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Shopnow: E-Commerce Android & IOS Mobile Application

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ABSTRACT: Using a smartphone for browsing an online store can be frustrating due to the small screen size. This limitation often leads to a suboptimal user experience, as the web shop's functionalities are not effectively optimized for such devices. To address this issue, a solution was devised involving the development of both a server-side plugin and a client-side application. The client-side application was specifically designed for mobile devices and employed a generic communication method to connect to the server-side plugin. This plugin, integrated into the online store, allowed the mobile application to replicate the online shopping experience without the need for a web browser. This approach aimed to enhance the performance of browsing a web shop on a mobile device, making it a more seamless and enjoyable process for users. One of the key outcomes of this development was the compatibility of the plugin and application with various E-commerce frameworks. Instead of creating unique server-side plugins and client-side applications for individual web shops, this solution provided support for a wide range of web shops with just one plugin and application. This streamlined approach not only saved time and resources but also ensured a consistent user experience across different E-commerce platforms. Furthermore, by eliminating the need for a web browser, the plugin and application significantly improved the device's performance when accessing online stores. This optimization resulted in faster loading times and smoother navigation, enhancing the overall user experience on mobile devices with small screens.

KEY WORDS: Ecommerce, Application

I. INTRODUCTION

E-Commerce has improved business methods by giving the businesses the opportunity of selling goods and services on a universal basis. The Internet provides traders the possibility of spreading out their shops into infinite number of sites [1], and also gave the consumers the advantage of shopping across all borders. To give the customers not only the advantage of buying anytime, but also the advantage of buying anywhere, using a mobile device for E-commerce has become an alternative [2]. Progression of wireless technology made mobile devices more popular. From the customers' point of view in one hand, it is advantageous to use mobile devices such as smart phones and take advantage of their mobility while surfing an online store, while in the other hand the shop owners benefit from fulfilling the customers desires. This new method of purchasing, which is more convenient for the consumers and more profitable for the shop owners, is called mobile commerce or in abbreviation m-commerce [2].

II. BACKGROUND REVIEW

2.1 Selection Criteria

This Section discusses about the different selection opportunities for choosing the E-commerce frameworks, the mobile operating system and the possible methods which could have been considered reaching the target.

2.2 Special Knowledge

This section goes through the special knowledge required for this project and includes Android application fundamentals and connection's method used between client and server.

2.2.1 Android Programming

Before describing the Android application fundamentals, the Android OS architecture will be explained.

There are different components in the Android OS.

Applications: There are different core applications based on Java such as email client, maps, browsers, etc.
Content providers: With the help of content providers, applications can access and modify the shared or private stored data in any persistent storage location in which they have enough access privilege to. For instance managing the data stored in the file system, SQLite database or on the web. Each content provider is implemented as a subclass of Content Provider class and implements a standard bunch of APIs that enable the other applications the ability of performing transactions.
Broadcast receivers: The broadcast receivers are designed to do a very minimal amount of work, and are just a gateway to other components. They respond to system-wide broadcast announcements and in spite of the fact that they do not display a user interface; they might show a status bar notification to inform the user about the broadcast event occurrence.
After considering the Android application fundamentals and architecture, a real Android example could be discussed. There are two objects in the Android platform called “View” and “View Group”, which are the basic units in an Android OS user interface expression. A “View” object stores the layout parameters and content for a particular area of the screen and also is a point of interaction for the user and the receiver of the interaction events.

2.2.2 Head First PHP 2nd Edition

Http Client provides an effective way to implement the client side with recent HTTP standards. The HTTP protocol's role in today's communication systems could not be overlooked.

III. FEATURES AND REQUIREMENTS

This chapter discusses about features and requirements of the system that can solve the problem. The first section considers how the mobile shopping process looks like in general. In this section, the use case diagram will show required features in detail. In the second section, the functional and non-functional requirements will be addressed for the mentioned features while making it easy in the upcoming sections to reference to different requirements.

As the choice of development, the waterfall method was chosen since the project's plan or project's requirements were unlikely to change and the testing results or customer's feedback were not supposed to effect the project. So each model's phase (project planning, analysis, design, implementation, etc.) was accomplished before moving on to the next phase.

IV. FRAMEWORK

There is usually a configuration table on the framework's database which contains the framework's configuration information. Examples of the data which this table could involve are the basic shop's information, installed modules, current setting's information and a lot more. A bunch of tables usually belong to categories and a group of tables contain information about different products. These two groups of tables should be accessed during the “Browse category”, “Search product”, “View products description” and some more features. Another group contains the customer's information, these tables along with the previously mentioned groups should be accessed during the “Add to cart” and some more features.

