Project Report

on

"Let Your Career Match Your Interests"

submitted towards the partial fulfilment of

the requirement for the award of the degree of

CO101-Programming Fundamentals

Submitted by

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2K20/B3/65

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And

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CONTENT

CO101-Programming Fundamentals

DELHI TECHNOLOGICAL UNIVERSITY

Certificate

I hereby certify that the project titled "Let Your Career Match Your Interests" which is submitted by Gaurav Gulati [2K20/B3/65] comprises original work and has not been submitted in part or full for any Course/Degree to this university or elsewhere as per the candidate's declaration.

Delhi Technological University, Delhi in complete fulfilment of the requirement for the award of the degree of the Bachelor of Technology, is a record of the project work carried out by the students under my supervision. To the best of my knowledge this work has not been submitted in part or full for any Degree or Diploma to this University or elsewhere.

ACKNOWLEDGEMENT

In performing our project, required the support of some respected persons, who deserve our greatest gratitude. The completion of this project gives us great pleasure.
We would like to show our gratitude to Ms. Gull Kaur, for giving us a good guideline for report throughout numerous consultations. We would also like to extend our deepest gratitude to all those who have directly and indirectly guided us in writing this assignment.

Many people our classmates and team members itself, have made valuable comment suggestions on this proposal which gave us an inspiration to improve our assignment. We thank all the people for their help directly and indirectly to complete our assignment.

In addition, we would like to thank Department of Computer Science, Delhi Technological University for giving us the opportunity to work on this topic.

<u>INTRODUCTION</u>

So, every collegian is worried about his future and his passion and want to know about them as soon as possible so that he can straightway start working on them. To find these two things all he can do is explore dozens of domains himself and give at least a time span of 20 days so that he can find his best domain and this method is very tedious and proper guidance is also required. Further the capital required in purchasing the courses in this domain is also required and one not be dependent on his/her parents for every thing considering their own limitations.

The main objective of this project is to familiarize the user with various new domains that have come up in past few recent years.

Due to change of demands and invention of new products and ways taking place every day, it is nearly not possible for an individual to get himself updated in every domain. Even talking to seniors in the college I got to know that the main initial problem in the college is to identify that for which domain we are perfect and we can devote our life.

So here my project comes to rescue. The aim is to give the user the top 3 most preferred domains after entering a set of questions which has many indications to various domains. After the answering of questions, the user is given a complete guide of the top 3 domains that he got. He will also be able to see the ways to make money quick for financial growth too.

__INTRODUCTION__

There are not so many people in this domain finding thing these days and hence students keep on wandering here and there without proper guidance spending their time and money here and there unsure of the result. And in case there are not able to figure out their passion they get stuck in a job for 40-35 years in a thing in which they are not interested. Online there are very few platforms which can guide the students but they are mainly for abroad and the measures and the courses they offer are for the students abroad and hence not suitable for Indian students.

These projects can be used by collegians as well as working people to find out what their meaning of life is indeed in true sense. This project can also be used to incline the institutes offering such courses in these domains towards the proper batch of students who are in proper need of it and hence increase their profits even after reducing the price of the courses.

In this project first of all I will make the user realize the importance of finding his/her passion. I have a set of various domains with me which are: -

1. Competitive Coding
2. Web development
3. App development
4. Animation

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5. Acting
6. Interest in building drones
7. Research interest
8. Teaching
9. Affiliate marketing
10.   Designing

There after I will put forth a set of seven questions which will have multiple options selection option. These seven questions will have 3-4 questions of each of the domains I am taking up in this project. These questions will be asked by the user in sequential order and the user will have the choice to answer the options any number of times and even when he wants to answer none of them. After this analysis the user will get the three most preferred domain according to the answers, he/she had given in these questions. Thereafter he will get the details of: -

1. The courses famous in that domain

2. Famous people in that domain
3. The average package of people in this domain in India
4. The YouTube channels that are offering free content in the domains

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Thereafter the user will have the choice of providing the email id in that domain so that he can remain connected with me after the test and I can provide the details of the latest updates in that course.

