

OFF (Brands Sale Awareness App)

Final Year Project Proposal (2023-2024)

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Supervisor
Engr. Lala Rukh Ahsan

Submitted by

Muhammad Shaheer Khan
{01-135201-042}

Shabbir Alam
{01-135201-092}

Department of Computer Science,
Bahria University, Islamabad.

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1. Introduction

- In today's fast-paced world, people are always on the lookout for great deals and discounts. While there are several e-commerce platforms available that offer a wide range of products, finding the best deals on specific brands can be a daunting task.
- This is where a mobile app like OFF can come in handy. OFF is an app that provides users with all the information about brand sale items and allows them to easily place orders.
- With OFF, customers can conveniently browse through all the sale items across different brands and choose the products that fit their needs and budget.
- It can benefit both businesses and consumers alike.

2. Objective

The objectives of the OFF app are to:

- Provide users with a comprehensive list of brands and products that are on sale, allowing them to save money and shop smarter.
- Providing a user-friendly interface that allows users to easily browse and filter sale items based on their preferences, such as size, color, style, and price range.
- Ensure that users never miss out on great deals by keeping them informed about the latest sales and promotions.
- Offer a seamless and user-friendly shopping experience by providing a feature to place orders directly from the app.
- Help users discover new products and brands by curating a diverse selection of items on sale.
- Build trust and loyalty with users by providing a reliable and secure platform for online shopping.
- Enhance the convenience of shopping by offering features like easy payment options and fast delivery.
- Continuously improve the app's functionality and user experience to meet the evolving needs of shoppers.

Brand Benefits:

Developing an app "OFF" can provide several benefits, including increased sales, improved customer engagement, better customer experience, increased brand visibility, data collection and analysis. These benefits can lead to increased revenue, customer loyalty, and long-term business growth.

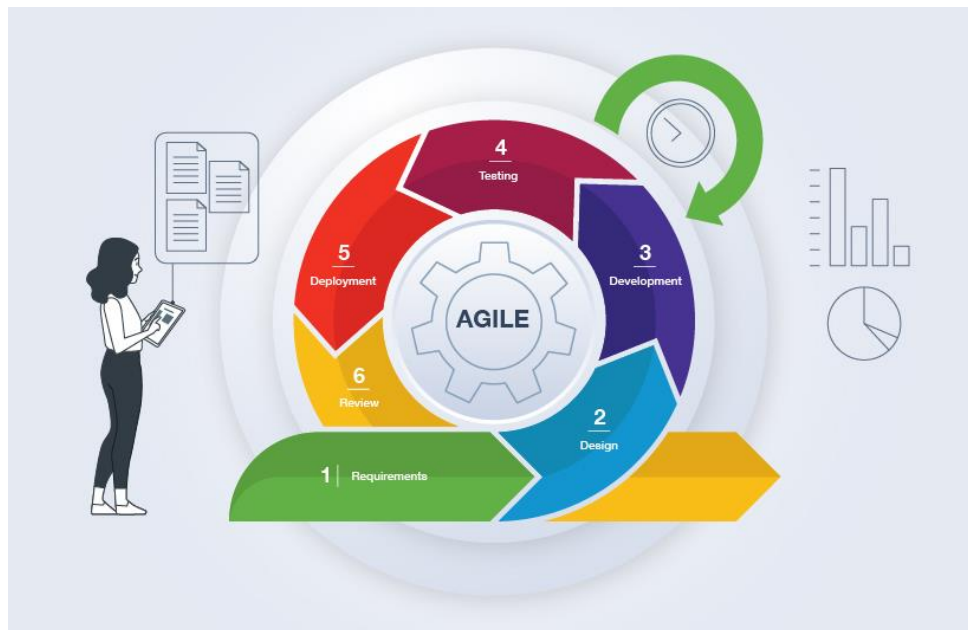
- **Increased sales:** The app can increase sales by promoting brand items that are on sale and providing an easy way for customers to place orders.
- **Improved customer engagement:** The app can improve customer engagement by providing customers with information on new products on sale, discounts, and promotions.
- **Better customer experience:** The app can provide customers with a better shopping experience by providing a user-friendly interface, easy navigation, and quick checkout options.
- **Increased brand visibility:** The app can increase brand visibility by reaching a wider audience and promoting brand items to customers who may not have otherwise discovered them.
- **Data collection and analysis:** The app can collect customer data, including purchasing habits, preferences, and feedback, which can be analyzed to improve marketing strategies, product offerings, and customer service.

