Jarir Bookstore App

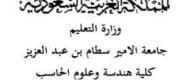






Kingdom of Saudi Arabia Ministry of Education Prince Sattam Bin Abdulaziz University College of Computer Engineering and sciences





Jarir Bookstore App

N	Student name	Students Number
1	Mohammed Khalid Al-Dawood	442051602
2	Mustafa Mahmoud Numan	441051712
3	Saleh Ibrahim Alqubayshi	442051125

Supervised by: D. Mohammed Saad Assiri

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1: Feasibility Study & Project Proposal:

• Introduction:

Jarir Bookstore is a popular retail chain in the Middle East that offers a wide range of products, including books, electronics, and office supplies. The Jarir Bookstore mobile app is an essential tool for the company as it allows customers to browse and purchase products from their mobile devices.

• Problem:

The problem on which the Jarir Bookstore application was developed is that in the past, if the customer wanted to buy a specific commodity or product, he must go to the store himself and search for the availability of this product, and this causes trouble, whether it is moving between stores or wasting time, and also there is difficulty in comparing products, whether at prices or specifications, and knowing what is new.

• Background:

Jarir Bookstore is a well-established brand with a loyal customer base in the Middle East. However, the company may face competition from online retailers and e-book platforms. Developing a mobile application can help Jarir Bookstore stay competitive and provide a modern, convenient shopping experience for customers.

• Proposed Solution:

Based on these problems, Jarir application has been developed to be a pioneering and distinctive application that combines several products, including electronic products, books and a lot, and what is presented is that the customer can browse many categories of products and order them online and deliver them to the customer's home, thus saving time and effort for the customer and also in the field of product marketing for companies.

• Workplan:

To develop the Jarir Bookstore mobile application, we will follow the following workplan:

Project Kickoff Meeting

Meeting will be held to introduce team members, establish project goals, review the project timeline, and discuss roles and responsibilities.

Feasibility Study

Gather data on Jarir Bookstore's current processes and customer needs, analyze the competition and market trends, evaluate the technical feasibility of developing a mobile application, and determine the economic feasibility of the project, including cost and revenue projections.

Project Proposal

A project proposal will be developed that defines the project's scope, plan, risks, budget, and success criteria. This will include developing a project plan with timelines, milestones, and deliverables; identifying project risks and mitigation strategies; outlining project budget and resource requirements, and defining project success criteria and metrics.

Feasibility Study & Project Proposal Report

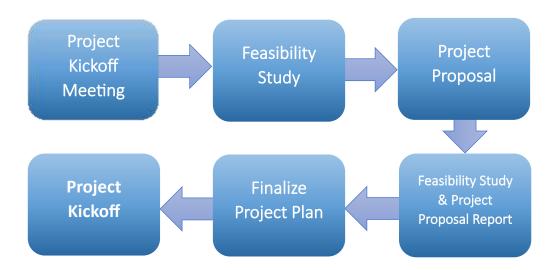
The findings of the feasibility study and project proposal will be compiled into a comprehensive report, which will be presented to the project sponsor and stakeholders for review and approval.

Finalize Project Plan

Incorporating feedback from the project sponsor and stakeholders, defining project team roles and responsibilities, establishing project communication and reporting protocols, and establishing project quality assurance and testing protocols.

❖ Project Kickoff

The project will be launched and the project plan will be executed, including tasks like developing the mobile application, designing the database, integrating payment gateways, setting up GPS tracking, creating a customer support system, and integrating a loyalty program. A project kickoff meeting will be held to review the project plan and establish project expectations before initiating project tasks.



2: Project requirements:

Functional Requirements:

- 1. User Authentication: Jarir Application must provide a secure and reliable user authentication process to protect customer information.
- 2. Browse and search for products: Jarir Application should allow users to browse products efficiently by category or keyword research.
- 3. Add to cart and buy: Jarir Application should enable seamless transactions by allowing users to add items to their cart, view their cart, and complete purchases safely and easily.
- 4. Order Tracking: Jarir Application must provide real-time tracking information for all orders.
- 5. Personalization: The Jarir Application should enable users to personalize their shopping experience by providing product recommendations based on search history and purchase behavior.
- 6. Send notifications: Jarir Application must allow push notifications to alert users of offers, promotions and order updates.
- 7. Customer Support: Jarir App should provide users with comprehensive customer support through chat or phone for inquiries, complaints and returns.
- 8. Multi-Platform Compatibility: The Amazon App must be accessible across multiple platforms, including iOS and Android devices.

Non-Functional Requirements:

- 1. Reliability: The Jarir App should function reliably and consistently without any crashes or downtime, to ensure a seamless user experience.
- 2. Performance: The Jarir App must perform efficiently, with fast loading times and quick responses to user actions.
- 3. Usability: The Jarir App must have a user-friendly interface with easy navigation and clear instructions for all features and functions.
- 4. Security: The Jarir App must ensure the safety and security of user data, including personal information, payment details, and order history.
- 5. Portability: The Jarir App should be readily available and accessible across multiple devices and platforms, including smartphones, tablets, and desktop computers.

