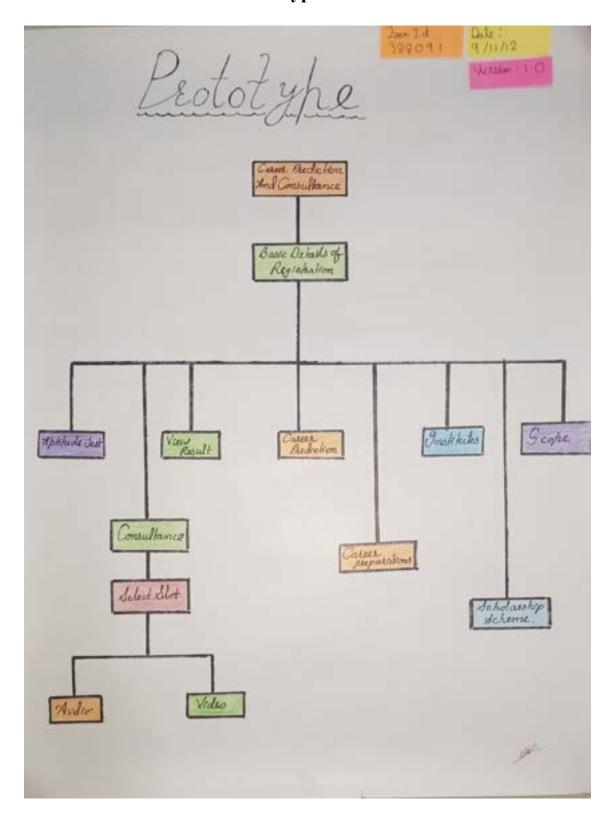


Figure (7.1)
The Rough Prototype Model of out Project

#### **Product Development Canvas**

#### A)Purpose

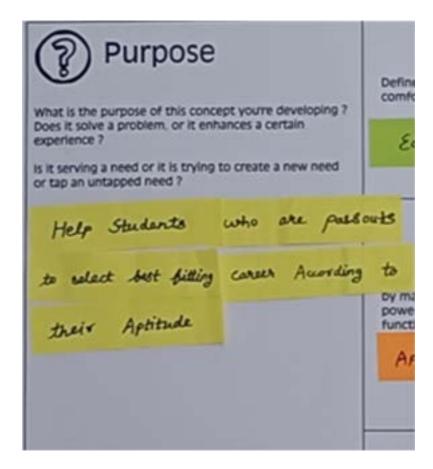


Figure (8.1)
Purpose in the PDC

- As students are going through their academics, they don't know what career should they choose, so it is important to assess their capabilities.
- So that they can get well settled in the career that best fits them.
- This software helps students to predict their career according to their aptitude.

#### B) People



Figure (8.2)
People in the PDC

#### 1) Students

The Career Prediction and Consultancy app is basically formed for the career selection for the students. As it is the formed for students it is ultimately proven that the students are the primary users of this application. The students can use this app in order to know which career courses they can choose, what preparations must be done in order to secure admission in the respective courses in respective institutes etc.

#### 2) Consultants

As this app is for securing the future and prediction of careers for any individual, it becomes necessary to give proper advice and guidance regarding the doubts arising in student's mind. In order to do that we are having secondary users which help the primary users. These secondary users are Consultants.

#### **C)Product Function**



Figure (8.3)
Product functions in the PDC

#### 1. Aptitude test

This test can be taken by the students in order to know their approach in the academics, also by using these tests the individual can get an idea of what courses can he/she choose in the respective institutes or colleges. It basically gives the idea to the students regarding their career selection etc.

#### 2. Scholarship Schemes

There are various scholarships for the students in need. The students who are belonging to financially weak families, by such scholarships they are able to go for their dream and also support their family. Each and every student who are eligible for these scholarships can apply for them and then the ones who are most fit to get the scholarship are chose.

#### 3. Consultancy

As seen earlier, the consultancy is a basic need on this platform as it helps the students to choose their career with a better understanding and also it provides the idea to students about their academic approach.

#### 4. Career Prediction

This application is basically an app which by taking your initial records and performance in the exams you gave and also by evaluating the Aptitude test results predicts the best outcome for the individual. By this the student can know which are the careers he can do with respect to the institutes and can choose any career of his/her interest from it.

#### 5. Career Scope

It also gives the student the information in brief regarding the career he/she chooses. It describes the scope of the career in the future and also it the possible future changes in the career scope. It basically shows the demand of that career in the near future.

#### 6. Career Preparation Tips

This app also gives the tips regarding the career an individual chooses. In order to achieve the dream career, for each and every individual there are a few tips given by the app itself. These tips help the individuals in order to know the path they have chosen and also gives them the help to achieve their career of interest.

#### **D)Product Features**



Figure (8.4)
Product Features in the PDC

#### 1) Regional language support

We have provided support to various regional languages so that a greater number of students can use them efficiently and easily. This includes tests, menus, and other texts in regional languages.

#### 2) Consultancy through audio, video, and chat

To guide and motivate students about their careers, we have tied up with various professors and experts to help students select and ask related doubts through audio, video, and live chat.

#### 3) Intuitive to use

To give students ease of use, we have spent a lot of time in optimizing the UI so that the students can guide through the app without any problems and get to the required tabs easily.

#### 4) Test based on age

To assess the students correctly and get the most accurate career options and related options, we have provided space to enter their age and class/year.

#### 5) MCQ based test

All the questions asked in the test are in the form of MCQ and doesn't have any negative marking.

#### 6) Predicts career

Once the student gives test, then on the basis of the result, the career options and filtered and presented to him/her. Also, all the other information like what preparations should they do for predicted careers, which institute is best and other details are provided.

#### E) Components

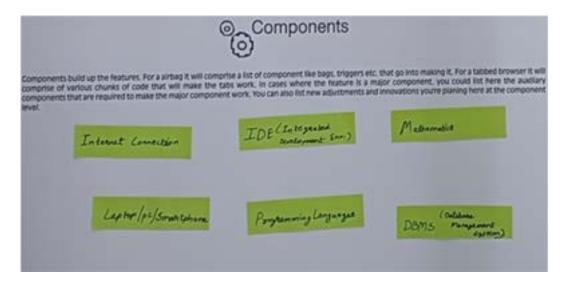


Figure (8.5)
Components in the PDC

#### 1. Internet Connection

Any device that uses our website or app, would need an active internet connection as it is needed to connect to our database server, amongst other things.