Tables related to orders, address book, taxes, zones and countries are usually needed to be modified during the “Checkout” processes. Putting the tables in different categories does not necessarily mean that they will not have relation to the tables from another group; it just shows that the tables are more logically connected in a particular group and have more relations to each other as a result.

V. LOGIN

5.1. Login Feature

In fact the login is always occurring before browsing the categories or any other feature of the application. But the reason of putting it after the Section 5.1.1 is that it has a much simpler implementation, and the intention was to provide the details of a more complex part in the beginning.

The login in consisted of Android's <TextView> objects for getting the username and password and an Android's <Button> object for sending the entered data to the server side.

5.2 Add Products to/Remove Product from/Change Quantity of Cart

The shopping cart has an interface for showing the items on the list and also some Android <Button> objects for removing or changing the product's quantity on the shopping cart. It also has an Android <Button> object for checkout.

Each time the content of the shopping cart is manipulated, the customer's identification that changed the shopping cart contents and the product's information should be sent to the server side. What returns is the customer's updated cart contents to be displayed on the shopping cart.

5.3. Checkout – Payment Method

In the first part, there should be an appropriate user interface for showing the checkout receipt. The customer's identification that wants to do the checkout should also be sent to the server side.

In the second part, the discussed payment method in the Section 4.3 starts to run, so the interfaces and functionalities of the PayPal in this case is the result of using the PayPal's mobile payment library.

The following steps are the most important phases required for the PayPal to perform the payment process.

- The application initializes the library.
- The library creates a Pay button to be placed on the application.
- When the button is pressed, the library takes the application to the PayPal checkout.
- After the payment is completed by the customer, the library returns a callback to the application with the status of the payment and the pay key. In this step the library is still in control of the user interface and has not returned control to the application.

After the completion of the library flow, an activity result will be sent to the application.

5.4. Details

In this section a piece of code is presented which has been used for all the three frameworks in order to insert the required data in the “customers_basket” table while adding a product to the cart.

This PHP function checks if there is enough quantity of the product on the store by performing a “Select” query, then it updates the data on the customer's cart by performing an “Insert” query.

The differences between the selected frameworks is in their database schemas, so different PHP module functions fulfilling different requirements should be more or less similar for different frameworks. Data should only be stored or retrieved from different tables or different table's columns depending on the database's design.

What follows next is a brief description about some requirements implementation related to the server side:

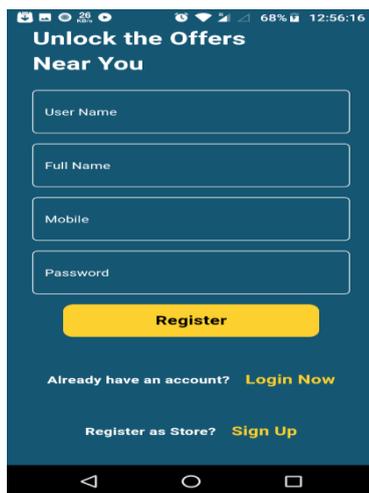
In the login function the provided login information should be queried and compared with the data on the customers table on the database. Since the password is stored as encrypted on the database, additional functions are required in order to check the validity of the password provided by the client. Finally the authentication result should be generated as an XML document to be received by the client.

This function corresponds to the following requirement:

Server must check the sent login information by the client and respond to the client.

In some functions of the module the required data should be queried (Select query) and the result should be stored in the XML document. Browsing category, searching products, viewing products description and view.

