**An online Laundry Provider Platform: A Case Study Of Fua Hub**

**SYSTEM DOCUMENTATION**

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**DECLARATION**

I hereby certify that content of this report was not derived from the internet, AI assistants, other students or students from previous semesters of Zetech University and or any other university and it only includes work done solely with input from the unit instructor.

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**ABSTRACT**

This study aims at exploring how the development of an application that’s going to connect users with knock-one mama fuas who iron and wash cloth manually will solve the problem of inadequate access to efficient service providers through word of mouth which could be appalling. The purpose is the creation of a simple search and booking system for mama fuas based on certain parameters like qualifications, working hours, and preferable location. Literature studies were also done with available service platforms evaluated, user feedback collected, and potential user as well as service providers consulted to establish requirements and areas of concern. To achieve the above objectives, the following sources of data were utilized: industry reports, user feedback, and competitor analysis to understand their needs in the market. The divisions of the paper include problem statement, objectives, system design and the implementation plan. The structured approach used in this case guarantees a consolidated solution on improving the availability and quality of services to users and mama fuas.

**LIST OF FIGURES**

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**ABBREVIATIONS AND ACRONYMS**

MF- Mama fua

MFs-Mama fua’s

ID-Identification Number

**DEFINITION OF KEY TERMS**

**Clients-** people who give jobs to mama fuas

**Service providers-** This are the personnel who provide services

**Location-** where the client lives or within the proximity

**Description-** how the task will be handled

**Booked-** when the service provider is occupied

**Not booked-** when the service provider is not occupied

# **CHAPTER ONE**

# **SYSTEM OVERVIEW**

## **1.1Statement of Problem**

## The current process of accessing manual laundry services, provided by "Mama Fua" workers, relies heavily on informal, word-of-mouth referrals. This system is inefficient, as clients face challenges in finding available and reliable providers, leading to inconsistent service quality and unmet needs. Additionally, service providers often experience exploitation, lack of proper recognition, and limited access to clients beyond their local circles. These inefficiencies result in dissatisfaction and hinder the growth of the manual laundry service industry. To address these issues, a structured, digital solution is necessary to bridge the gap between clients and service providers effectively and transparently.

## **1.2System Justification**

## The proposed online platform for "Mama Fua" services aims to address existing gaps by creating a digital marketplace that connects clients with verified service providers. This system simplifies service access, allowing clients to search for providers based on location, availability, and expertise. Features such as detailed profiles, ratings, and secure booking ensure reliability and satisfaction. For service providers, the platform offers opportunities to expand their client base, secure consistent work, and receive fair treatment. By digitizing this informal sector, the system promotes trust, efficiency, and professionalism, ultimately benefiting both clients and workers while enhancing the broader gig economy.

## **1.3 System Objectives**

### **General Objectives**

The overall objective of this project is to develop an online laundry service platform.

### **1.3.2Specific Objectives**

* 1. To develop an interface where a client can get information about the service provider and get in touch with them.
  2. To develop a front end interface where a service provider can create an account
  3. To develop a back end where the admin can verify an account and update its status to indicate whether it is pending, active, suspended or deleted.

**1.4 Functional Requirements**

|  |  |  |
| --- | --- | --- |
| **User** | **User Activities** | **Features** |
| User Registration | Enable users (clients and service providers) to create accounts. | Clients: Name, email, location.  - Providers: Name, contact, experience, profile photo, specialties. |
| Profile Management | Allow clients and providers to manage their profiles. | Update personal details.  - Display skills, experience, availability. |
| Service Search | Facilitate clients to search for "Mama Fua" providers. | Search by location, availability, specialization, and ratings |
| Booking System | Enable clients to book services directly via the platform. | - Real-time booking with provider’s schedule.  - Immediate or scheduled bookings |
| Validation & Verification | Verify service providers’ identities and qualifications. | ID verification, background checks.  - Status updates (active, pending, suspended). |

# **CHAPTER TWO: FRONT END**

## **2.1 Introduction to User Interface**

This chapter focuses on different pages and screens of the system the user interacts with in the system.