#### 2. IDE (Integrated Development Environment)

It is the developing requirement that we would need to work on our project. To design and compile and run tests on the created builds.

#### 3. Mathematics

We consider mathematics as an essential and important part of the development of our project. As Probability and statistics are necessary to do various calculations.

#### 4. Laptop/ PC/ Smartphone

These devices will also be required to code, design, and compile the project using the necessary software. In short, we require devices to develop.

#### 5. Programming language

The languages that we will use in coding our project are those programming languages such as python, c, HTML, CSS, PHP, etc.

#### 6. DBMS (Database Management System)

A database is needed to store and retrieve information from and for our users.

#### F) Product experience



Figure (8.6)
Product Experience in the PDC

#### 1) Easy to use

Students should find it easy to use and they will not have any difficulty to navigate through the tabs.

#### 2) Good consultance

After giving the test, students can have their consultation meeting with the professors and guides, as they will find it very helpful and their doubts will be cleared.

#### 3) Proper questions

We will make sure that the students find relevant and satisfactory questions in the test as it is for the prediction of career, the questions will be of moderate level.

# **G)** Customer revalidation

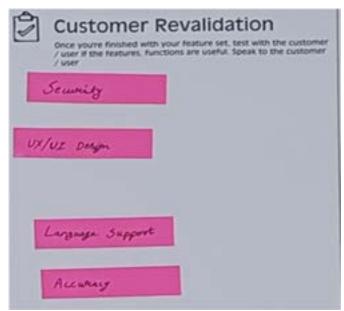


Figure (8.7)
Customer Revalidation in the PDC

#### 1) Security

It is necessary that the students, parents, or any users can use the application or website without the fear of having any of their entered data leaked. So, security optimization is required.

#### 2) UX/UI design

The user interface will have to be made easy and understandable so that users don't find it difficult to navigate through the designs.

#### 3) Language Support

Our original Idea was to do our whole project in one Language only that is standard English, but some users may find difficulty in giving answers to the questions, in other written information and in navigating. So, we will try to add more language options.

#### 4) Accuracy

The results of the aptitude test feature will accurate but enough. As, it is essential to making it more relevant and accurate, for the prediction of appropriate careers.

# H)Reject/Retain/Redesign

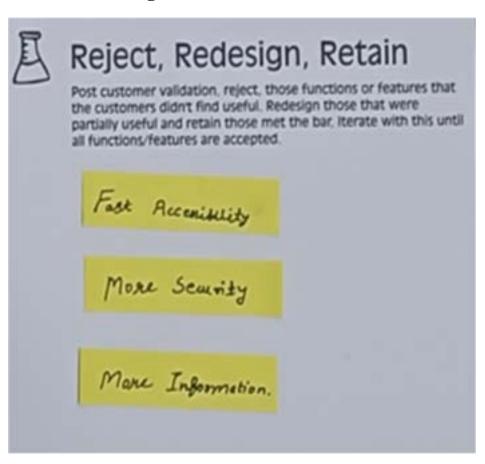


Figure (8.8)
Reject/Retain/Redesign in the PDC

#### 1) Fast Accessibility

We will make the accessing of data faster, we will try that our app/website will not have any buffering while fetching the information from the database.

#### 2) More Security

More Security is needed, as the students, parents, and other users enter their credentials in the UI, and it's our responsibility to make sure that their information is safe with us.

#### 3) More Information

We have the aptitude test, the options, and all the features, but there is a lack of information. We might not have all the information on every institution and some of the data may not be the latest. For the users to be satisfactory we will need more information.

#### **Solution/Product Working**

First of all, students have to fill basic information about themselves like name, DOB, class/sem, address, etc. This is required so that when they give aptitude test, they get questions according to their level.

The test is MCQ based. After giving test, students will view their result and then on the basis of their result, the career options will be filtered and displayed on screen.

Also, all the institutes, which teach those career related branches can be viewed.

Online consultation from professors and other educational guides can be done through audio, video and chat so that they can get correct guidance and can clear their doubts.

Tips for preparation for that career will also be given along with the scope. Many students also face financial difficulties, so for that, information about various scholarship schemes are also given.

# I) Product Development Canvas:

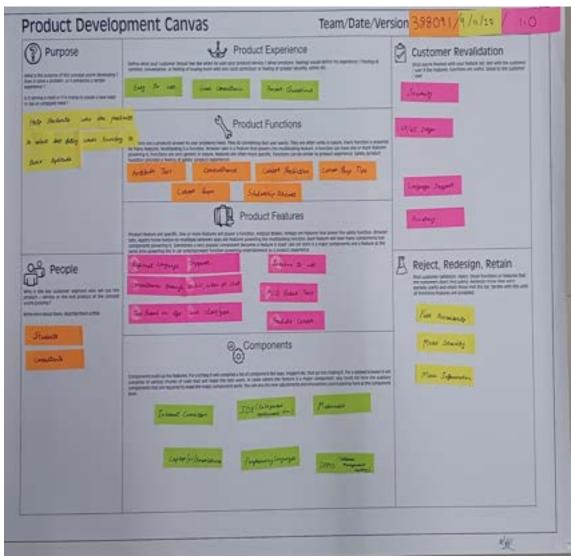


Figure (8.9)
The product development canvas

### **Learning Needs Matrix**

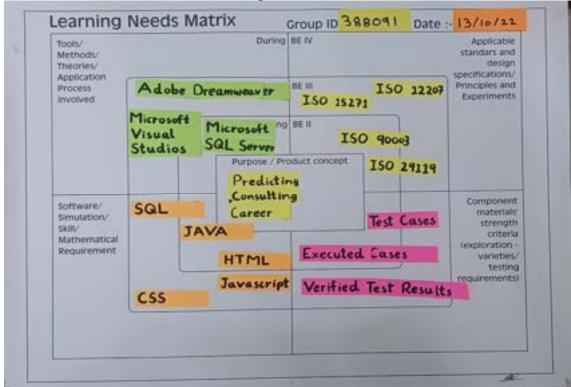


Figure (9.1)
The Learning Needs matrix

#### 1) Tools/Method/Theory/Application Processes Involved:

Our Project is to build an application, for which our team needs to learn to use various tools. For the app development, we need to learn for both front end as well as backend developments. The backend for the same is developed using Java, so we need to learn the object-oriented programming, while for frontend we must learn CSS, HTML and JavaScript.