Further if he/she wants to get ways to earn money so that he/she can purchase then he/she will have the choice to do it too. This way I have prepared the user fully with all the help that he/she may need in future in that domain.

The rest of the sections include what all I have included in the code and how I was able to complete with the help of my teacher and a few online contents available for free. I have provided the various applications of this project in various domains.

In the background section I have further provided the reason of making the project in C++ and its usefulness in making the project. I have further tried to explain the design of the project. I have further given the summary and the conclusion of the project in detail.

The future work also includes the work that can be further done on that project so as to make the project better as we know that a project can never be perfect. I have further mentioned the references which apparently were useful for the development for the project.

<u>SOLUTION</u>

The solution to this problem is simple provide the user all the details regarding the various domains after finding out his interests. The user should be given a full package of the domains he/she is interested. The details must be updated from time to time as these domains are soon going to be very popular with more and more people becoming famous, making courses and hence the average salary getting increased exponentially.

The main motivation behind the project is the project is to help the engineering students to get the idea of all possible future options. No one should be should have an excuse that the field was not known to him/her and years after he should only be doing job of his/her interest.

The project is suitable for both college students and the ones who have started in their career recently. It has 10 various independent domains and the questions will give them a taste of every domain. The solution includes: -

1. There are plenty of Domains that a collegian can discover and some them are not known even to their seniors. So, I have tried to cover each and every domain.

2.   The screening process has been made clear. The user gets to know what he should be trying in a specific order.

3.   The list of courses, institutes and the people who have experienced the hurdles on that road has been given in addition to the result of the quiz the user has given.

IMPLEMENTATION DETAILS

The project has been made by using the various concepts I have used in C++ from my teachers Ms. Gull Kaur and Ms. Garima Chikkara. The various concepts are highly useful in making the project successful and can be applied in a similar pattern in C language as well. Also, the application of arrays, strings, sorting etc. can be seen in the project.