## **2.2 Login Page**

This page will be used by every user to access the system.



*Below is a html code from the login page that was generated by the code above*

*<!DOCTYPE html>*

*<html lang="en">*

*<head>*

*<meta charset="UTF-8">*

*<meta name="viewport" content="width=device-width, initial-scale=1.0">*

*<title>Login - Fua Hub</title>*

*<link rel="stylesheet" href="styles.css"> <!-- Link your CSS file -->*

*</head>*

*<body>*

*<header>*

*<h1>Fua Hub</h1>*

*<nav>*

*<a href="index.html">Home</a>*

*<a href="about.html">About Us</a>*

*<a href="account.html">Account</a>*

*<a href="contact.html">Contact Us</a>*

*<a href="services.html">Services</a>*

*<a href="signup.html">Sign Up</a>*

*</nav>*

*</header>*

*<main>*

*<h2>Login</h2>*

*<form action="login.php" method="POST">*

*<label for="email">Email:</label>*

*<input type="email" id="email" name="email" placeholder="Enter your email" required>*

*<label for="password">Password:</label>*

*<input type="password" id="password" name="password" placeholder="Enter your password" required>*

*<button type="submit">Login</button>*

*</form>*

*<p>Don't have an account? <a href="signup.html">Sign up here</a>.</p>*

*</main>*

*<footer>*

*<p>&copy; 2024 Fua Hub. All rights reserved.</p>*

*</footer>*

*</body>*

*</html>*

## **2.2.1 Validation of Laundry Lady (Mama Fua)**

The process of approval of mama fuas to be enlisted on the platform is critical since only safe, reliable, and legal mama fuas should be enlisted. All service providers must be at least above eighteen years of age and during registration, they are required to prove their age hence; meeting the minimum working age policies. Also, the applicants are required to produce a number identifying them like national ID or passport will be used to establish the legality of the applicant to work. This step definitely makes it safer for users assuring them that the providers they are dealing with are genuine. Moreover, registration of mama fuas is done with details about the gender of the provider, as many would prefer providers of their sex for various reasons such as cultural beliefs, personal preferences, etc. Being one of the mandatory demographic categories, the gender is clearly displayed in the profile sections to allow a service provider and the customer arrive at a mutual decision.

## **2.3 Creation of Account**

Additionally, the platform’s interactions should allow both mama fuas and clients to create user accounts through which they can gain access to services and effectively interface with each other. The creation of account for both the parties should involve simplicity where name, email address and phone number among others should suffice. Customers would use MFs accounts for viewing the available services, profiles of MFs, booking services, and feedback of previous clients. On the other hand, MFs would open an account in order to display skills, schedule and also to interact with the customers. This way, the fact of both parties being on the platform guarantees safe communication and, thus, trust and responsibility on the partner’s side. It also enables the platform to deliver client’s solutions for the MFs personal tastes referencing and the relevant analysis of the MF outcomes. Such a dual account strategy ensures simple coincidence of all access keys; it is beneficial for both providers and the clients, making the overall usage of platform functions more convenient.

## **2.4 Booking a Laundry Lady (Mama Fua)**

The various bookings on the proposed online platform will be well simplified and arranged to allow users like my mother to easily locate the service provider for the mama fua for laundry services. Users will visit the available MFs profiles where they will be able to view her experience, discipline specialization, customer feedback, and when she is available for employment. With a suitable mama fua in sight, the user will be able to see the MFs schedule in real-time and choose the date and time at which the service is required. This way it will include an option to book the service immediately or submit a choice of a more particular time and date the mama fua will approve. In this regard, all the communication regarding the final details and any special requests from the user to the MFs will be completed through the messaging services within the application. When the trip is booked and confirmed, both the customer and supplied speaker get notifications containing details of the booking. This way, the transition process in hiring laundry services is convenient, clear and effective through the direct hiring from the platform.

