PERSONALITY PREDICTION SYSTEM BASED ON FINGERPRINT DETECTION "PPFD"

Muhamad Akram Buqhari Bin Mohd Adli | akram.adli@s.unikl.edu.my | +6016 9550585
Munaisyah Abdullah - Assoc. Prof. Ts. Dr. | munaisyah@unikl.edu.my

INTRODUCTION

Motivated by the limitations of conventional personality assessment methods, such as self-reporting, this research seeks to develop a Personality Prediction System (PPS) based on fingerprint detection. By leveraging the uniqueness of fingerprint patterns, we aim to create a more objective and reliable approach to predicting personality traits. This exploration not only contributes to the fields of biometrics and psychology but also holds implications for diverse areas such as criminology and human-computer interaction. Through this study, we aim to provide a novel perspective on the relationship between physical and psychological dimensions of human identity.

PROBLEM STATEMENT

⚠ Accuracy and Reliability

The Personality Prediction System focuses on ensuring high quality and reliability of fingerprint data.

⚠ Correlation between Fingerprint Patterns and Personality Traits

Establishing a correlation between fingerprint patterns and personality traits requires collaboration between psychologists, biometric experts, and data scientists.

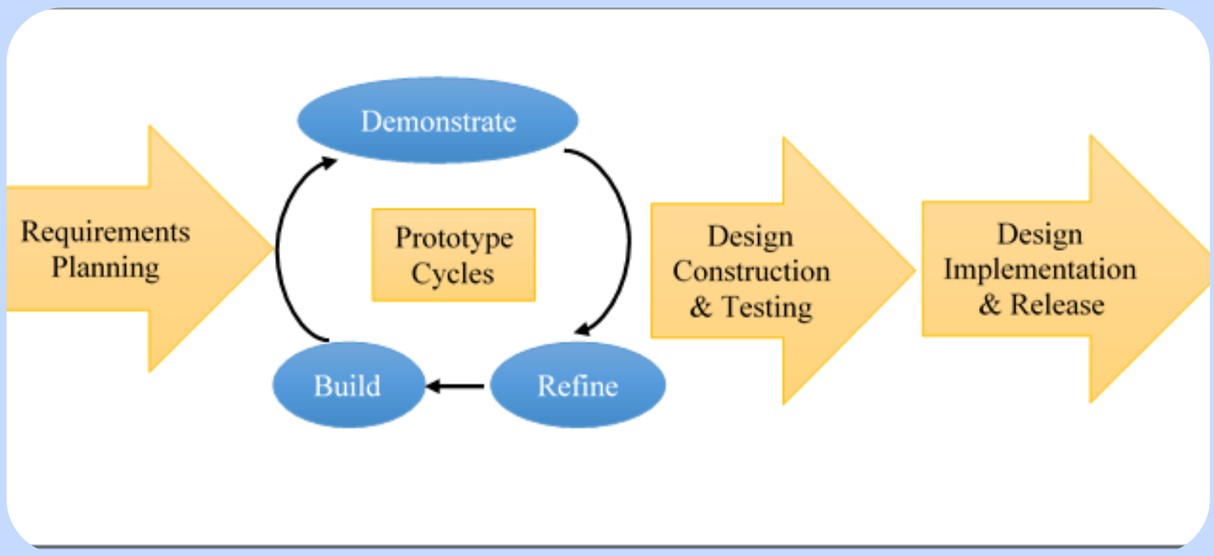
⚠ Ethical Considerations

Ethical considerations include obtaining informed consent, implementing robust data security measures, and ensuring privacy protection.

OBJECTIVES

- Create a user-friendly website that can capture fingerprint data and utilize it for behavior prediction.
- Ensure the confidentiality and security of the data collected from users.
- To enhance the current system to be able to access from anywhere with a load of database online
- To automate the fingerprint data and generate DISC Report "(D) Dominance, (I) Influence, (S) Steadiness, (C) Conscientiousness " based on fingerprint captured.
- Seamlessly integrate the fingerprint capture device with the website for real-time data capture and analysis.