The Header Files included are: -

1. #include<iostream>

2. #include<string>

3. #include<vector>

The Functions Used are-

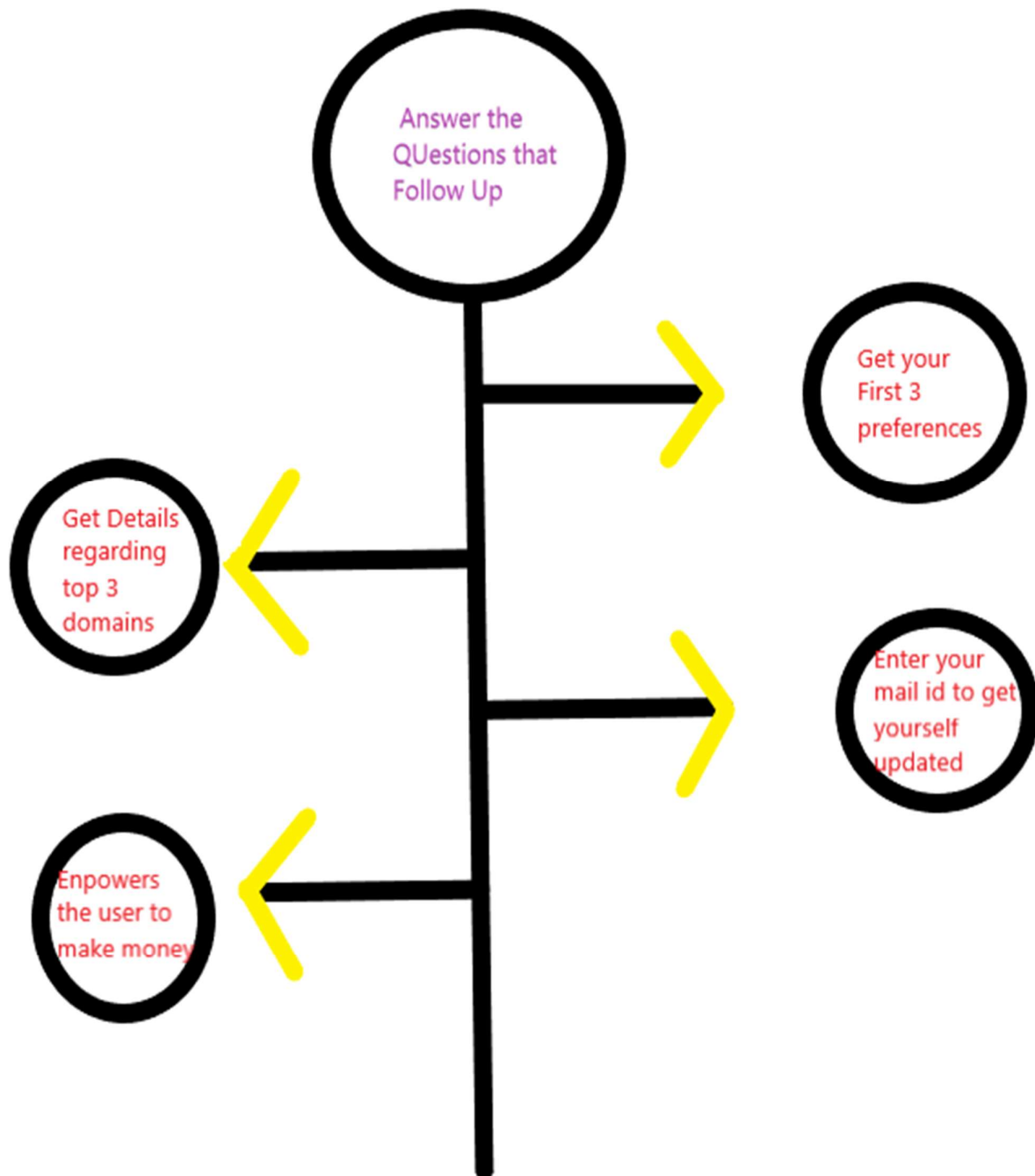1. Email

2. Ways_to_earn_money

Further I have used

1. If else statements

2. Switch cases

3. Arrays

4. Insertion Sort

5. Strings

6. Vectors

7. For and while loops

8. Pairing

IMPLEMENTATION DETAILS

Here I have tried to explain through a flow chart diagram the order of the project contents and how it follows after user's answers to questions.

Answer the QUestions that Follow Up

Get your First 3 preferences

Get Details regarding top 3 domains

Enter your mail id to get yourself updated

Enpowers the user to make money

<u>APPLICATIONS</u>

These projects can be used by collegians as well as working people to find out what their meaning of life is indeed in true sense. This project can also be used to incline the institutes offering such courses in these domains towards the proper batch of students who are in proper need of it and hence increase their profits even after reducing the price of the courses.

The main application of the project is to help the user find his/her passion in the various domains that exist and keep on adding in the modern time. The project can also be made for the professionals to identify the right people for the job they are looking and hence can look for people who are more interested rather than people who just do the work to earn money in the today scenario.

When a man is stuck in middle of job or a man is wondering in the start of his career whether the domain is best for him or not for all these people the project is beneficial. The choices that the user gets in this are very useful for him as it may be life changing in his life and what appears to be money earning job can be converted to heart loving job.

The project helps user to only explore the three most preferred domain through the responses of the questions. These three domains have been given so that in case the user wants not to carry on with the top domain then he has the choice of doing so.

BACKGROUND

Language:-

The project has been made in C++. C++ appeared to be very suitable for this project given its object oriented approach. The other reason for choosing C++ as the language for writing this code is that:-

I have just started coding in college and for clearing the basics this language is probably the best at the moment. Through my teachers guidance the project was completed pretty well easily without any difficulty and hence I was able to run in visual studio code perfectly well.

The language didn't offer any resistance while coding and had been pretty easy to implement my commands. Due to its object oriented approach it was possible to implement what I exactly wanted my code to do without any second thought. The classes like pair were also extremely useful for carrying out the various I wanted my code to perform. I have used Visual Studio Code for coding due to its beautiful and easy design and user layout.

