A Major Project Synopsis on

**CLAYBI -App using Flutter**

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Towards the partial fulfillment for the Award of the Degree of

# MASTER OF COMPUTER APPLICATIONS

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## I. Introduction

**CLAYBI** is an innovative online store that serves as a digital platform where individuals and businesses can conveniently purchase products over the internet. Online stores are essential for modern commerce and provide a convenient way for both buyers and sellers to conduct transactions without needing a physical storefront.

CLAYBI offers a user-friendly mobile application where users can purchase unique, nature-inspired terracotta pots and planters that bring the beauty of the outdoors into the home.

CLAYBI are passionate about supporting our local community and promoting exceptional craftsmanship. By collaborating with talented artisans, including women and widows, we aim to uplift and sustain their livelihoods.

Each purchase from CLAYBI not only enhances the living space with beautiful, handcrafted pieces but also directly supports these skilled artists and their families.

Why Should You Choose CLAYBI?

1. **For Buyers:**

a. **Affordable Price:** It offers the best pricing for high-quality, handcrafted terracotta pots and planters, ensuring that customers get exceptional value for their money. Products are designed to bring beauty and nature into your home.

b. **Instant Purchase**: With our user-friendly mobile application, purchase can be made in just one tap. This seamless and quick process ensures that you can easily buy the products you love without any hassle.

c. **Real-Time Tracking**: Stay informed about your purchase every step of the way. Real-time tracking features let you know exactly where your product is, so you can track its journey to your doorstep.

d. **Cashless Payments**: Paying for your favorite products is simple and secure. **CLAYBI** offers convenient payment options through UPI, digital wallets, and cards, making your shopping experience easy and safe.

e. **Safe & Secure**: It takes the safety of your products seriously. With premium packaging materials and live tracking, your order is protected throughout the entire process, from shipping to delivery.

1. **For Artisans:**

**a. Higher Earnings**: It allows artisans to expand their reach and sell them to customers worldwide. This increased exposure and access to a global marketplace leads to higher earnings, helping you grow your craft and business.

b. **Flexible Work**: As an artisan, have the freedom to work at your own pace and convenience. There's no need to worry about rigid schedules or deadlines—create and sell on your terms.

c. **Scalability**: Don’t worry about outgrowing your physical space. Businesses can scale up without limitations, allowing you to grow your production and sales as demand increases.

d. **Transparent Payments**: It ensures that artisans are paid fairly and on time. It provides automatic payment calculations and instant payouts, so you can focus on what you do best, crafting beautiful products.

e. **Sell Anywhere, anytime**: With an online platform available 24/7, It gives artisans the freedom to sell at any time, reaching customers from different time zones and locations without geographical constraints.

## II. Motivation

The creation of **CLAYBI** was driven by a deep passion for two key principles: **empowering artisans** and **bringing nature into homes**. Our Services Include:

1. **Supporting Local Artisans:** It provides a platform that supports local artisans, especially those from marginalized communities. Many talented individuals, particularly women and widows.
2. **Promoting Craftsmanship:** It helps to keep traditional artistry alive, ensuring that future generations can continue to appreciate and learn from these practices.
3. **Environmental Sustainability:** With a growing demand for sustainable products, it creates products that are not only beautiful but also eco-friendly.
4. **Providing Convenience and Accessibility:** It provides an online platform that enables customers to shop from the comfort of their homes. Through user-friendly mobile applications.
5. **Connecting Nature with Home:** It brings nature’s beauty into homes through carefully crafted terracotta products. Products help individuals to create peaceful and welcoming spaces in their homes.

## III. Problem Statement

Traditional auto-hailing systems lack efficiency, transparency, and affordability. FareRari solves these challenges with a smart booking system.