METHODOLOGY

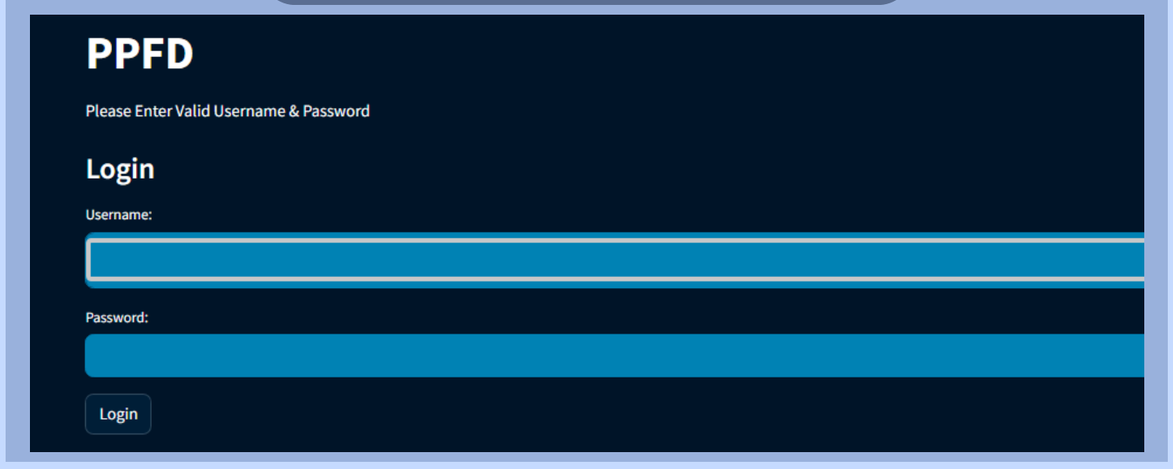


HOW IT WORKS ?

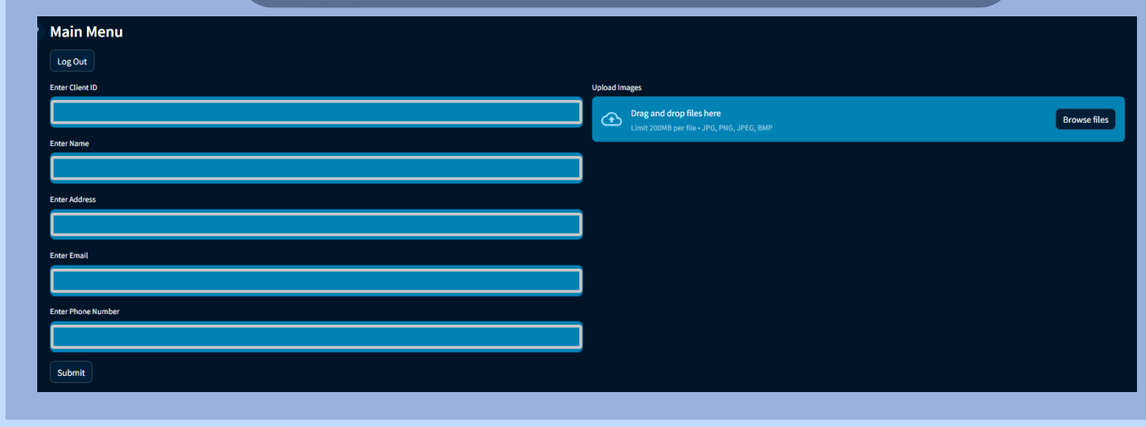
- Collect User Information: Users fill out a form to enter their personal details, including ID, name, address, email, and phone number.
- Upload Images: Users can upload multiple images gather from current thinker talent system. These images are saved on the server and encoded in base64 format for storage in the database.
- Database: The system uses an SQLite database to store user information and encoded image data. Each user's information is stored as a record in the database.
- Data Retrieval and PDF Report Generation: Search Functionality using ID or Name, able to edit or delete data. Generated report will be review by data analyst and will come out with final report manually