People's Review :-

My Friends found it very useful and said that after having knowledge in each domain I can even start the paid services of it by launching an app and providing personal guidance. Taking the guidance of each and

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every domain is itself a very big task and one can also choose itself as a domain to work in.

"The idea can be used as an opening base for an ed tech startup and can be taken to other level too." said one of my friends. The idea of startup is also taken my many individuals in the tech industry but most of were unsuccessful due to vast knowledge required in this domain and hence can be considered only after much research in this domain.

To make this project various sources are responsible which include:-

My lab and theory CO teachers Ms. Garima and Ms. Gull Kaur respectively who made my basics strong so as to make this project easily. The concepts that were required to make this project were taught during my classes and I owe a deep thanks to them for granting me the knowledge I wanted for this project.

The YouTube channel of Saurabh Sharma sir was also very helpful as the pairing concept was not covered yet in the class but I required to learn it very hardly. So it taught me the basics of pairing which made my project complete

Last but not the least I want to thank my friends Mr. Krish Chopra and Mr. Ayush Bansal who gave me the idea of pairing and vectors

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respectively and without them the project would have remain unsuccessful.

The material available was mainly for the students abroad and not for the students of the college of india and hence I decided to make this project only for the Indian collegians. Further these quizzes didn't provide the details of the domains and the courses that are prevalent at the specific time. I have tried my best to provide all required information regarding the domains that come forth after the results.

My project is better in the way that It provides all details and also helps the user to grow financially and hence makes him self reliant in every possible way whether it is related to finance or knowledge.

PROJECT

When I got admission into this college and talked to some seniors of societies, the first thing they told me was that there is lot to discover in the college life. There are plenty of domains which you will have to figure out and help yourself in getting knowledge about that domain. They told me there was no as such website for college students which gives them the idea of which domain will suit them the most.

So here came the idea of making a project that could be useful to a large domain of college students. Due to change of demands and invention of new products and ways ,taking place everyday, it is nearly not possible for an individual to get himself updated in every domain. Even talking to seniors in the college I got to know that the main initial problem in the college is to identify that for which domain we are perfect and we can devote our life.

My approach to the problem:-

I had decided to decide the best domains after putting forth a set of questions and which after sorting gives me the most appropriable 3 domains for the user.

After getting those 3 domains user will be provided with a complete guide of its YouTube channels, people who are in this field for a long time, Course available on the net for that domain and the average package in India for that domain.

<u>PROJECT</u>

The user will have the power to either give his/her mail or not and further can choose to see the ways to earn money as well for financial growth.

<u>The Case Studies Included:-</u>

Every domain has 3 questions related to it. Each answer in agreement to that domain increments the variable for that domain by one.

Thereafter using insertion sort code the values of the variable are arranged in the ascending order. The last three values indicates the maximum values. Hence it indicates the user is interested and do better in those 3 domains.

The user is also required to choose whether to provide the mail or not and can also decide whether to gain knowledge regarding the growth of money and implement in personal life. These various cases that I have taken in my project helps to make this project to identify the order of the interests in domains and provide them to user and this also makes the project user friendly as it is not compulsory anywhere in the project that a user have to enter so it makes the project user friendly and more attractive.

<u>DESIGN</u>

The aim is to give the user the top 3 most preferred domains after entering a set of questions which has many indications to various domains. These set of domains helps user to not only enter the right domain but also to work on one but all together 3 domains so that in case he is not satisfied with one he is free to go on to other domains.

After the answering of questions the user is given a complete guide of the top 3 domains that he got. He will also be able to see the ways to make money quick for financial growth too. This helps the user to grow financially as well as in the domains that he or she is interested.

What didn't work was the 2 power idea. This idea was that in the multiple correct questions it was possible to explore the area of mathematics as well by attaching the power of two to each question and this could be made useful by removing the repetitive loops in each question which increases the time.

The project has been made in C++. C++ appeared to be very suitable for this project given its object oriented approach. The other reason for choosing C++ as the language for writing this code is that I was comfortable in this language and had learnt coding in this.