### **2.4.1 Describe the Laundry Task**

As much as it relates to the types of clothes that a m ama fua service provider offers it is equally important for the online platform that lists the mama fua services to include detailed information on the kinds of clothes that are to expected to be cleaned. The clothes should be divided into various classes for instance business, general and fabrics that require careful handling, this makes it easier for the users to choose the correct category of service. This categorization assists in the selection mechanism between the users and the mama fuas, in this way excluding the challenges of identifying a MFs that shall have the capacity to handle the specific types of clothes.

Also, MFs should be in a position to demonstrate the extent of their familiarity with various types of fabric. For example, a MF who is specialized in dealing with sensitive fabrics such as silk or wool can include this in the profile in order to guide the users who have such clothes to choose them. The platform should also enable the client to state the specific instructions for washing their garments, for instance, hand washing of fragile fabrics or pressing of formal wear. This will make the laundry process personalized on the user’s wish thus enhancing satisfaction to the garment and enabling proper care. Lastly, this feature improves the service delivery and hence the user experience out where clients have a well-arranged and effective laundry service.

### **2.4.2 Selection of Personnel According to my Location**

One of the defining aspects of the “mama fua” platform is the ability to search for personnel by location; this makes it easier for its users to find service providers in close proximity to them. It should be possible to enable the users of the platform to search for the personnel of their interest by location. This makes it easier for users to hook up with MFs who are nearby hence cutting down on the time they will use and associated issues. Users would be able to input their location during sign up or creating service providers account which the would be used to enable providers to search for users in their proximity. Also, it could offer the average travel time and distance and make it easier for the user to chose between the various providers. This feature also increases the satisfaction level of the users by providing them faster and efficient services, and at the same time, it increases the opportunity of the MFs to find jobs among their local clients and also promotes a strong connection within the community.

### **2.4.3 Identification of best Personnel Available**

Matching of the most competent staff is one of the unique aspects of the online “mama fua” where you can hire personnel from various fields. The platform should have a reliable rating as well as a reviewing tool, which allows the users to rate the quality of the previous services. Every review or report would contain sections such as punctuality, and service delivery, and interaction between the provider and the client portraying the level of reliability of the service provider. Also, it’s possible to show on the web the schedule of availability of each of the mamas fua, so that a client can book someone who is not busy at the time of her choosing. Experience, special skills, even the location helps to make the right decision comes with detailed profiles. Users are thus able to quickly sort out the most qualified personnel by rating, availability and need for specialized services that the establishment offers. It also improves the users’ satisfaction and at the same time exerts pressure on the providers of these services to improve on the quality of their services.

### **2.4.4 Clarification of date and time Availability**

Date and time availability functionality is one of the significant options on the platform as it

allows both clients and mama fuas to set up a suitable schedule. Mama fuas should adopt the skills of posting their availability where they should be able to post the days and hours they are willing to dedicate their time to-provide their services. Such information would be effectively reflected on their profiles so that clients could easily know the availability of the personnel they wish to hire immediately they begin the booking process. Clients also get a chance to choose their most suitable dates and times to access the mama fuain question thus relieving the burden of scheduling. It could also state options where clients can request certain times, and the mama fua can either approve or give other suitable time slots based on the situation. This feature minimizes the heat between the two parties that is commonly associated with scheduling of the booking process. Timely visibility of availability reduces conflicts, increases reliability and guarantee that the presenter as well as the audience can effectively manage their time when preparing for the service.