SYSTEM FEATURE AND INTERFACES

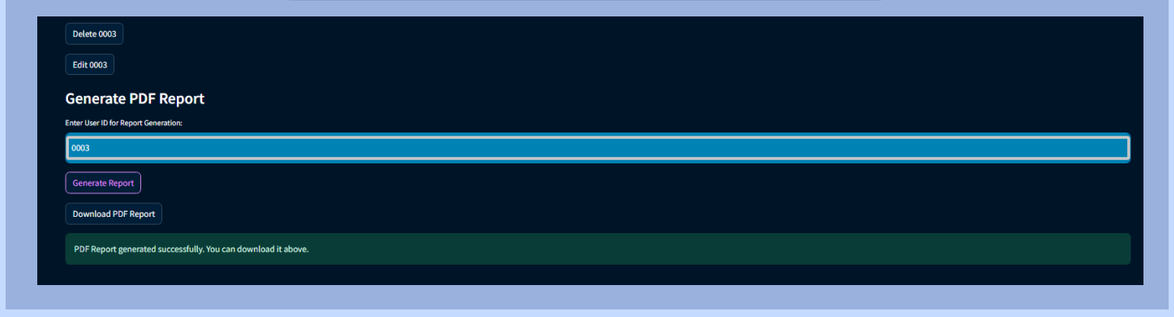
User Authentication



Data Entry and Image Upload



PDF Report Generation



TESTING AND RESULTS

ID	Title	Test Data	Steps	Expected Result	Actual Result	Pass/ Fail
TC001	Login Testing	Username:Admin Password:123	1- Go to HomePage 2- Scroll down to login interface 3- Fill up the input	Successfully login to the Main Menu	Successfully login to the Main Menu	Pass
TC002	Logout Testing	NA	1- From the current page click on logout button	Successfully logout to the HomePage	Successfully logout to the HomePage	Pass
TC003	Main Menu Testing	Client ID Name Address Email PhoneNumber	1- From Main Menu Interface, enter test data	Successfully submit the data	Successfully submit the data	Pass
TC004	Upload Image Testing	JPG PNG JPEG BMP	1- From Main Menu Interface, drag, drop or browse image files	Successfully upload image	Successfully upload image	Pass
TC005	Search Name or ID Testing	Name Client ID	1- From Main Menu Interface, Search Name or ID	Successfully search Name or ID and display data	Successfully search Name or ID and display data	Pass
TC006	Delete Data Testing	NA	1- From Main Menu Interface, click on delete "Name" or "ID"	Successfully delete data from Name Search or ID search	Successfully delete data from Name Search or ID search	Pass
TC007	Edit Data Testing	NA	1- From Main Menu Interface, click on Edit "Name" or "ID"	Successfully edit data from Name Search or ID search	Successfully edit data from Name Search or ID search	Pass
TC008	Generate PDF Report Testing	NA	1- From Main Menu Interface, Enter ID 2- Click on Generate Report button	Successfully generate report and Download PDF Report button pop out	Successfully generate report and Download PDF Report button pop out	Pass
TC009	Download PDF Report Testing	NA	1- From Main Menu Interface, Click on Download PDF Report button	Successfully download pdf report using the correct format	Successfully download pdf report using the correct format	Pass
TC010	About Us Link Testing	NA	1- From About Us Interface, Click on the link provided	Successfully redirect new tab from the clicked link	Successfully redirect new tab from the clicked link	Pass
TC011	Contact Us Testing	Name Email Message	1- From Contact Us Interface, enter test data 2- Click on Send button	Successfully send the message and receive the message	Successfully send the message and receive the message	Pass

CONCLUSION

Overall, this project provides a robust, user-friendly platform for managing and reporting user data, effectively combining secure data handling, efficient image processing, and dynamic report generation. Future enhancements could include database scalability, additional data analysis features, and further UI refinements.