# 2) Applicable Standards and Design Specification/Principles and Experiments:

We would require Some ISO certifications such as: ISO 15271, ISO 90003, ISO 12207 and ISO 29119 for basic management of software development.

#### 3) Software/Simulation/Skill/Mathematical Requirements:

Software like Adobe Dreamweaver is required for the web development of our project. Other software such as Microsoft Visual Studios and Microsoft SQL Server are essential for web application, application development and to manage our database respectively.

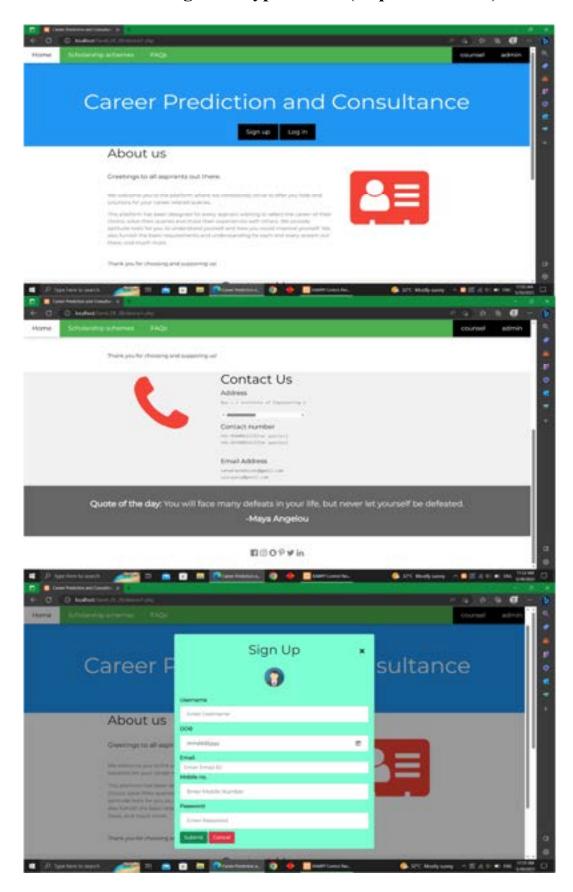
# 4) Component Materials Strength Criteria (Exploration – Varieties/testing Requirements):

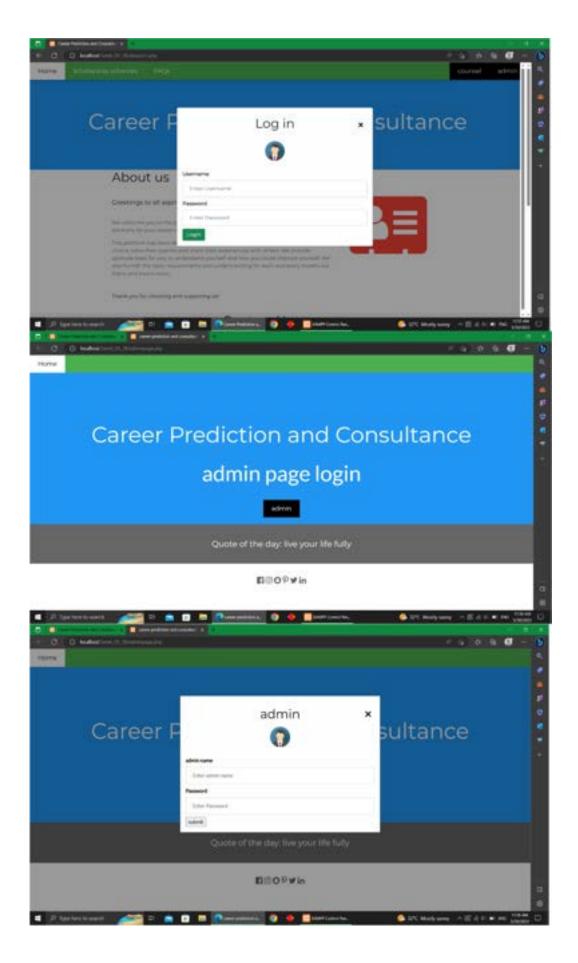
We plan to conduct test cases and execute them as well as work on the results once the application for our project has been completely developed.

