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Findself: A Personality Type Detection Application

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ABSTRACT:

"Findself" is a web based application designed for the detection of the personality type of the users and tells them about their personality. It is a web app or web based application which can be visited accessed with the help of any platform whether you are using a mobile phone or smart phone or using a laptop supporting any browser in it. In order to detect the personality of the users, the web app provides various tests or personality tests like-

(a) MBTI Personality Test
(b) LOGB Personality Test
(c) Color Personality Test

In the MBTI Test model, the user's personality type will be evaluated according to the 16 personality type of the MBTI model in Findself [3]. In the LOGB Test, the user's personality type will be decided according to the 4 types supported by LOGB which are Lion, Otter, Golden Retriever and Beaver. Color personality type test tells the users which color his/her personality matches to.

Keywords- MBTI Test, Personality Test, LOGB Test, Python, Color Personality Test.

1. INTRODUCTION:

The Findself web app is a web application which is not just an ordinary app but a website which plays an important role to guide the users or introduce them with themselves. It tells the users about their personality type like which type of person are they and what are their strengths and weaknesses and many more things. In a team in any organization or company, there are many kinds of persons that are working with each other. Personality plays an important role as it helps the team leader to decide which type of person needed to do a particular project and it also helps the company to know about their employees better [1]. It also helps the employees by telling them their plus points so that they will get to know about them better because it is very important to know about yourself first before understanding others.

As the Findself application is targeting almost every person of the community. Because for every person whether he is a software developer or a sales employee in a company, a CEO or office clerk, everyone has a different personality. Some are punctual, some are not etc. Sometime it is seen that there is a miscommunication in the team and conflict which is an easy task to handle so here the

Findself will help them as telling the team leader or manager that of what type of personality are their employees so that it becomes easy for them to make coordination between the team and know how to deal with them. Apart from the employees, team leaders can also use it to know about his personality. Simple users of any stage whether they are adults or children, anybody can use it without need of having any prior knowledge.

1.1 Problem Context:

Team work is a thing which is there in almost every sector whether it an educational institute or an IT company. There is some times when we'll see team conflicts and misunderstanding or lack or self analysis which gives a bad impact on team as well as on the project development. Some employee find job not suitable for him because he is not aware of his personality and self awareness which both effects him and team and company. Lack of management is also a major reason of team conflicts [2]. If a person is not aware of himself, how can he/she understand other's feeling or situation? Some are not aware of their weaknesses and strengths which make them not a good candidate for job role [10]. So in order to make things more clear and reduce conflicts we should be aware of ourselves and our personality where Findself web app plays an important role which tells the users about their personality traits, what are their weaknesses, their strengths, famous people like them and many more things.

1.2 Project Objective:

It is required to achieve the system's objectives in order to attain the system's goal. The primary goal is to create a system for users that will alleviate the problem of users having to visit numerous websites for different services in order to learn about their personality, etc., which wastes their valuable time and money. But with the help of Findself application they no longer need to worry about this issue. They can now use one app which contains all the necessary services that they need in order to perform their task [11]. Isn't it a good solution which provides every functionality to the users so that only one application performs the all task form them related to personality type. It also provides security feature so that the users no longer need to worry about whether their sensitive data is secure or not [4]. The other objectives are summarized below:

- There are several criteria for creating software of this type. First, it must determine whether or not the end customers are satisfied with the software.
- Platform must be decided before constructing the program, such as what tools, frameworks, and libraries would be necessary.
- For input user's information, a function or form is needed to input user's details.
- Then we need to define all the questions that are there in the tests.

- Then a model is needed to build which will compute and detects the user's personality type.

1.3 Scope of the System:

The proposed system will be beneficial in a number of ways. The Findself application helps each and every person or user who want to know about him, his personality type, his strengths etc. with free of cost with best customer satisfaction. The application gives various choices to the users like- choose favorable personality tests, detect personality type, find about his personality again in future with unique ID, and many more [12]. Scope of the software is to give all sort of information about a user's personality type and many more features to its users. So, its major advantage is that it will give everything related to personality type detection in one application which will save a lot of time and also saves the wastage of money.