RESULTS

The results of the code had been up to expectation and where extremely useful for the friends who were given the code to run. The screenshots of the results have been attached here:-

```
PS C:\Users\Gaurav Gulati> cd "c:\Users\Gaurav Gulati\Desktop\coding\c and c++\" ; if ($?) { g++ Project.cpp -o Project } ; if ($?) { .\Project }
    Have you been facing with the same problem of not being able to find your area of interest?
Are you Not able to find your passion?

    Well here is the complete guide and solutions to all your career and interests related problem. Just answer the questions that Follow up and you will get all
 the details regarding your passion along with the course of one and a half month of complete experience in all the domains.

The instructions for answering the questions are:-
 Enter the ans with only their integers option and there after enter 0


A. Have you found yourself enjoying these things?

1. Founded it interesting in solving analytical problems and felt satisfied after solving on your own
2. Felt happy when you decorated and designed the objects and colored various objects vibrantly
 3. Founded writing blogs and writing articles interesting
4. Founded teaching someone satisfactory and later got appreciated for it
2
0


 B. Which of these do you find interesting ?

1. Admiring the beautiful animated posts on social media and think that you can also create one
2. Founded animation in different objects interesting and want to explore it
3. Founded interesting to know how to build websites of big companies and their designs and colours
4. Founded interested in building apps and their colour combinations
1
0
```

```
 C. Have you experienced any of these situations?

 1. Can you modulate your voice and speak in different manners and act just like actors and find it interesting?
 2. You found it interesting opening different electrical objects and knowing what is their in it
 3. Wanted to really delve into a topic and do complete analysis in that subject
 4. Convince other people regarding different objects and make them purchase it successfully
 3
 0


 D. Can you do the following things?

 1. Design animated posters for different objects if given proper software
 2. Can you imitate actors and really act in front of parents in a manner that they are really satisfied with false talk
 3. Can you sit for long hours and keep on studying a topic in detail
 4. Are you interested in electrical and mechanical parts of a machine
 3
 0


 E. Which of these make you happy?

 1. Looking at different posters on billboard and finding flaws to improve them
 2. Finding flaws in the websites design and want to improve them
 3. Find coding interesting and want to compete with others in this
 4. Find flaws in different apps and there bugs and how they can be made more user friendly
 1
 0


 F. What have you found yourself doing in idle time

 1. Appreciating and thinking of developing different  personal games
 2. Thinking of advertising different products and doing it better than actors
 3. Have you found it never boring the same concept to someone repeatedly?
 4. Thinking of the aerodynamics of drones or thermal effects in machines?
```

```
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2. Thinking of advertising different products and doing it better than actors
3. Have you found it never boring the same concept to someone repeatedly?
4. Thinking of the aerodynamics of drones or thermal effects in machines?
0


   G. Which of these are you ready to carry on daily basis for next 25-30 days?

1. Finding solutions to user problems and bugs and developing new features using coding
2. Designing websites for startups and greatr MNCs
3. Dedicate your time towards acting in different even small shows
4. Do whole thesis on a project and if required Phd in it and researching in topic of subject of your interest
5. Teaching a kid or adult concept with same energy as teaching for the first time whether it is subject or instrument
0
First Preference is found to be Designing
Second Perence is found to be Research
Third Preference is found to be ThreeDAnimator

Here are some Youtube Channels that have gained fame in Designing
1. Adobe Creative Cloud
2. Jesse ShowAlter
3. GCFLearnFree.org
4. Gareth David Studio

Here are the courses that will guide you in the right Direction
1. http://www.dreamzonecentre.com/
2. https://www.upgrad.com/?mf_campaignname_click=7247714378&gclickId_identifier=CjwKCAjw9MuCBhBUEiwAbDZ-7mjiPfwwnslhyR4gICfUjTNox4UrZLBTslp7RUD5E4SaPqTMHtzPcRoCZ3