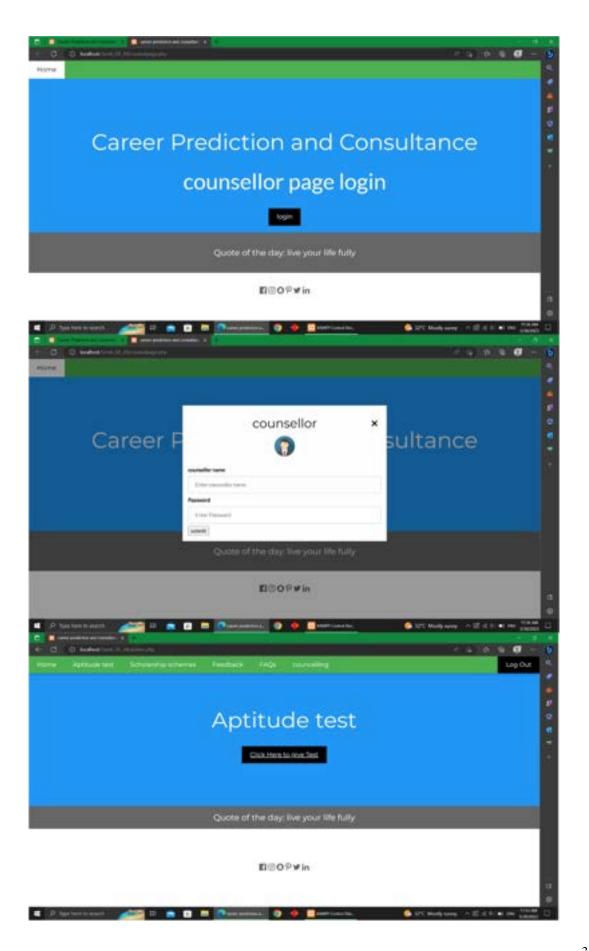
# **Data Dictionary**

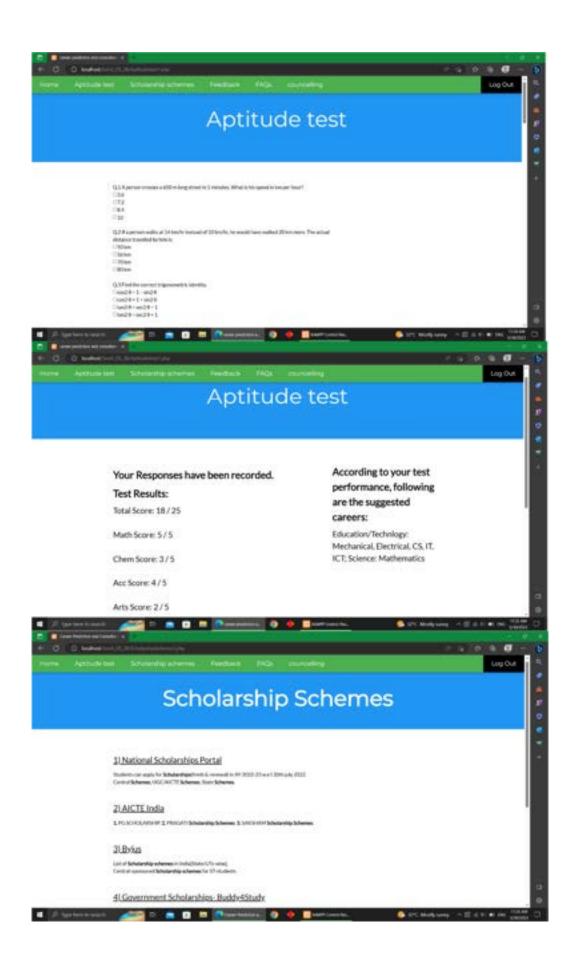
Sr. no.	Field Name	Data Type	Field Length	Constraint	Description
1	uname	varchar	25	Primary Key, Case Sensitive	It is the username that is unique for every user that visits the website. It has to be made while signing up, that is upon the first visit on the website. It can be further used to log into the website.
2	dob	date	NA	Not Null	It is your Date of Birth. The user has to enter the date of birth only once, while signing up.
3	email	varchar	25	Not Null, Case Sensitive	Users must enter their emails to keep track and in order to give us a means to contact in the future.
4	mobno	bigint	10	Not Null, Case Insensitive	The user must enter their contact number. This too is only for once while signing up. It is not needed after that.
5	psw	varchar	15	Not Null, Case Sensitive	It is the password that the user must decide that can be used in the future to log into the website.
6	userfeedback	varchar	50	Case Insensitive	This field is on the feedback page of the website, which can only be accessed if the user is logged in. The user can give feedback about the website, which will be duly noted by us.

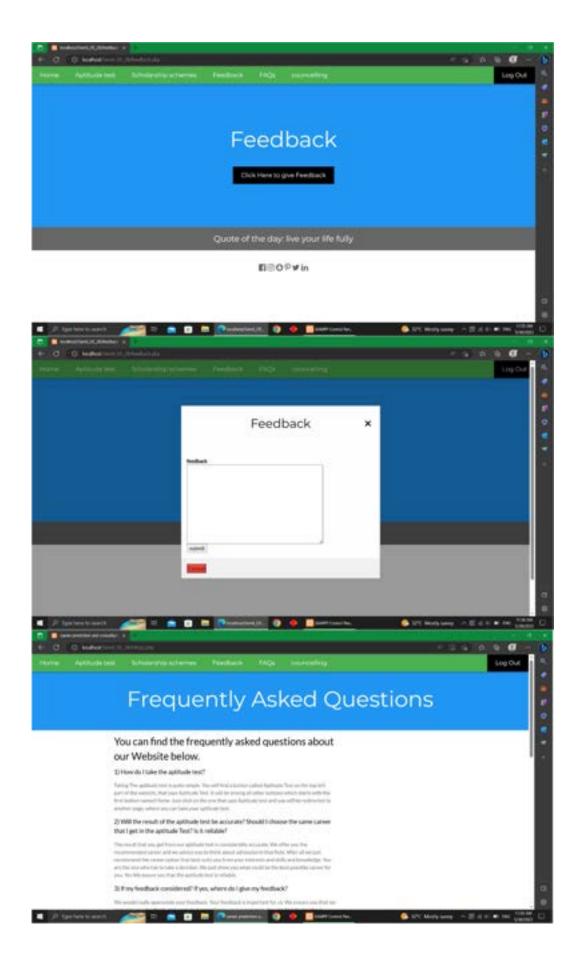
# **Working Prototype Model (Implementation)**











### **Feedback Analysis**

- 1. Students find it easy to use and didn't have any difficulty to navigate through the tabs.
- 2. After giving the test, students had their consultation meeting with the professors and guides, and they did find it very helpful and made have cleared their doubts.
- 3. Students found out the difficulty of the test as moderate and were satisfied by these questions.
- 4. Even though the students didn't find difficulty in navigating through the app, many of them experienced lags and stuttering which led to the delay in load times.
- 5. After giving the test, students had their consultation meeting with the professors and guides, and they did find it very helpful and made have cleared their doubts.
- 6. Students found out the difficulty of the test as moderate and were satisfied by these questions.
- 7. Students told us that there wasn't much of the written information available, like explanation of the particular field of work, its scope, etc.
- 8. As there weren't more languages, students found difficulty in giving answers to the questions, in other written information and in navigating
- 9. Students were facing some difficulties in chats, so we had to remove it.
- 10. As there was lack of written information available, like explanation of the particular field of work, its scope, etc., we have to add a lot of new information so that they can understand it accurately.
- 11. Because there were lot of glitches, stuttering and lags, a lot of bugs has to fixed to reduce the loading times, which will improve the user experience.
- 12. Students liked the experience of audio and video consultation, so we are retaining it.
- 13. Students found the MCQ pattern easy.

### **Conclusion**

- 1. Many students can choose their dream career successfully through scholarship even if they belong to economically weaker class.
- 2. From our app the students can easily decide their career according to their potential.
- 3. If any student is not able to decide their career then they can undergo aptitude test.
- 4. If a student is not being able to find good college, they can choose suggested colleges for their career.
- 5. It would be possible for students to clear their doubts related to career selection through meeting with consultants.
- 6. Students can go through preparation tips for career from our app.
- 7. Students can check the scope of different careers.
- 8. Students can also check about the preferred institutions.
- 9. Our App provides good interface.
- 10. Our career prediction app is available easily on all the platforms.