It also provides security of data assurance to the user[5]. The reason of making it as a web based application rather than a desktop application is that in desktop based application there is need of first download the software and then we'll be able to use it which wastes both time and space of our machine but web app can be accessed from sitting anywhere in the world and also there is no need to download any file to use it.

The success factors are important because these are the main things which makes a system or really useful to the customers that fulfill their requirements or need in an efficient way.

- The application is designed in such a way that it will work properly on every platform whether it is a Windows Operating System, Mac OS, etc [7]. If the application is not compatible on all physical devices then it will be of no use.
- The application will designed in such a way that it meets all the requirements of the users. A correct application is an application which meets all the requirements, fulfills all the user's needs and give best results to them.
- A project will be treated as successful only if it will satisfy all the necessary conditions imposed on it. The application will developed in such a way that the chances of its success will be more.

2. TECHNICAL CHALLENGES:

The challenges that would come on the way of the researcher while working on the technology area are as follows:

- **Import error:** At first, I faced package or module import error. After carefully check, I found that it was happening due to some version issue like I have low version of python installed in my system and particular package need higher version [13].

- **Incorrect output:** Next problem that I faced is that while checking or testing web app, sometime it gives incorrect output.
- **Not user friendly:** At first I faced problem of making this web app a good GUI app which make it more user friendly.
- **Invalid input:** Sometimes the user gives such kind of input which is not valid results in error [6]. So to handle it I design the app in such a way that the application simply tells the user that the given input by him/her is not a valid input.
- **Exception handling:** While making the project, I faced the problem of exception occurs in the program like Unknown Value Error, Unbound Local Error etc.
- **Platform independent:** Platform independency is an important feature everyone wants. To tackle this problem I create an .exe file of the application.

3. Use Case Diagrams:

In this section we see the different project use case diagrams. Below given are the different use case diagrams of the Findself application.

User Modules-

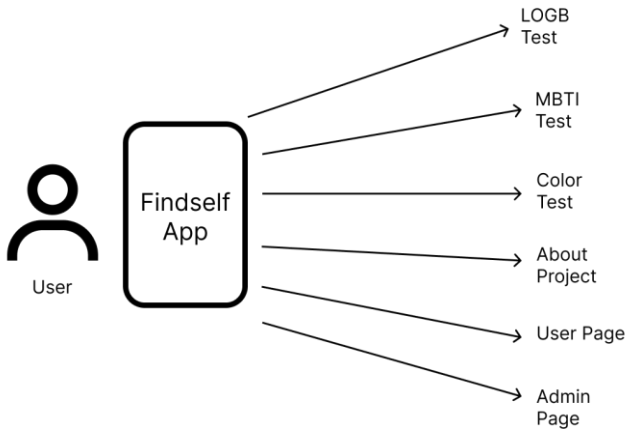

Figure:-1 Use Case Diagrams of Findself

Description- As you can see about that there are various options are there provided on the screen or image above.

There are mainly six options are there provided above.

LOGB Test-

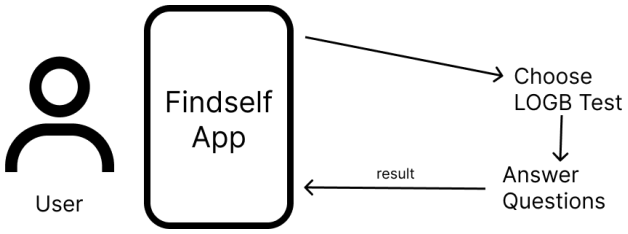

Figure:-2 Use Case Diagrams of LOGB Test

Description- The first personality type detection test option which the user can choose is the LOGB Test.

The test provides four animals like- Lion, Otter, Golden Retriever, Beaver.

The application will tell the user which animal

personality matches with his/her personality type [9].

The test is provides rich user interface and rich interactive content on it.