### **2.4.5 Approval of Task Completion**

Certification of the task performed is an important phase in the process of providing services within the framework of the “mama fua” platform, as well as the satisfaction of the contracting parties with the performance of a particular task. After a mama fua has completed the laundry service out of the home of the employer, they would have to update their work status in the mobile application. The client was then to be notified that the work was complete and should be reviewed. The client could check the cleaned clothes and determine whether the service provided was to the expected standard. If the client is satisfied, then the specific task is completed and the payment for the mama fua is also made, and both can share feedback. This step also ensures that the clients approve all the terms before finalizing the particular transaction making it a transparent and accountable process. Also, it guarantees that only the best services will be provided since all the mama fuas are aware that the payment they will receive and future opportunities are in direct correlation with the clients they serve.

## **2.5Automatic Declination of the task- select another**

The platform should have an option to reject tasks automatically as it would help in expediting the booking process. Mama fua operators are able to easily decline a task if they are unavailable for the task at hand or if for any other reason they are unable to take up the task, this leads to the generation of an alert to the clients involved. Utilizing this feature enables the clients to be responded to immediately so that they do not have to wait which they might find inconveniencing. If declined, the system would then proceed to recommend other similar service providers in terms of specialty, location, and availability, based on the clients’ initial preferences.

This helps to make sure that the client can go ahead and continue with the other processes in the

booking process which makes the user experience very seamless throughout. Furthermore, there could be some data collected regarding the declination concerning different service providers and depending on it, the platform could identify the frequency of the day, when a lot of declinations occurred and thus, decide when to hire more services or what changes to make so that there were minimal declinations in the future. This elevates the efficiency when working on the platform and improves the satisfaction level of the clients.

## **2.6 Development Technology**

Since ‘mama fua’ is an online platform, its development technology should encompass design

characteristics that make the system strong, stable and friendly to use by clients. The front-end can be implemented using the contemporary front-end frameworks such as the React or Angular since the front-end would contain vibrant and responsive UI for web and mobile. If the platform is to be created to activate for both the iOS and Android systems, then using React Native or Flutter for creation for the mobile applications would be best for the system.

The back-end should include a strong framework like Node. js or Django to deal with the

platform’s core functionalities such as user authorization, profile management and booking. A relational database like PostgreSQL or MySQL would efficiently store user data, including users’ profile and reviews, and transaction history. For features that require near-real-time data, for instance, for the chat or for a live update of some kind, WebSocket or Firebase can be employed. Besides, for improved location-based services, the Google Maps API will be incorporated in the platform as well as payment gateways that are safe and secure like the Stripe or PayPal. It also makes for an adaptive, interactive, and indeed secure interface for the users.

## **2.7Benefits of The Laundry System**

### **2.7.1 Benefits to The Service Providers**

The laundry system also has a lot of advantages from service providers improving their options

of work and development. Freelance work problems can be solved if mama fuas join the platform because they can access clients outside their circles hence enhancing their opportunities to secure constant gigs. Probably the profile feature enables them to present their skills and experience as well as the customer feedback to ensure they secure more clients. Further, real-time booking and availability features of the platform ensure that they can manage their schedules effectively, and eliminate any idle time, which would mean less income earned.

Another benefit that the system gives is on the safe tender processing in that the transactions

are IT reliable, thereby minimizing the risks of handling cash. In addition, the rating and feedback feature takes the customer satisfaction levels and feedback to another level, enabling service givers to enhance their delivery in order to gain higher ratings. In general, the platform increases the opportunities for mama fuas and contributes to the development of their work, making it an efficient and stable source ofincome.

### **2.7.2 Benefits to the Clients**

The laundry platform has many essential advantages for clients: providing better and faster

access to quality laundry facilities. This one is rather simple, a mama fua is easy to choose and order online, and it decreases clients’ dependency on friends’ recommendations or physical searches. It also features numerous contracted service providers ensuring that the clients have a wide selection to make based on factors including geographical location, experience, and the rating given by previous customers. Such flexibility is important because it means that clients can get a more appropriate solution depending on the type of laundry problem they have.