3. Problem Description

- Shopping can be a time-consuming and daunting task, with users often having to spend hours browsing through different stores and websites to find the best deals and discounts.
- Furthermore, keeping track of when brand products are on sale can be challenging, leading to missed opportunities to save money.
- This can be time-consuming and overwhelming, particularly for those with busy lifestyles.
- Furthermore, many shoppers are not aware of the latest sales and promotions offered by their favorite brand, resulting in missed opportunities.
- The OFF app aims to address these problems by providing users with a comprehensive list of brands and products on sale, along with the convenience of placing orders directly from the app.

3. Methodology

- A variety of techniques as well as a number of different technologies will be employed to complete this project.
- **Agile methodology** is an approach to software development that emphasizes collaboration, flexibility, and rapid iteration.
- The Agile methodology involves breaking down a project into smaller, more manageable pieces, called sprints, and then working on these sprints in a collaborative, iterative manner.



Why we use Agile Methodology in Development

- **Iterative development:** Agile methodology emphasizes an iterative and incremental approach to development. This means that the development team can focus on building and testing small pieces of functionality at a time, which can be especially helpful for an app like OFF that offers multiple features.
- **Continuous feedback:** Agile methodology encourages continuous feedback from users and stakeholders throughout the development process. This feedback can help ensure that the app meets the needs and expectations of its users, which is especially important for an app that provides information about brand items on sale and offers features for placing orders.

- **Flexibility:** Agile methodology is designed to be flexible and adaptable to changing requirements and priorities. This can be useful, which may need to evolve over time as new brands and items become available or as user needs change.
- **Collaboration:** Agile methodology emphasizes collaboration between team members and stakeholders. This can be especially helpful that requires coordination between different departments, such as designer and developers.

Overall, Agile methodology can help ensure that the development of the OFF app is efficient, effective, and responsive to the needs of its users and stakeholders.

5. Project Scope

The project scope for OFF would be to provide a user-friendly and reliable platform for users to browse and purchase discounted brand items, while also providing brands with a platform to reach a wider audience and increase sales.

- **Admin Panel:** Provide an admin panel to manage products, prices, discounts, order fulfillment, and user data to each brand which will collaborate with OFF app.
- **User Registration and Login:** Allow users to create an account or login via social media accounts.
- **Browse Products:** Users should be able to view all available items on sale and filter based on brands, categories and more.
- **Product Details:** Provide product details like brand, description, price, discount, available sizes, colors, and more.
- **Order Placement:** Allow users to place orders and complete transactions using their preferred payment method.
- **Shopping Cart:** Enable users to add products to the shopping cart, update quantities, and remove items.
- **Push Notifications:** Send users push notifications about new product launches, price drops, order updates, and other important announcements.
- **User Reviews and Ratings:** Allow users to leave reviews and ratings on products they have purchased, to help other users make informed decisions.

- **Integration with third-party services:** Integrate with third-party services like Google Maps, social media, and payment gateways for a seamless user experience.

6. Feasibility Study

i. Risks Involved:

- **Security Risks:** One of the primary risks of any app that handles sensitive user information and financial transactions is security. Malicious actors may attempt to hack the app and steal sensitive data like user credentials, payment details, or order information.
- **Data Privacy Risks:** The app may collect user data like browsing history, purchase history, and location information. There is a risk that this data may be mishandled or misused, leading to privacy violations.
- **Technical Risks:** The app may face technical risks like server downtime, network failures, bugs, and errors. Technical issues may cause users to lose trust in the app and lead to financial losses.
- **Payment Risks:** Since the app handles financial transactions, there is a risk of payment fraud and chargebacks. In addition, if the app relies on third-party payment gateways, it may be at risk of payment processing errors or security breaches.
- **Reputational Risks:** Any negative publicity, such as complaints about poor quality or customer service, can impact the app's reputation and lead to financial losses.

To mitigate these risks:

- It is important to implement appropriate security measures like SSL encryption, multi-factor authentication, and regular security audits.
- Additionally, data privacy should be given utmost importance and strict data privacy policies should be in place.
- Proper testing and quality assurance processes should be implemented to ensure the app is technically stable and reliable.
- In terms of payments, it is important to partner with reputable payment gateways and implement fraud prevention measures.
- Finally, providing excellent customer service can help in reducing risks and build a loyal user base.

ii. Resource Requirement:

The specific resource requirements may vary based on the complexity and scale of the app. However, having the right mix of resources is critical to ensure the success of the app and provide a great user experience to the customers.

- **Project manager:** A project manager will be required to oversee the development process, ensure that the project stays on track, and manage communication with stakeholders.
- **Development team:** A development team comprising React Native developers and UX/UI designers will be required to design and develop the app. The team should have knowledge in app development using React Native and related technologies.
- **Infrastructure and servers:** The app will require infrastructure and servers to host the app and store user data. Cloud providers such as Amazon Web Services (AWS), Microsoft Azure, or Google Cloud Platform may be used to host the app after discussing with the customer.
- **APIs and third-party services:** APIs and third-party services may be required to integrate payment gateways, push notifications, location-based services, and other features into the app.
- **Budget:** A budget will be required to cover the cost of development, infrastructure, third-party services and marketing.