MBTI Test-

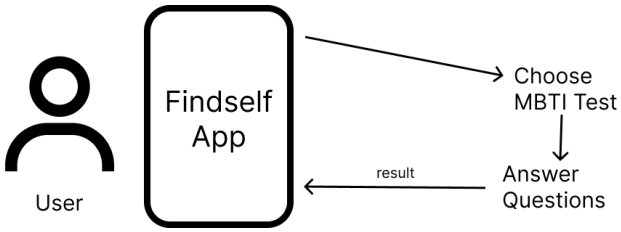

Figure:-3 Use Case Diagrams of MBTI Test

Description- The second personality type detection test option which the user can choose is the MBTI Test.

The test provides 16 personality types in it

The application will tell the user which personality type matches with his/her personality type.

The test is provides rich user interface and rich interactive content on it.

Color Test-

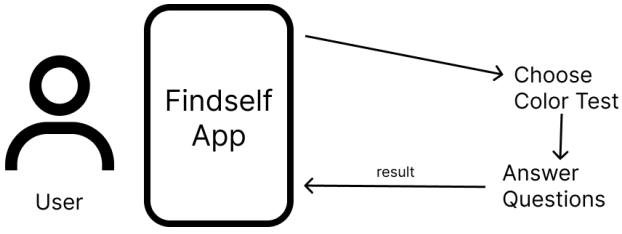

Figure:-4 Use Case Diagrams of Color Test

Description- The third personality type detection test option which the user can choose is the Color Test.

The test provides 4 color personality types in it-

Red

Blue

White

Yellow

The application will tell the user which personality type matches with his/her personality type.

The test is provides rich user interface and rich interactive content on it.

About Page-

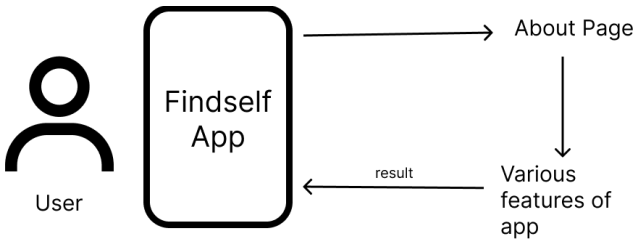

Figure:-5 Use Case Diagrams of About Page

Description- On the about us page on the Findself website, user will be able to find about various features provided on web application and details like-

Different personality test modes-

1. MBTI test
2. LOGB test
3. Color test

User page

Admin Page, etc,

User Page-

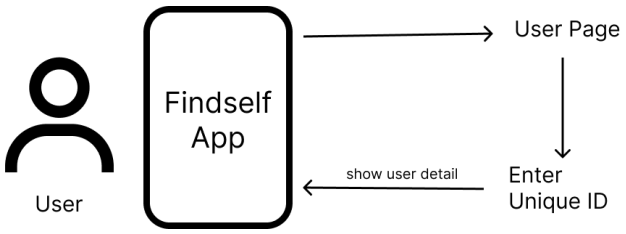

Figure:-6 Use Case Diagrams of User Page

Description- If the user wants to know the result in the future without giving the personality test again then he/she will be able to do that by visiting on the User Page of the web application.
The application gives the user a UID or unique id entering which in the space above in the figure will tell the user about their personality type.

Now there is no need to again give the test to know about your personality type.
The unique id is highly secured and encrypted so the user is no need to worry about compromising about their privacy.

Admin Page-

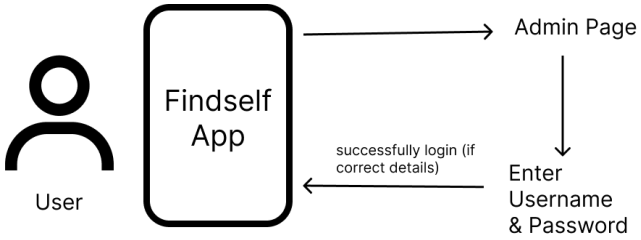

Figure:-7 Use Case Diagrams of Admin Page

Description- The Admin page is the page from where the admin will be able to monitor all the activities of the application.
Admin will also be given power relayed to the database and management.
The page will only be accessible to the admin after entering correct username and password.
Other person will not be able to access the admin page.