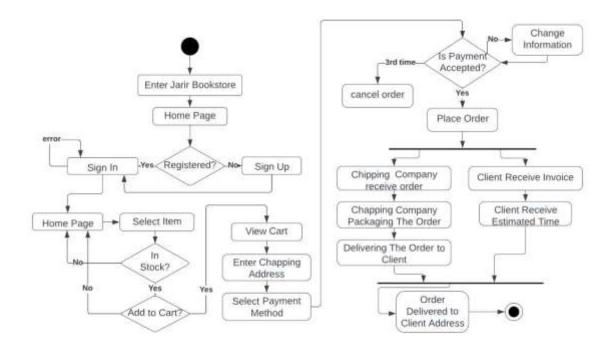
Technical Requirements:

- 1. React Native for app development.
- 2. Node.js for server-side development.
- 3. Database management system for data storage.
- 4. Payment gateway API for secure transactions.
- 5. Push notification service for order updates and promotions.
- 6. Analytics tools for monitoring and analysis.

Operational Requirements:

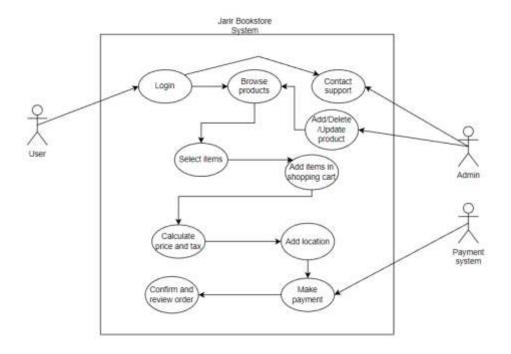
- 1. Project management and tracking tools for efficient development.
- 2. Quality assurance and testing procedures for ensuring app quality.
- 3. Ongoing maintenance and support for bug fixes and updates.
- 4. Customer support channels for addressing user concerns and feedback.

3: Activity diagram:

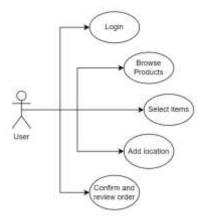


4: Project Use Case Modelling:

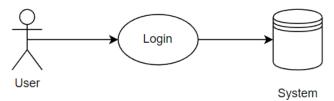
• Diagram:



- Actors:
 - Customer.
 - ❖ Admin.
 - ❖ Jarir bookstore system.
 - Payment system.
- Use cases &its related use cases:



• Table 1:



Jarir bookstore: Login		
Actors	User, System	
Description	The user logs in by e-mail and password previously registered in the system.	
Data	E-mail and password.	
Stimulus	User Request Login in Jarir App.	
Response	The system determines whether the information is correct or not to access the account.	
Comments	For security, the system allows 3 login attempts.	

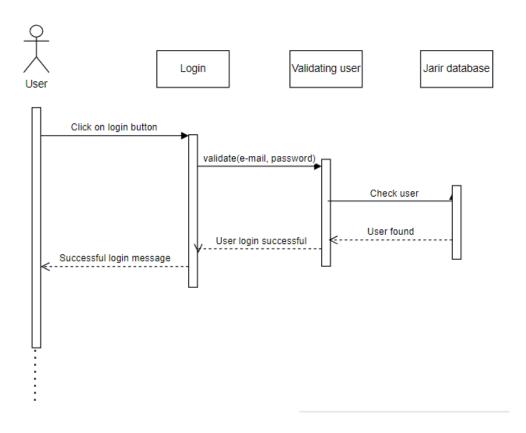
• Table 2:



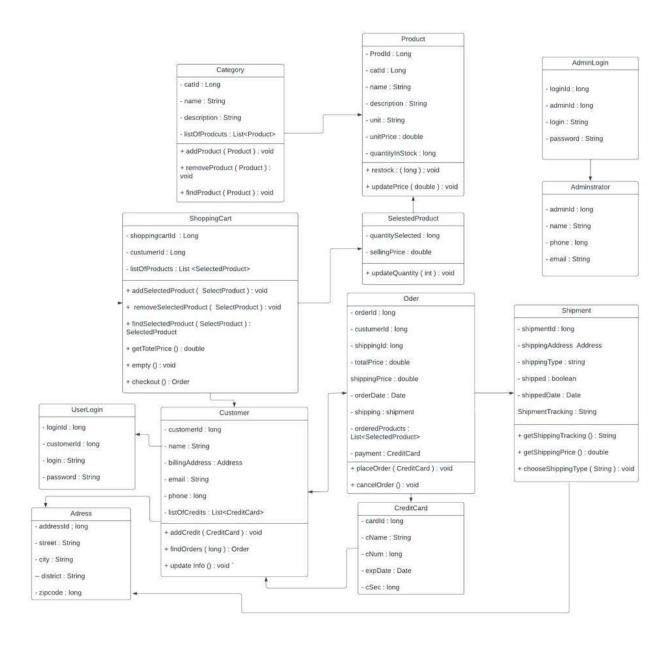
Jarir bookstore: Confirm and review order		
Actors	User, System.	
Description	The user confirms the order and then requests a review from the system.	
Data	Order, which consists of the products to be purchased.	
Stimulus	The user wants to pay to confirm the order and delivery of the ordered products.	
Response	The system determines based on whether the products are available and whether the required amount has been paid to accept the order or not.	
Comments	Inform the user of the existing policies of the application and the obligation of the system to send an e-mail (registered in the login) to the user with the requested information.	

5: Creating Sequence Diagrams:

Sequence diagram for login to Jarir bookstore application:



6: Creating a Class Diagram:



7: Conclusion:

the Jarir Bookstore mobile app will provide a modern and convenient shopping experience for customers while staying competitive in the market.