MQAvD_BwE&placement_id_identifier=&key_word_identifier=%2Bonline%20%2Bcourses&ad_group_id_identifier=82084562284&utm_source=GOOGLE&utm_medium=BSEARCH&utm_campaign
=ALL_ALL_ALL_GOOGLE_BSEARCH_EDUCATION_METROS_ALL&utm_content=online_courses&utm_term=%2Bonline%20%2Bcourses&gclid=CjwKCAjw9MuCBhBUEiwAbDZ-7mjiPfwwnslhyR4gICfUjTNo
x4UrZLBTslp7RUD5E4SaPqTMHtzPcRoCZ3MQAvD_BwE
```

```
People who are famous in this Domain:-
1. Jesse ShowAlter
2. Gareth David

Average Salary in the domain = 3.3 Lakhs

do you want to recieve emails? enter 1 for yes and 0 for no1
enter the code for domain:
cc:CompetitiveCoding
wd:WebDevelopment
ad:AppDevelopment
am:AffiliateMarketing
de:Designing
td:ThreeDAnimatorc:Acting
rs:Research
dr:DroneandmachineDevelopment
te:Teachingte
enter your mail ID gaurav@gmail.com


For above courses and meetings you will probably require money
Do you want to know how you can make money and grow. If yes Press 1 if no press 01
If you do have a limited amount of money and want to grow it (i.e. given by parents or other sources) then Stock market and real estate are two prime methods of m
aking that money grow faster in comparison to deposit in bank. For stock market use trading and guiding app Zerodha and for real estate see videos of Aman Dhatarw
al and experience is the best source in this so learn from existing traders.

If you donΓÇöt have enough funds the methods like
1.      Teaching instruments or academics or sport
2.      Becoming  a virtual Assistant
3.      Free Lancer Writing
4.      Graphic designing
5.      Personal Blogging

Are the ways to start making money


Here are some Youtube Channels that have gained fame in 3D Animation
```

```
Here are some Youtube Channels that have gained fame in 3D Animation
1. Blender Guru
2. Animation Blender
3. Blender Studio
4. TheCGBros

Here are the courses that will guide you in the right Direction
1. https://aaft.com/lp/animation/?page=lp&gclid=CjwKCAjw9MuCBhBUEiwAbDZ-7kjgiwf-f3uMgRufsjdxLD_e4ils8v_9o6yzl32ZfqVZsQdKk3z1YRoCmAkQAvD_BwE
2. https://www.derby.ac.uk/undergraduate/art-design-courses/?utm_source=google&utm_medium=cpc&utm_content=Animation-intl&utm_campaign=ug+recruit+ahe&gclid=CjwKCAj
w9MuCBhBUEiwAbDZ-7gNuqAsoW5I3v0imuW7K0tAcJarv25w4QW1kcDJO58_o-eY3A67uHhoC5tYQAvD_BwE

People who are famous in this Domain:-
1. John Lasseter
2. Ken Anderson

Average Salary in the domain = 3.1 Lakhs

do you want to recieve emails? enter 1 for yes and 0 for no0


For above courses and meetings you will probably require money
Do you want to know how you can make money and grow. If yes Press 1 if no press 00


Here are some Youtube Channels that have gained fame in Research
1. SciToons
2. Randall Meyer
3.  Kurzgesagt
4. Professor Dr Javed Iqbal

Here are the courses that will guide you in the right Direction
1. https://www.udemy.com/topic/research-methods/?utm_source=adwords&utm_medium=udemyads&utm_campaign=DSA_Catchall_la.EN_cc.INDIA&utm_content=deal4584&utm_term=_._
ag_82569850245_._ad_437477497176_._kw__._de_c_._dm__._pl__._ti_dsa-437115340933_._li_9061692_._pd__._&matchtype=b&gclid=CjwKCAjw9MuCBhBUEiwAbDZ-7qQYivjO1wXOLRdIGS
63PEeKA_UeSHFkaR76r8NSKLsO00TD7HrBcRoCQxsQAvD_BwE
2. https://catalyst.harvard.edu/courses/?gclid=CjwKCAjw9MuCBhBUEiwAbDZ-7lzS-A-Qka_tFDMzPvha80lfOcN3Dtwx-Obz7GJ7QOSYpoU9E-Gf7BoCX14QAvD_BwE
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Here are some Youtube Channels that have gained fame in Research
1. SciToons
2. Randall Meyer
3.  Kurzgesagt
4. Professor Dr Javed Iqbal

Here are the courses that will guide you in the right Direction
1. https://www.udemy.com/topic/research-methods/?utm_source=adwords&utm_medium=udemyads&utm_campaign=DSA_Catchall_la.EN_cc.INDIA&utm_content=deal4584&utm_term=_._
ag_82569850245_._ad_437477497176_._kw__._de_c_._dm__._pl__._ti_dsa-437115340933_._li_9061692_._pd__._&matchtype=b&gclid=CjwKCAjw9MuCBhBUEiwAbDZ-7qQYivjO1wXOLRdIGS
63PEeKA_UeSHFkaR76r8NSKLsO00TD7HrBcRoCQxsQAvD_BwE
2. https://catalyst.harvard.edu/courses/?gclid=CjwKCAjw9MuCBhBUEiwAbDZ-7lzS-A-Qka_tFDMzPvha80lfOcN3Dtwx-Obz7GJ7QOSYpoU9E-Gf7BoCX14QAvD_BwE

People who are famous in this Domain:-
1. Stephen hawking
2. Hill Combey

Average Salary in the domain = 3.8 Lakhs

do you want to recieve emails? enter 1 for yes and 0 for no1
enter the code for domain:
cc:CompetitiveCoding
wd:WebDevelopment
ad:AppDevelopment
am:AffiliateMarketing
de:Designing
td:ThreeDAnimatorc:Acting
rs:Research
dr:DroneandmachineDevelopment
te:Teachingrs
enter your mail IDgauravg@gmail.com


For above courses and meetings you will probably require money
Do you want to know how you can make money and grow. If yes Press 1 if no press 00


PS C:\Users\Gaurav Gulati\Desktop\coding\c and c++>
```