Advantages-

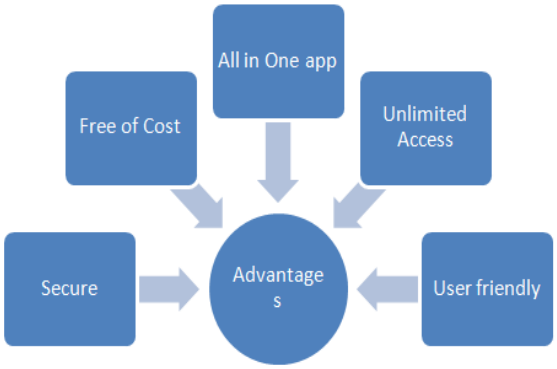

Figure:-8 Advantages of Findself

i. **All in one App –** The Findself application is the All in one application as in this you'll get the accessing mode i.e. from MBTI Test mode to LOGB Test Mode.
ii. **Unlimited Access –** If you use an online personality type test service then you would notice that after two or three time they'll ask you to buy the subscription plans if you want to use their service but in Findself app there is not such thing like that [8]. You can have

unlimited access on the software and can use it as many time as you want.

iii. **User friendly –** Another advantage of it is that is a user friendly application. It is developed in such a way so that user don't face any problem while accessing it or using it.

iv. **Free of Cost –** User don't need to spend a single penny on this application as this is absolutely free of cost.

v. **Secure –** As it is a web based application so chances of security also increase as compared to other applications.

3.1 Implementation Approach Steps

1. First step in the implementation is to design the front-end of the application. We make use of Figma; a designing app for designing app.

2. Second we need to make a virtual environment in the python. Open current directory in the cmd and type 'virtualenv env'.

3. This makes a virtual environment where you can install all dependency modules, project files etc. in it.

4. Then we need to make a file with .py extension and save it.

5. We first install and import the required modules in the file.

6. We need to first design the home screen or index page screen in the file by using the Streamlit (a python library package for making web apps using python) in built functions, classes etc.

7. We make use of Streamlit classes for making and including the design file made with the Figma Designer app.

8. We make various input fields for different inputs like Name of user, Gender, etc.

9. Next we make input fields to input the type of personality test that user wants to select like "MBTI Test", "LOGB Test", "Color Test". To make this we make use of Streamlit built-in input class.

10. Then we code the inner functionality of all the three personality type models or tests.

11. After making or developing the home screen, we then go for developing the "About Page" of the Findself web app.

12. In the "About Page", we define all the features, tests, etc which are provided by the Findself web app or website.

13. Then we develop our third page named as "User Page", in which we are given an input field where we have to put our UID (User ID) which is given to us at the time of playing the personality test.

14. UID is an encrypted key which is highly secure and encrypted with the help of which we can check out our personality type result in future.

15. Next we develop the "Admin Page", in which there are functionalities given like the database seen, download the .csv file of the database, etc.

16. After developing the website, we then move towards the deployment of the website or web app in real – environment.

17. We choose the Streamlit Cloud for the

deployment of the web app. To deploy it, we first make an account on the Streamlit Cloud platform.

18. Then we choose the name of our website (Domain name) and import all our project related files on it.

19. After importing the files, we then test our web app, and if everything works fine then we finally deploy it on web.

20. Finally our web app is live and can be viewed by anyone on the internet.

4. CRITICAL APPRAISAL:

The developer has tried to add all the features of detection of personality type in the Findself web application and developed it in such a way that it can be easily accessible by all stages of humans like kids, adults, etc. The developer also provides security of user's information in the Findself so that users now no need to worry about their data privacy and leakage [14]. The web application is ready to be deployed and use after doing fully functional testing of it which finds errors if present in the application and helps the development team to remove it [5]. The app provides three different personality type detection modes which makes it unique and different web application from other web apps on the internet.

5. CONCLUSION AND FUTURE SCOPE:

So at last from the above research we conclude that the Findself application is one of the best applications and an all in one app for the users who want to use the personality type detection with better user experience and security. It uses different test models like MBTI Test, LOGB Test, etc. It is a web based app which is free of cost to use and give the users an unlimited access to it. By using the web application, the users now become more aware and confident of their personality type. Future scope of it is that it will be used as an efficient tool to find about the person's nature and his attitude [15].

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