#### References

#### **PAPERS**

- 1. Dr. Gopal Chandra Mahakud, "Is It Essential to Measure Intelligence Along with Aptitude Test for Career Guidance", October 2013, ISSN 2231-4172.
- 2. Tanya Sue D. Barayuga, Daniel Juan B. Ramirez, "Career Confusion of ISPSC Freshmen College Students: A Phenomenological Analysis", August 2021, Paper ID: SR21818170340.

#### WEB SITES

- 1. Dr. Gopal Chandra Mahakud, "Is It Essential to Measure Intelligence Along with Aptitude Test for Career Guidance", October 2013,
- https://search.proquest.com/openview/b95b72bfff509381e8eb86e7443b5723/1?pq-origsite=gscholar&cbl=556342
- 2. Tanya Sue D. Barayuga, Daniel Juan B. Ramirez, "Career Confusion of ISPSC Freshmen College Students: A Phenomenological Analysis", August 2021, https://www.researchgate.net/profile/Tanya\_Sue\_Barayuga/publication/354204585\_Career\_C onfusion\_of\_ISPSC\_Freshmen\_College\_Students\_A\_Phenomenological\_Analysis/links/612c 15fac69a4e487967c75d/Career-Confusion-of-ISPSC-Freshmen-College-Students-A-Phenomenological-Analysis.pdf
- 3. A. J. Metz and Janice E. Jones, "Ability and Aptitude Assessment in Career Counseling", May 2013,
- https://books.google.com/books?hl=en&lr=&id=6mOX6XBxrv0C&oi=fnd&pg=PA449&dq=Ability+and+Aptitude+Assessment+in+Career+Counseling&ots=oHEjmfCX6H&sig=5nNGQm74tqBtwmWj7DpfWRHknq4
- 4. Salim Korompot, Tuti Wantu and Nurul Maulida Alwi, "Understanding the World of Industry and Business from the perspective of Career Guidance and Counseling", 2022, https://ejournal.undiksha.ac.id/index.php/bisma/article/view/42131
- 5. Zehra Keshf, Saeeda Khanum, "Career Guidance and Counseling needs in a Developing County's Context: A Qualitative Study", 2021, https://journals.sagepub.com/doi/abs/10.1177/21582440211040119
- 6. Linda S. Gottfredson, "The Challenge and Promise of Cognitive Career Assessment", 2003 https://r.search.yahoo.com/\_ylt=AwrKBxljtIBjDxgiZ2G7HAx.;\_ylu=Y29sbwNzZzMEcG9z AzQEdnRpZAMEc2VjA3Ny/RV=2/RE=1669407972/RO=10/RU=https%3a%2f%2fwww.re searchgate.net%2fpublication%2f242666980\_The\_Challenge\_and\_Promise\_of\_Cognitive\_C areer\_Assessment/RK=2/RS=AaSMsH4vv\_R6AenkAHWXqKeM56M-
- 7. Fred A. Rowe and Kathy A. Mauer, "Career guidance, career assessment, and consultancy: Journal of career development", 1991, https://link.springer.com/article/10.1007/BF01322029

#### **BOOKS**

1. Steven D. Brown and Robert W. Lent, "Career Development and Counseling", Second Edition, 2013, John Wiley & Sons, Inc., ISBN: 978-1-119-58035-5







Characters:6469 Sentences:46

Speak Time: 8 Min

Words:1000

**Excluded URL** 

None

## **Content Checked for Plagiarism**

Introduction Phase 1: Reverse Engineering (RE): Selection and disassembling of art facts/components Expertrons app Infigon app Figure (1.1) Figure (1.2) Phase 2: Disassembly / Analysis of the component/ product/ art fact/ program and learning about the topic. 1. List of Observed Features: o Al based career and education counselling platform o Overall Academic analysis through Tests o Subject wise analysis o Career explorer o Provides exams to perform well and also provides notification regarding upcoming exams o Furnish resources related to your choices o Gives detailed info with live updates o Provides 1-1 consultation by experts o Career Guidance provided by the experts o Also provide opportunities to become the next Career Influencer 2. Design Specifications: Menu Search Content relative to your search Home Explore FAQ Profile Table (1.1) Project Summary Sr. no. Paper Title Paper Author Published Year Summary 1 Ability and Aptitude Assessment in Career Counseling A. J. Metz and Janice E. Jones 2013 This research paper highlights the use of abilities, aptitudes, skills in career, assessment strategies, methods and tools which define important constructs and review the structure and stability of these constructs, with special attention to gender and cultural differences. 2 Is It Essential to Measure Intelligence Along with Aptitude Test for Career Guidance Dr. Gopal Chandra Mahakud 2013 This research paper is about the study which was planned to find out the relationship of Aptitude, IQ, personality and interest tests for better career guidance. 3 Career Confusion of ISPSC Freshmen College Students: A Phenomenological Analysis Tanya Sue D. Barayuga, Daniel Juan B. Ramirez 2021 This Research paper explored and investigated the career confusion as experienced by students. It shows that parents, peers, and teachers have impacted the students in a way that makes them choose an affordable course, be successful in those courses, and be easily employed in the future. 4 Understanding the World of Industry and Business from the perspective of Career Guidance and Counseling Salim Korompot, Tuti Wantu, Nurul Maulida Alwi 2022 This research paper helps us understand of how career guidance and counseling services can open up horizons of thinking as basic knowledge for the world of industry and business that can be understood. 5 Career Guidance and Counseling needs in a Developing County's Context: A Qualitative Study Zehra Keshf, Saeeda Khanum 2021 This research paper enlightens us about potential implications for students and career service providers regarding utilization, assessment, planning, and