VI. RESULTS



Figure

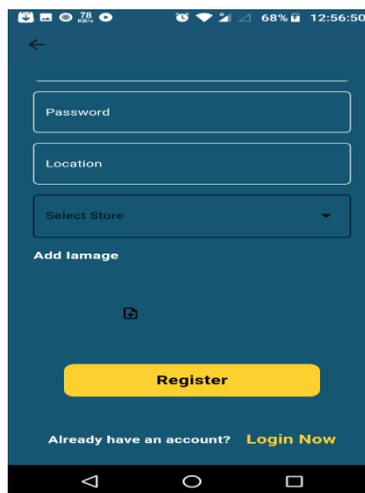


Figure 2

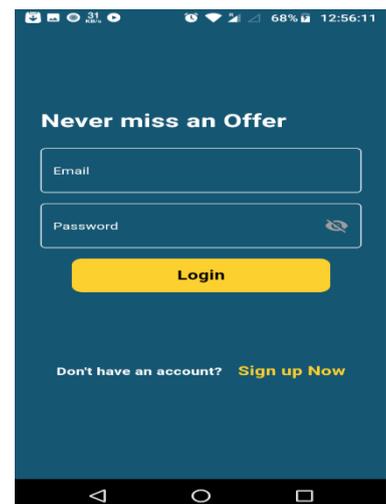


Figure 3

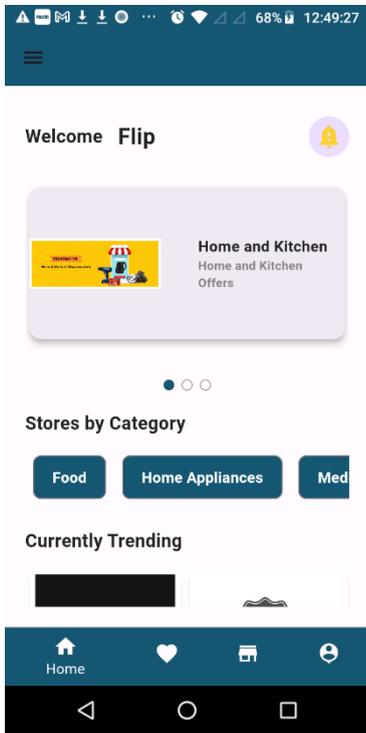


Figure 4

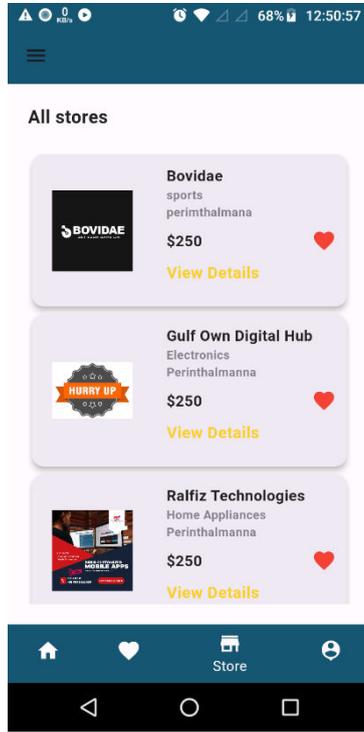


Figure 5



Figure 6

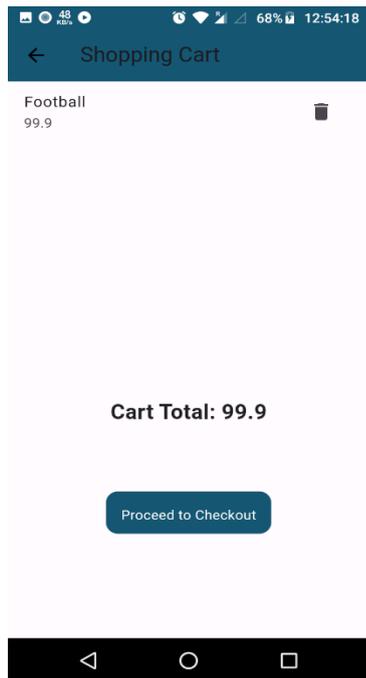


Figure 7

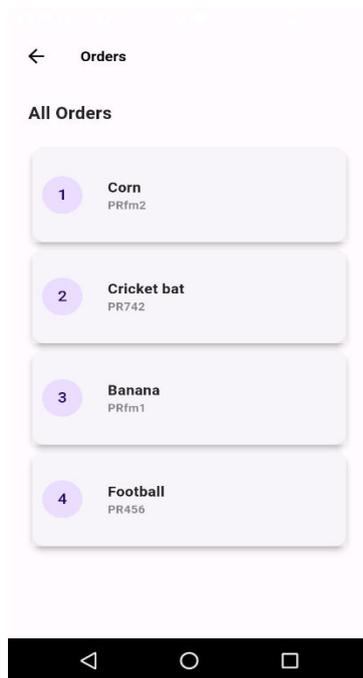


Figure 8

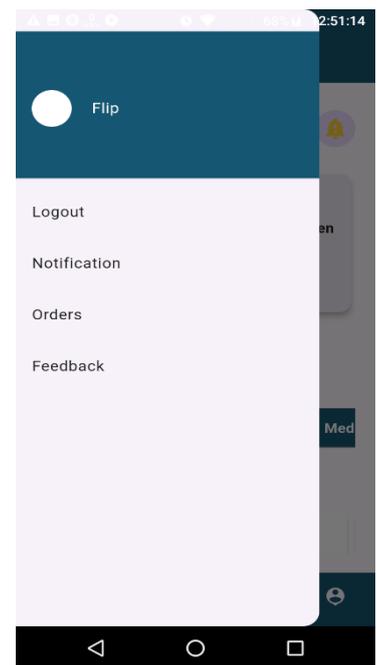


Figure 9

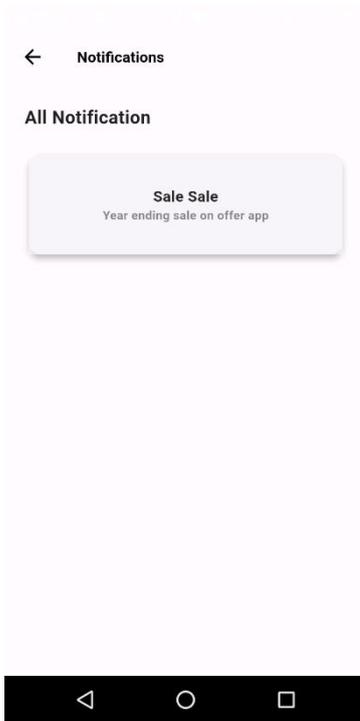


Figure 10

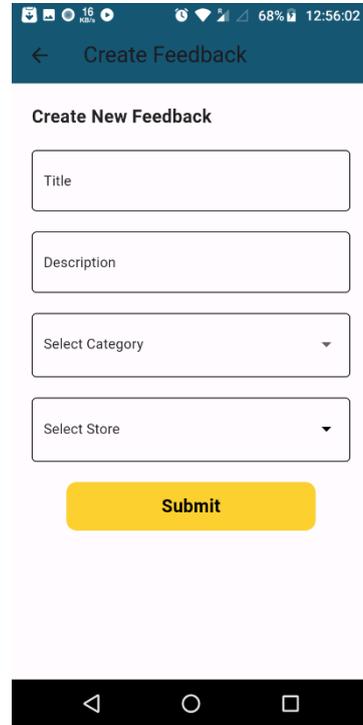


Figure 11

VII. CONCLUSIONS

While developing the system a conscious effort has been made to create and develop a software package, making use of available tools, techniques and resources – that would generate a proper system for ONLINE SOCIAL NETWORKING.

While making the system, an eye has been kept on making it as user- friendly. As such one may hope that the system will be acceptable to any user and will adequately meet his/her needs. As in case of any system development process where there are a number of short comings, there have been some shortcomings in the development of this system also. There are some of the areas of improvement which couldn't be implemented due to time constraints. One such feature was online chat where members can chat with his friends through this website. I also couldn't implement the scrap book and the selling item page for now but we still have two months of internship

REFERENCES

- [1] Capterra. (2022). Applicant tracking software. Retrieved from <https://www.capterra.com/applicant-tracking-software/>
- [2] Bersin, J. (2015). Talent acquisition technology: Today, tomorrow, and beyond. Deloitte University Press.
- [3] Damerow, R. M. (2021). Applicant Tracking Systems: The Comprehensive Guide. Society for Human Resource Management (SHRM)
- [4] Gupta, S. (2020). Understanding the Role of Applicant Tracking Systems in Modern Recruitment. Society for Industrial and Organizational Psychology (SIOP).