Furthermore, the availability and scheduling/hour options make it possible for customers to

request services at specific durations, thus, helping eliminate long waiting times and lack of efficiency in service delivery. The function that allows reading reviews and overviewing other clients’ ratings is also useful for making decisions concerning reaching a higher level of satisfaction with the received services. In general, the system improves the benefits for clients in search of the laundering by increasing convenience, choices, and quality.

## **2.8 Challenges of The Mama Fua System**

Despite being revolutionary, the “Mama Fua” system experiences a few issues which can affect

its functionality. One major consideration is therefore the ability to develop qualitative service provider profiles that are credible. If measures for users’ background check are insufficient, it is possible that scammers or low-quality professionals will register on the platform, and this will threaten clients’ trust. Another is working on availability and making sure there is an adequate number of mama fuas to meet customers at their peak engagement with the platform. If there are few providers, then clients are likely to wait a long time which will make them dissatisfied.

Also, the platform has to face language issues, as some of the MFs can be non-

philosophers of the language in which the platform is developed, which can make communication with clients a problem. Payment processing and dispute management are also important, it involves the process of protecting transactions and addressing the controversy. Finally, due to a possible limited level of computer literacy among the identified target group of MFs, one could name the need for training other usability of simple interfaces on the platform created to overcome this issue.

### **2.8.1 Challenges During Development**

Implementing the MF brand might also run into some challenges that are discussed

below. The first is the need to fully integrate source location services which involves the proper mapping and real-time synchronization of service location pertinent to matched clients. A major issue is to incorporate a universal, strong, and secure way of authenticating users, particularly the mama fuas and clients. The protection of information must be observed especially the identification numbers and payments and other sensitive data. Further, the other constraint is the design aspects that include the creation of a friendly UI for the various categories of users including the social age group who may not have extensive computer operating experience. Again, striking a balance between minimalism and usability is the key to avoiding many a user’s frustration. However, identifying how the location-based platform can adapt swiftly as more users are added in a manner that the operation remains fast and stable may be challenging. These

issues must be met before the actual development stage and at the same time should be tested and modified at each stage of the development process.

### **2.8.2 Challenges to the Users**

The following potential issues may be experienced by the users of the platform. A primary concern could be the ability to understand how the application works and in effect may cause problems when trying to search and reserve services for those less competent in the usage of the digital apps. Another difficulty is the unpredictability of service delivery quality; one can refer to reviews, yet, they cannot always depict a certain mama fua’s performance at the time of visiting.

Another disadvantage likely to be noted by users is that of availability; this is because, when many clients are accessing the system and requesting for services at the same time, they may be forced to wait for quite some time or have to opt for other service providers. Subsequently, to any particular need, for instance, contact with delicate fabrics, searching for a MF capable of dealing with such preferences would be difficult if the ability was not well indicated. Finally, it must be pointed out that data protection is the key to success, as users have to keep their personal and payment information secure from hackers and scammers. It is crucial to manage such issues with the help of the design that is convenient for use and providing access to clear information with protected security.

## **2.9 Conclusion**

In conclusion, having identified the need for reliable manual laundry services and the existing

shortcomings of the current approaches, this paper aims to propose an online platform for ‘mama fua’ services. Through linking its clients to service providers, the platform increases the convenience, productivity as well as satisfaction on the side of clients and service providers. Some of the features are specific provider profiles, availability schedules, the search by location, and the possibility to read other clients’ feedback, so clients can choose the necessary personnel quickly. The availability of an auto-task rejection option makes the process even easier since clients can easily search for other options they may wish to access. Also, the validation process confirms that all the MFs are compliant with the regulations and provide professional services. One has to agree with the idea that the registration system unifies MFs and clients, creating safe and open communication to help both sides and the providers of services. Besides, by increasing the quality and reliability of manual laundry services, through an integrated approach, it opens more employment opportunities for mama fuas while being a useful tool for the community. Due to the simplicity and effectiveness of the platform structure, it will be possible to fit into the current demand in the laundry service sphere and contribute to the industry’s transformation in the necessary direction.

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