execution of career services in developing countries as well as future research in Career Guidance and Counseling. 6 The Challenge and Promise of Cognitive Career Assessment Linda S. Gottfredson 2003 Abilities are as important as interests in career choice and development. Reviving cognitive assessment in career counselling promises to help counselees better understand their career options and how to enhance their competitiveness for the ones they prefer. 7 Career guidance, career assessment, and consultancy: Journal of career development Fred A. Rowe, Kathy A. Mauer 1991 Career activities can positively influence students' career development, it is often impaired because they attempt to provide the same services to all students at the same time. A primary focus of refining programs must be the individualization of services to meet a wide variety of student needs. 8 Design Decision Taking System for Student Career Selection for Accurate Academic System Saiteja Myla, Surya Teja Marella, A Swarnendra Goud 2019 For selecting a career, the faculty members of an institution must give advices to the student in which branch he/she should choose. The- se effective advising consists of providing current information. Table (2.1) Project Summary Research Papers. AEIOU Canvas Figure (3.1) The AEIOU canvas can be seen in the above image Mind Map Canvas We have chosen an educational institute as our domain. A) Users 1. Students The Career Prediction and Consultancy app are formed for the career selection of the students. As it is formed for students it is ultimately proven that the students are the primary users of this application. The students can use this app to know which career courses they can choose, what preparations must be done in order to get admission in the respective courses in respective institutes etc. 2. Consultants As this app is for securing the future and predicting careers for any individual, it becomes necessary to give proper advice and guidance regarding the doubts arising in student's minds. In order to do that we are having secondary users which help the primary users. These secondary users are Consultants. 3. Investors This app is also having many institutes associated with it and also many scholarship schemes for students. With a view to overcome the obstacle of these financial processes there are Investors who financially supports the app. B) Stakeholders 1. Consultants These stake holders are the ones who help the students when they are in need of proper guidance. As they are a important part of this system, they deserve payments for their service. 2. System Management Team As this is an application, it requires continuous watch over its functions and features. In order to let the application, run smoothly and also give the desired results and to provide good service to the users the management of this app is a necessity, and it is done by the system management team. As they're also providing fine service and utmost priority to users, they too become a part of the stake holders. 3. System Developers Just as seen above, this is an application platform, hence, it required constant management, but not only it requires constant management but also constant growth. This growth is also known as development. This constant development is done by the System Developers. As they also provide their service to users, they get paid for it for their hard work. 4. Investors The financial processes and entities are looked out by the Investors. They invest

their money here in order to grow their approach over the academic world.

Many companies and institutes invest in this platform for the students so that they deserve a better future.

### Sources

### 2% Plagiarized

Group 13Report Sem 4 Final - StuDocu

https://www.studocu.com/in/document/new-horizon-institute-of-technology-and-management/computer-engineering/group-13report-sem-4-

final/27501278

### 2% Plagiarized

Measures of Aptitude | Ask A REL Response

https://ies.ed.gov/ncee/edlabs/regions/northwest/askarel/measures-of-

<u>aptitude.asp</u>



Home Blog Testimonials About Us Privacy Policy

Copyright © 2022 <u>Plagiarism Detector</u>. All right reserved







Characters:5061

Sentences:44

Speak Time: 8 Min

Words:901

Excluded URL

None

## **Content Checked for Plagiarism**

C) Activities: Figure (5.3) Activities in Empathy Canvas/Mapping 1. Aptitude test This test can be taken by the students in order to know their approach in the academics, also by using these tests the individual can get an idea of what courses can he/she choose in the respective institutes or colleges. It basically gives the idea to the students regarding their career selection etc. 2. Scholarship Schemes There are various scholarships for the students in need. The students who are belonging to financially weak families, by such scholarships they are able to go for their dream and also support their family. Each and every student who are eligible for these scholarships can apply for them and then the ones who are most fit to get the scholarship are chose. 3. Consultancy As seen earlier, the consultancy is a basic need on this platform as it helps the students to choose their career with a better understanding and also it provides the idea to students about their academic approach. 4. Career Prediction This application is basically an app which by taking your initial records and performance in the exams you gave and also by evaluating the Aptitude test results predicts the best outcome for the individual. By this the student can know which are the careers he can do with respect to the institutes and can choose any career of his/her interest from it. 5. Career Scope It also gives the student the information in brief regarding the career he/she chooses. It describes the scope of the career in the future and also it the possible future changes in the career scope. It basically shows the demand of that career in the near future. D) Story Boarding: 1. Happy Story 1 Het was a student who was about to give his 10th board exam. He knew the subject of his interest was Computer Science, but he was confused if he should do Diploma in it or study further in 11th and 12th. In between when he was confused, he came to know about the Career Prediction and Consultancy app. He took the opportunity and by taking the help of the app he got a detailed idea regarding the difference between Diploma and Degree. By further use of this app he also came to know his own potential by taking the Aptitude test. After using it very often, he searched for the institutes that which teach the Computer Science. He not only searched but also used the Consultancy feature of the app and with a proper view regarding his career selection he chose Diploma in his subject of interest. After giving the boards as his objective was clear than before and he had a clear goal set ahead he chose the career of his interest and made his life successful. 2. Happy Story 2 Mithilesh was a boy who was going to give his 12th board exams, and was

from a financially weak family. He had a clear desire of supporting his family but also wanted to study further so that he could support his family in near future. He also had chosen his career of interest which was Mechanical Engineering but wanted to do it in a well renowned college so that he would be able to complete all the dreams of his family when he gets a job. In the middle of his studies he came to know about the Career Selection and Consultancy app. So he used it in order to get a better view regarding his future. After using it, he came to know about the scholarship schemes in the app. As he was smart and was totally eligible for the scholarship, he applied for it and after when the result regarding the scholarship was declared he was selected. As a result, all of his dreams came true. 3. Sad Story 1 By coming in the influence of his friends, Shyam chose the stream he wasn't even interested in. Due to lack of awareness and false hope, he never even gave a thought to his own interests and as a conclusion he demolished his career. If he were a little more aware about his future path and the stream, he liked than this could have been avoided. As he was not aware of the Career Prediction and Consultancy application and also by not focusing on his own desires and dreams this phenomenon became inevitable. If he would've realized it before than this might've not happened and he could have loved his career. 4. Sad Story 2 Prem was a brilliant student and his grades were excellent as well. After getting his 12th-result he thought that there is nothing that he can't do. Due to overconfidence and also not deeply thinking about his future he chose Information Technology stream. He thought that whatever he chooses, it doesn't matter. After a few months he realized that he was not able to understand a thing in the course. He also came to know that he had no interest in the stream. Hence, with overconfidence, and lack of awareness of the app he demolished his own career. E) Empathy Canvas Figure (5.4) The Empathy Canvas F) Conclusion 1. Students need proper guidance. 2. Students need to be confident about them and their choice. 3. Students need to have a clear goal in mind. 4. Students should develop various skills and good personality.