In addition, the development team may need access to tools and resources such as React Native libraries, development environments such as Visual Studio Code, or Android Studio, and device emulators or testing devices.

The specific resource requirements may vary based on the complexity and scale of the app. However, having the right mix of resources is critical to ensure the success of the app and provide a great user experience to the customers.

7. Solution Application Areas

- Firstly, the app provides convenience to customers by allowing them to easily access information on brand items that are on sale and placing orders from the comfort of their own device. This can save time and effort for customers, who may otherwise have to visit physical stores or spend time searching for sales online.
- Secondly, the app provides value to customers by giving them access to exclusive sales and discounts on brand items, which can encourage them to make purchases they might not have otherwise considered. This can help build brand loyalty and attract new customers who are looking for a good deal.
- Thirdly, the app can help drive business growth by increasing sales and revenue. By promoting brand items that are on sale and providing an easy way for customers to place orders, the app can help businesses reach a wider audience and drive more sales, leading to increased revenue and profitability.

Overall, the real value of developing an app like "OFF" lies in its ability to provide convenience and value to customers and increase revenue.

8. Tools/Technology

Developing an app "OFF" using React Native would require a variety of tools and techniques, including the React Native framework, an IDE, JavaScript, API integration, a database, testing frameworks, UI/UX design, and deployment tools.

- **React Native Framework:** React Native is a popular cross-platform development framework for building mobile apps. It allows developers to build mobile apps for both iOS and Android platforms using a single codebase.
- **UI/UX Design:** The app would need a user interface (UI) and user experience (UX) design to ensure that it is easy to use and navigate. Tools like Figma or Adobe XD can be used to create UI/UX designs.
- **IDE:** An Integrated Development Environment (IDE) such as Visual Studio Code, or Sublime Text would be required to write, edit, and debug code. IDEs can also offer useful features like code completion and debugging tools.
- **JavaScript:** React Native uses JavaScript, so a strong understanding of this programming language is necessary for developing the app.

- **API Integration:** The app would require integration with APIs to retrieve information on brand items that are on sale and process orders. The APIs can be developed using technologies like Node.js.
- **Database:** A database would be required to store information on brand items, user data, and orders. The database can be developed using technologies like MySQL, MongoDB, or Firebase.
- **Testing Frameworks:** Testing frameworks like Jest or Enzyme would be required to ensure that the app functions correctly and is free of bugs.
- **Deployment:** Finally, the app would need to be deployed to app stores like the Apple App Store or Google Play Store. Tools like Android Studio can be used to build and deploy the app.

9. Expertise of the Team Members

- **Project Manager:** This team member should have knowledge in managing App development projects. They should be proficient in project management methodologies such as Agile and have excellent communication and organizational skills.
- **UI/UX Designer:** This team member should have experience in designing intuitive and user-friendly interfaces for mobile applications. They should be proficient in design tools such as Sketch, Adobe XD, or Figma.
- **React Native Developer:** This team member should have experience in developing cross-platform mobile applications using React Native.
- **Backend Developer:** This team member should have experience in developing server-side applications and API integrations. They should be proficient in Node.js or another suitable technology for developing the backend of the app.
- **Database Developer:** This team member should have experience in designing and implementing database schemas and data access layers. They should be proficient in SQL or another suitable technology for database development.

The specific skills and experience required for each team member may vary depending on the scope and complexity of the project, but having a team with these core competencies should ensure a successful project outcome.

10. Milestones

These major tasks can be broken down into smaller sub-tasks to help define the project timeline and ensure that each task is completed in a timely manner. Some examples of sub-tasks include creating mockups for the app design, setting up a development environment, developing API endpoints, writing unit tests, conducting user acceptance testing, and publishing the app to app stores.

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1. Planning and Design

- Define app requirements
- Create wireframes and design app UI/UX
- Plan database schema and API integrations

2. Development

- Set up the development environment
- Develop the front-end of the app using React Native
- Develop the back-end of the app using Node.js or another suitable technology
- Develop the API for retrieving information on brand items and processing orders
- Implement database schema and develop data access layer
- Develop user authentication and authorization functionality

3. Performance and Load Testing

- Develop and test each module to ensure functionality of that individual component of app
- Conduct integration testing to ensure different components of the app work together as expected
- Develop and run unit tests to ensure functionality of app components.
- Plan and execute performance test of app.
- Conduct user acceptance testing to ensure the app meets user requirements.

4. Deployment

- Deploy the app to app stores such as the Apple App Store and Google Play Store
- Set up analytics and monitoring to track app performance and usage.
- Continuously release updates and improvements to the app based on user feedback.

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