Empowering Rural Artisans: The VCOM Mobile Application for Online Selling and Community Engagement <----- Empowering Rural Artisans: The VCOM Mobile Application for Online Selling and Community Engagement ----->

Abstract

Abstract:
This research paper presents a solution to the challenge faced by individuals in rural areas who possess crafting skills but lack platforms to effectively sell their goods. The proposed solution involves the development of a mobile application named "VCOM," which enables rural artisans to sell their products online without intermediary charges. The application aims to provide a user-friendly interface tailored for ease of use by individuals with varying levels of education, including those who are unskilled or unfamiliar with complex mobile applications. Furthermore, the paper outlines the software system design, software architecture, and technologies employed in the development of VCOM. The system design focuses on creating a suitable UI and screen flow to support user registration and roles, with an emphasis on linear application workflow to accommodate users with limited experience in using mobile applications. The high-level architecture of the mobile application is inspired by existing work and comprises a client-side system and a server-side system to handle data, services, and client requests. The software technologies utilized include Flutter, Dart, Node.js, and MySQL, enabling VCOM to provide a user-friendly interface while ensuring data integrity and cost-effective visualizations through table-based representations. This paper aims to contribute to the enhancement of rural craft-selling platforms and the empowerment of individuals in rural areas through technology and innovation.

Introduction

The impact of mobile applications on rural market development is a topic of growing interest as technology continues to transform the way individuals in rural areas engage in economic activities. Mobile applications have the potential to provide a platform for individuals in rural areas to showcase and sell their products, thereby contributing to the development of rural markets. However, there is a need to explore the extent to which mobile applications can effectively address the challenges faced by individuals in rural areas, particularly those who lack platforms to sell their goods and navigate complex mobile applications.

The use of mobile applications in rural market development has the potential to bridge the gap between skillful artisans in rural areas and potential consumers, creating opportunities for economic empowerment and sustainable growth. Additionally, mobile applications can enhance user experiences by providing insights into the origin of products and the stories behind their creation, fostering a sense of community engagement and connection.

In this context, it is essential to explore the impact of mobile applications on rural market development, considering factors such as accessibility, user interface design, and the potential for empowering individuals with varying levels of education to participate in the digital economy. Understanding these impacts is crucial for designing effective interventions and platforms that cater to the specific needs of rural communities and

contribute to their economic development.

Related works

Based on the problem statement provided, it is evident that there is a need for a platform to enable individuals in rural areas to effectively sell their handmade products, especially those who may not be familiar with complex mobile applications. Representatives from Self-Help Groups have taken steps to impart crafting skills to residents in various villages. Additionally, a mobile application called "VCOM" has been developed to provide a platform for selling products online without intermediary charges, and to enhance the user experience by connecting the product to its origin and the story of the village where it was crafted. The software system design includes creating a suitable UI and screen flow to support user registration, with a focus on linear application workflow and visual elements for enhanced user interaction. The software architecture is inspired by a previous work and includes a client-side system and a server-side component for handling client requests and database management. Flutter, Dart, Node.js, and MySQL have been utilized for the development of VCOM to provide a user-friendly interface for individuals with varying levels of education.

Software system design

I am currently unable to retrieve search results for the software system design for the rural mobile application "VCOM." However, I can assist you in formulating the software system design based on the given problem statement and solution. The software system design would involve creating a suitable user interface (UI) and screen flow to support user registration, as well as defining the roles of users within the application. The main focus of the software system design would be to ensure a linear application workflow, accommodating users who may be unfamiliar with complex mobile applications, particularly elderly individuals. Additionally, the high-level architecture of the mobile application would encompass the client-side system, including user interface and application logic, and the server-side system responsible for handling client requests, directing them to specific functions, and interacting with the database. It's important to consider the choice of software technologies, such as Flutter, Dart, Node.js, and MySQL, to ensure the development of a user-friendly interface tailored for ease of use by individuals with varying levels of education. If you would like additional details or specific aspects of the software system design to be addressed, please let me know.

System architecture

The problem statement underscores the challenge faced by individuals in rural areas who lack platforms to effectively sell their crafted goods, especially those unfamiliar with complex mobile applications. To address this issue, representatives from Self-Help Groups (SHGs) have visited numerous villages to impart crafting skills to residents. A mobile application named "VCOM" was developed to enable individuals to sell their products online without intermediary charges, providing a seamless and user-friendly experience for individuals in rural areas. The software architecture includes a client-side system encompassing the user interface and application logic, and a server-side component responsible for handling client requests and interacting with the database to

manage data. Technologies such as Flutter, Dart, Node.js, and MySQL were employed to develop a user-friendly interface tailored for ease of use by individuals with varying levels of education.

Software implementation

Based on the provided problem statement, the software implementation for the rural craft selling app, "VCOM," involves creating a suitable UI and screen flow to support user registration. The high-level architecture of the mobile application consists of a client-side system that includes the user interface and application logic, as well as a server-side system with a server component responsible for handling client requests and interacting with the database. The software technologies used for the app include Flutter for cross-platform applications, Dart for frontend and backend development, Node.js for scalability, and a MySQL structured database for data integrity and visualizations. If you require further detailed information on a specific aspect of the software implementation, please let me know.

Software technologies

The problem at hand involves the lack of platforms for individuals in rural areas to effectively sell their handcrafted products, especially for those who are unskilled or unfamiliar with mobile applications. To address this, representatives from Self-Help Groups (SHGs) have been visiting villages to impart crafting skills and developed the mobile application "VCOM" to enable individuals to sell their products online without intermediary charges. The software system design focuses on creating a user-friendly UI and screen flow to support user registration and roles, particularly for those new to using mobile applications. The software architecture is inspired by a previous work and involves client-side and server-side components, while software technologies such as Flutter, Dart, Node.js, and MySQL were chosen for their efficiency and user-friendliness in developing VCOM.

Conclusion

The focus of the research is on addressing the challenges faced by rural artisans in effectively selling their products, especially those who are unskilled or unfamiliar with complex mobile applications. Representatives from Self-Help Groups (SHGs) have visited various villages to impart crafting skills to residents and have developed a mobile application named "VCOM" to enable individuals to sell their products online without intermediary charges. The mobile application aims to provide insights into the product's origin and the story of the village where it was crafted, fostering a sense of connection and community engagement.

The research paper should emphasize the importance of addressing the challenges faced by rural artisans in accessing platforms to effectively sell their goods and highlight the positive impact of initiatives like the SHG's visits and the development of the VCOM mobile application in empowering rural artisans and providing them with opportunities to showcase and sell their products. The potential socio-economic benefits and community engagement that can be achieved through such initiatives should also be underscored.