- [5] Heuvel, S., & Bondarouk, T. (2017). The Added Value of Applicant Tracking Systems: Implementation and Interpretation. The International Journal of Human Resource Management, 28(17), 2384-2404.
- [6] Kavanagh, S., & Gueutal, H. G. (2017). Recruiting and Hiring: A Strategic Approach. Business Expert Press.
- [7] Ramesh, A., & Ganganath, N. (2018). Optimizing recruitment with applicant tracking systems: A comparative study of applicant tracking software. Management Science Letters, 8(3), 189-198.
- [8] Talent Tech Labs. (2021). Applicant Tracking Systems: Market Report & Overview. Retrieved from <https://www.talenttechlabs.com/resources/atx-market-report/>
- [9] Society for Human Resource Management (SHRM). (2021). Applicant Tracking Systems: Considerations for HR

Professionals. Retrieved from <https://www.shrm.org/resourcesandtools/tools-and-samples/hr-qa/pages/applicanttrackingsystem.aspx>

[10]LinkedIn Talent Solutions. (2021). How to Choose the Right Applicant Tracking System (ATS) for Your Company. Retrieved from <https://business.linkedin.com/talent-solutions/resources/talent-acquisition/ats-articles/choose-the-right-applicant-tracking-system>

[11]Gartner. (2021). Magic Quadrant for Applicant Tracking Systems. Retrieved from <https://www.gartner.com/en/documents/4002111/magic-quadrant-for-applicant-tracking-systems>

[12] Society for Industrial and Organizational Psychology (SIOP). (2021). Applicant Tracking Systems: Best Practices for Implementation and Use. Retrieved from <https://www.siop.org/Research-Publications/Items-of-Interest/ArtMID/19366/ArticleID/4770/Applicant-Tracking-Systems-Best-Practices-for-Implementation-and-Use>

[13]Aberdeen Group. (2019). Applicant Tracking Systems: Key Trends and Benchmarks. Retrieved from <https://www.aberdeen.com/hcm-essentials/applicant-tracking-systems/>



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