### **Sources**









Characters:5221

Sentences:35

Words:861

Speak Time: 7 Min

Excluded URL

None

## **Content Checked for Plagiarism**

Ideation Canvas A) People Figure (6.1) People in Ideation Canvas 1) Students This whole project is for students. The students at a certain stage of their life have to take a decision where they have to choose a career that they will work on for the rest of their lives, making it the most important decision to be taken for them for the first time in their life. So, it is necessary that the student seeks to guide and consultance. That's what we are trying to do here. 2) Consultants The consultants hold a major role in our project, as they guide students and help them to pursue a career that is suitable to their skills and capabilities. 3) Investors The investors will fund us for the project prototype and everything that needs funding in the process. 4) Developers The developers are the people who will convert the idea into thoughts and then implement it on platforms, and programming languages and build an app or a website that is easy to access and use. 5) Parents The parents are the ones hoping for their children to choose the best career for themselves and settle well in their lives. Hence, they are also users or people involved. B) Activities Figure (6.2) Activities in the Ideation Canvas 1) Giving Aptitude Test This test can be taken by the students in order to know their approach in the academics, also by using these tests the individual can get an idea of what courses can he/she choose in the respective institutes or colleges. It basically gives the idea to the students regarding their career selection etc. 2) Viewing Result After the student has completed the test, the result of this test will be shown to him/her. The result will recommend what career to choose on the basis of the skills and capabilities the student holds. 3) Career Prediction Based on the result of the aptitude test, the student will be recommended a career which will be a prediction on the basis of the answers that are chosen by the student in the test. 4) Consulting, Scholarship Schemes, Career Preparation tips and Career Scope These are the other activities that are possible to use in the model. Consultation by experienced professors and experts. Scholarship Schemes if any available. Career Preparation tips contain the advices for the preparation that one needs to study in their respective career courses, for example: Eligibility criteria, cut-off marks, exams to prepare for, etc. And the career scope of the predicted career. C) Situation/context/location Figure (6.3) Situation/Context/Location in the Ideation Canvas These are the locations where a student plans, discusses and thinks about what career to choose. Schools and tuitions are the most frequent places where student thinks about his/her career. The students from

small villages have difficulty thinking about where to study amongst other things. Not only the school students, but the college or university students also have a hard time deciding what to do next in their career. D) Props/Possible Solution Figure (6.4) The Props or Possible Solutions in the Ideation Canvas 1) Website Nowadays everyone uses the internet, so if the model is designed on a website, it will be easy to access to everyone, anyone, anytime and anywhere. 2) System Application (Mobile App) This is also an option for the platform for the model, one can download the application from the play store for android devices, and apple store for apple devices, hence easily available for both the users of the system. 3) IDE Swift, XCode, Anaconda, Codeblocks. These are the tools where the developers can code and program the idea. Anaconda has Python whereas Codeblocks has C, C++ as well as python. 4) Programming Languages Python and C. These are the programming languages that will be used to program the software model in the tools or open-source software like Codeblocks. E) Ideation Canvas Figure (6.5) The Ideation Canvas Prototype model Figure (7.1) The Rough Prototype Model of out Project Product Development Canvas A) Purpose Figure (8.1) Purpose in the PDC  $\cdot$  As students are going through their academics, they don't know what career should they choose, so it is important to assess their capabilities. · So that they can get well settled in the career that best fits them. This software helps students to predict their career according to their aptitude. B) People Figure (8.2) People in the PDC 1) Students The Career Prediction and Consultancy app is basically formed for the career selection for the students. As it is the formed for students it is ultimately proven that the students are the primary users of this application. The students can use this app in order to know which career courses they can choose, what preparations must be done in order to secure admission in the respective courses in respective institutes etc. 2) Consultants As this app is for securing the future and prediction of careers for any individual, it becomes necessary to give proper advice and guidance regarding the doubts arising in student's mind. In order to do that we are having secondary users which help the primary users. These secondary users are Consultants.

### **Sources**









Characters: 5866
Sentences: 40

Speak Time: 8 Min

Words:985

Excluded URL

None

## **Content Checked for Plagiarism**

C) Product Function Figure (8.3) Product functions in the PDC 1. Aptitude test This test can be taken by the students in order to know their approach in the academics, also by using these tests the individual can get an idea of what courses can he/she choose in the respective institutes or colleges. It basically gives the idea to the students regarding their career selection etc. 2. Scholarship Schemes There are various scholarships for the students in need. The students who are belonging to financially weak families, by such scholarships they are able to go for their dream and also support their family. Each and every student who are eligible for these scholarships can apply for them and then the ones who are most fit to get the scholarship are chose. 3. Consultancy As seen earlier, the consultancy is a basic need on this platform as it helps the students to choose their career with a better understanding and also it provides the idea to students about their academic approach. 4. Career Prediction This application is basically an app which by taking your initial records and performance in the exams you gave and also by evaluating the Aptitude test results predicts the best outcome for the individual. By this the student can know which are the careers he can do with respect to the institutes and can choose any career of his/her interest from it. 5. Career Scope It also gives the student the information in brief regarding the career he/she chooses. It describes the scope of the career in the future and also it the possible future changes in the career scope. It basically shows the demand of that career in the near future. 6. Career Preparation Tips This app also gives the tips regarding the career an individual chooses. In order to achieve the dream career, for each and every individual there are a few tips given by the app itself. These tips help the individuals in order to know the path they have chosen and also gives them the help to achieve their career of interest. D) Product Features Figure (8.4) Product Features in the PDC 1) Regional language support We have provided support to various regional languages so that a greater number of students can use them efficiently and easily. This includes tests, menus, and other texts in regional languages. 2) Consultancy through audio, video, and chat To guide and motivate students about their careers, we have tied up with various professors and experts to help students select and ask related doubts through audio, video, and live chat. 3) Intuitive to use To give students ease of use, we have spent a lot of time in optimizing the UI so that the students can guide through the app without any problems and get to the required tabs easily. 4) Test based on