SUMMARY

The idea of the project was to help the user to identify all the domains he might me interested in and the basic aim of it was achieved. It was able to return the right choices and hence was helpful both for finding the domain and also financial growth.

These seven questions will have 3-4 questions of each of the domains I am taking up in this project. These questions will be asked by the user in sequential order and the user will have the choice to answer the options any number of times and even when he wants to answer none of them. After this analysis the user will get the three most preferred domain according to the answers, he/she had given in these questions.

The main motivation behind the project is the project is to help the engineering students to get the idea of all possible future options. No one should be should have an excuse that the field was not known to him/her and years after he should only be doing job of his/her interest.

The project is suitable for both college students and the ones who have started in their career recently.

The future work also includes the work that can be further done on that project so as to make the project better as we know that a project can never be perfect. I have further mentioned the references which apparently were useful for the development for the project.

<u>CONCLUSIONS</u>

The Project is indeed useful for college students as well as those who want to explore everything in their life.

On this basis an app can be developed which makes it further user friendly and includes various designs in it. Making it paid and providing the mail id of the user to the institutes which are offering services in the domain the user may be interested (with users consent) can help on the financial side as well.

The project can be made more vast by having a huge dataset of questions and the sources and facilities in every domain.

This project helps the individual to grow financially as well as well as develop skills through the content provided and keeps them updated by taking the mail ids.

The project can be further improved by including the points in future work.

FUTURE WORK

Future Work includes:-

1. Apart from these tests a plan for one and a half month which gives user experience in every domain.

2. As the domains keep on increasing with increasing technology the list of questions will keep on increasing.

3. The set of questions will be increased so as to get better analysis.

4. Instead of for loop in every step the method of representing the options by power raised can be used also which gives unique answer every time. What didn't work was the 2 power idea. This idea was that in the multiple correct questions it was possible to explore the area of mathematics as well by attaching the power of two to each question and this could be made useful by removing the repetitive loops in each question which increases the time.

5. The question may contain one question from every domain through which function can be used.

6. App can be build. Making it paid and providing the mail id of the user to the institutes which are offering services in the domain the user may be interested (with users consent) can help on the financial side as well.

REFERENCES

1. Pairing in C++ by Saurabh Shukla and Krish Chopra

2. Vectors By Ayush Bansal