**1. Challenges for Buyers:**

1. **Limited Access to Handcrafted Products:** Buyers often struggle to find artisans who can offer one-of-a-kind items that add a personal touch to their home decor.
2. **Unclear Pricing and Overpaying for Products:** Buyers sometimes face issues with unclear or inflated pricing for handcrafted goods, leading to a lack of trust in online stores.
3. **Limited Payment Methods:** Many buyers experience inconvenience when online stores don't offer diverse or secure payment options, such as UPI, digital wallets, or cards.
4. **Lack of Tracking and Assurance:** Buyers often face anxiety about the safety and delivery of their purchased items. Without proper tracking or a reliable delivery system**.**

**2. Challenges for Artisans:**

1. **Limited Market Reach:** Many artisans, especially those in marginalized communities, struggle to sell their products outside their local markets.
2. **Inconsistent Earnings:** Artisans often face unpredictable demand, leading to unstable earnings. it’s challenging for artisans to scale their businesses and generate reliable income.
3. **Lack of Transparent Payments**: Artisans often face delays in payment or confusion regarding how much they will be paid for their products. Traditional systems may lack transparency, leading to trust issues between sellers and buyers.
4. **Absence of Digital Payment Methods**: In many communities, artisans lack access to modern payment solutions, making it difficult for them to manage earnings or receive payments securely and efficiently. This lack of digital infrastructure often limits their ability to grow their business.

## IV. Methodology/Planning of Work

1. **Frontend Development using React JS:**

Key components of the CLAYBI user interface include:

* **Home** – Main landing page showcasing featured products and categories (terracotta pots, planters, etc.).
* **Product Catalog** – Browse through various handcrafted products and filter by type, price, or popularity.
* **Product Details –** View detailed product descriptions, images, and artisan information.
* **Cart & Checkout –** Manage shopping cart and proceed to checkout with multiple payment options.
* **Profile & Wallet –** Manage user details, order history, and digital wallet for transactions.
* **Order Tracking** – Real-time tracking for orders to ensure safe and timely delivery.

**2. Portal Development:**

**Admin Portal:**

* **Product Management** – Monitor and update product listings, availability, and pricing.
* **Order Management –** Track and manage orders, including processing returns, exchanges, and refunds**.**
* **Customer Support –** Handle customer inquiries, resolve issues, and provide assistance.
* **Reports & Analytics –** Monitor sales trends, user activity, and performance metrics to ensure platform success**.**

**Buyer Portal:**

* **Browse & Purchase –** Shop for terracotta products and manage the checkout process.
* **Order History** – View past orders, re-order products, and track delivery status.
* **Wishlist –** Save and manage favorite products for future purchases.
* **Secure Payments** – Multiple payment methods, including UPI, digital wallets, and credit/debit cards**.**
* **Product Reviews** – Leave feedback on purchased items to help other buyers make informed decisions.

**3. Backend Development:**

* **Framework: Spring Boot (Java) –** For robust and scalable backend development.
* **Database: MySQL –** Store product, order, and user data securely**.**
* **API Integration:** 
  + **Payment Gateway:** Integrate secure payment solutions for seamless transactions.
  + **Shipping API:** Integrate delivery and tracking systems for real-time updates.
  + **Email & SMS Notifications:** Send order updates, shipping notifications, and promotional offers to users.

**4. Security and Data Protection:**

* **SSL Encryption:** Ensure secure communication between users and the platform.
* **Data Privacy:** Adhere to strict data privacy policies to protect user information**.**
* **Two-Factor Authentication (2FA):** For added security on user accounts, especially for artisans managing payments**.**

## V. Requirements for Proposed Work

1. **Software Requirements:** 
   * **Operating System:** Windows, Linux
   * **Frontend:** React JS
   * **Backend:** Spring Boot (Java)
   * **Database:** MySQL

1. **Hardware Requirements:** 
   * **Processor:** Minimum Intel i3 or higher
   * **RAM:** 4GB (Minimum)
   * **Storage:** 20GB Hard Disk Space

## VI. Bibliography/References

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