age To assess the students correctly and get the most accurate career options and related options, we have provided space to enter their age and class/year. 5) MCQ based test All the questions asked in the test are in the form of MCQ and doesn't have any negative marking. 6) Predicts career Once the student gives test, then on the basis of the result, the career options and filtered and presented to him/her. Also, all the other information like what preparations should they do for predicted careers, which institute is best and other details are provided. E) Components Figure (8.5) Components in the PDC 1. Internet Connection Any device that uses our website or app, would need an active internet connection as it is needed to connect to our database server, amongst other things. 2. IDE (Integrated Development Environment) It is the developing requirement that we would need to work on our project. To design and compile and run tests on the created builds. 3. Mathematics We consider mathematics as an essential and important part of the development of our project. As Probability and statistics are necessary to do various calculations. 4. Laptop/ PC/ Smartphone These devices will also be required to code, design, and compile the project using the necessary software. In short, we require devices to develop. 5. Programming language The languages that we will use in coding our project are those programming languages such as python, c, HTML, CSS, PHP, etc. 6. DBMS (Database Management System) A database is needed to store and retrieve information from and for our users. F) Product experience Figure (8.6) Product Experience in the PDC 1) Easy to use Students should find it easy to use and they will not have any difficulty to navigate through the tabs. 2) Good consultance After giving the test, students can have their consultation meeting with the professors and guides, as they will find it very helpful and their doubts will be cleared. 3) Proper questions We will make sure that the students find relevant and satisfactory questions in the test as it is for the prediction of career, the questions will be of moderate level. G) Customer revalidation Figure (8.7) Customer Revalidation in the PDC 1) Security It is necessary that the students, parents, or any users can use the application or website without the fear of having any of their entered data leaked. So, security optimization is required. 2) UX/UI design The user interface will have to be made easy and understandable so that users don't find it difficult to navigate through the designs. 3) Language Support Our original Idea was to do our whole project in one Language only that is standard English, but some users may find difficulty in giving answers to the questions, in other written information and in navigating. So, we will try to add more language options. 4) Accuracy The results of the aptitude test feature will accurate but enough. As, it is essential to making it more relevant and accurate, for the prediction of appropriate careers.

### Sources









Characters:5542
Sentences:41

Speak Time:

8 Min

Words:881

**Excluded URL** 

None

## **Content Checked for Plagiarism**

H) Reject/Retain/Redesign Figure (8.8) Reject/Retain/Redesign in the PDC 1) Fast Accessibility We will make the accessing of data faster, we will try that our app/website will not have any buffering while fetching the information from the database. 2) More Security More Security is needed, as the students, parents, and other users enter their credentials in the UI, and it's our responsibility to make sure that their information is safe with us. 3) More Information We have the aptitude test, the options, and all the features, but there is a lack of information. We might not have all the information on every institution and some of the data may not be the latest. For the users to be satisfactory we will need more information. Solution/Product Working  $\cdot$  First of all, students have to fill basic information about themselves like name, DOB, class/sem, address, etc. This is required so that when they give aptitude test, they get questions according to their level.  $\cdot$  The test is MCQ based. After giving test, students will view their result and then on the basis of their result, the career options will be filtered and displayed on screen. · Also, all the institutes, which teach those career related branches can be viewed. · Online consultation from professors and other educational guides can be done through audio, video and chat so that they can get correct guidance and can clear their doubts. · Tips for preparation for that career will also be given along with the scope. Many students also face financial difficulties, so for that, information about various scholarship schemes are also given. I) Product Development Canvas: Figure (8.9) The product development canvas Learning Needs Matrix Figure (9.1) The Learning Needs matrix 1) Tools/Method/Theory/Application Processes Involved: Our Project is to build an application, for which our team needs to learn to use various tools. For the app development, we need to learn for both front end as well as backend developments. The backend for the same is developed using Java, so we need to learn the object-oriented programming, while for frontend we must learn CSS, HTML and JavaScript. 2) Applicable Standards and Design Specification/Principles and Experiments: We would require Some ISO certifications such as: ISO 15271, ISO 90003, ISO 12207 and ISO 29119 for basic management of software development. 3) Software/Simulation/Skill/Mathematical Requirements: Software like Adobe Dreamweaver is required for the web development of our project. Other

software such as Microsoft Visual Studios and Microsoft SQL Server are

essential for web application, application development and to manage our

database respectively. 4) Component Materials Strength Criteria (Exploration - Varieties/testing Requirements): We plan to conduct test cases and execute them as well as work on the results once the application for our project has been completely developed. Feedback Analysis 1. Students find it easy to use and didn't have any difficulty to navigate through the tabs. 2. After giving the test, students had their consultation meeting with the professors and guides, and they did find it very helpful and made have cleared their doubts. 3. Students found out the difficulty of the test as moderate and were satisfied by these questions. 4. Even though the students didn't find difficulty in navigating through the app, many of them experienced lags and stuttering which led to the delay in load times. 5. After giving the test, students had their consultation meeting with the professors and guides, and they did find it very helpful and made have cleared their doubts. 6. Students found out the difficulty of the test as moderate and were satisfied by these questions. 7. Students told us that there wasn't much of the written information available, like explanation of the particular field of work, its scope, etc. 8. As there weren't more languages, students found difficulty in giving answers to the questions, in other written information and in navigating 9. Students were facing some difficulties in chats, so we had to remove it. 10. As there was lack of written information available, like explanation of the particular field of work, its scope, etc., we have to add a lot of new information so that they can understand it accurately. 11. Because there were lot of glitches, stuttering and lags, a lot of bugs has to fixed to reduce the loading times, which will improve the user experience. 12. Students liked the experience of audio and video consultation, so we are retaining it. 13. Students found the MCQ pattern easy. Conclusion 1. Many students can choose their dream career successfully through scholarship even if they belong to economically weaker class. 2. From our app the students can easily decide their career according to their potential. 3. If any student is not able to decide their career then they can undergo aptitude test. 4. If a student is not being able to find good college, they can choose suggested colleges for their career. 5. It would be possible for students to clear their doubts related to career selection through meeting with consultants. 6. Students can go through preparation tips for career from our app. 7. Students can check the scope of different careers. 8. Students can also check about the preferred institutions. 9. Our App provides good interface. 10. Our career prediction app is available easily on all the platforms

### **Sources**

