Institution Details

Province	Sindh	City	Karachi
Institution	titution National University of Computer and Emerging Sciences (FAST-NU) Campus		Karachi
Department Computer Science		Degree Level	BS
Degree Program Computer Science		Telephone	
Fax			

Supervisor Details

Name	Ms. Syeda Rubab Manzar	Gender	Female
Mobile	-	Office No	-
Email	rubab.jaffar@nu.edu.pk	Designation	Lecturer
Qualification	MS (CSE), Nust Islamabad		

Co-Supervisor Details

Name	Mr. Shoaib Raza	Gender	Male
Mobile	-	Office No	-
Email	shoaib.raza@nu.edu.pk	Designation	Lecturer
Qualification	MS (CS), MAJU Karachi, 2017		

Head of Department Details

Name	Dr. Zulfiqar Memon	Mobile No.	-
Email	zulfiqar.memon@nu.edu.pk	Gender	Male

Project Details

Project Title	PakStyle Connect: A Pakistani Fashi	ion Marl	retplace				
	Member 1 Name: EMMAD HUSSAIN	I KHAN	Member 2 Name: ZUBAIR AHMED		Member 3 Name: MUHAMMAD ABSAR KHALID		
Group Details	Member 1 Roll#: 19K-1538		Member 2 Rol	l#: 19K-0258	Member 3 Roll#: 19I-2176		
Project Area of Specialization	Mobile App Development.						
Project Start Date	FEB 2024	Project	End Date	DEC 2024			
Project Summary (less than 2500 characters)	this landscape, Pakistani fashion create unique and captivating donumers, both within Pakistani leading to fragmented experience development of a revolutionary modern ready-to-wear collections, this wealth of talent, many design and purchasing authentic Pakistani specialized focus needed to show	stands lesigns. and arc es and obile ap its vibra Pakist ners str ni fashi case th	fashion industry serves as a global platform for cultural expression and creativinds out for its rich heritage, blending traditional craftsmanship with contemporagns. However, accessing authentic Pakistani fashion remains a challenge for discount the world. Existing platforms often lack a dedicated focus on Pakistan and limited visibility for designers and brands. To address this gap, we prose application: the Pakistani Fashion Marketplace. vibrant colors, intricate embroidery, and luxurious fabrics. From traditional bridatakistani designers offer a diverse range of styles that appeal to a global audience is struggle to reach their target audience, while consumers face difficulties in disfashion. Existing retail channels are often limited in scope, and online platforms see the richness and diversity of Pakistani fashion. The Pakistani Fashion Marketps by providing a centralized platform where users can explore, discover, and				
Project Objectives(less than 2500 Characters)	The Pakistani Fashion Marketplac Pakistani fashion and e-commerce:		aims to addre	ess several critical iss	sues and research gaps within the domain o		

- 1.Limited Accessibility: Many consumers, both within Pakistan and abroad, encounter difficulties in accessing authentic Pakistani fashion due to the limited availability and visibility of designers and brands. By providing a centralized platform, the app enhances accessibility, allowing users to easily discover and purchase a diverse range of Pakistani fashion items.
- 2.Limited Exposure for Designers: Emerging designers and boutique labels struggle to gain exposure and reach a wider audience in the competitive fashion industry. The app addresses this issue by providing a platform for designers to showcase their collections to a global audience, thereby increasing their visibility and opportunities for growth.
- 3.Lack of Personalization: Many e-commerce platforms offer generic recommendations that may not align with users' individual preferences. Through innovative features such as virtual try-on and personalized recommendations, the app enhances the shopping experience, allowing users to discover items that resonate with their unique style and preferences.
- 4.Security Concerns: Online shopping is often associated with security risks such as fraud and data breaches. The app prioritizes user security by implementing robust measures such as secure payment gateways and data encryption, ensuring a safe and secure shopping environment.

By addressing these issues and research gaps, the Pakistani Fashion Marketplace app aims to revolutionize the way users engage with Pakistani fashion, fostering greater accessibility, visibility, and personalization within the industry.

LITERATURE REVIEW:

The Pakistani fashion retail industry is witnessing a transformative shift with the advent of feature-rich mobile applications, revolutionizing the way consumers interact with brands and make fashion purchases online. A comprehensive comparison of the key features offered by leading fashion apps in this dynamic landscape highlights the diverse strategies employed to enhance user experience, drive engagement, and boost sales.

1. Personalized Recommendations:

Khaadi's app employs sophisticated algorithms to provide personalized product recommendations based on user preferences, browsing history, and purchase behavior.

Gul Ahmed's app offers personalized recommendations tailored to each user's style preferences and past interactions with the platform.

2. Omnichannel Integration:

Gul Ahmed's app seamlessly integrates with the brand's physical stores, allowing users to check product availability, reserve items for in-store pickup, and even try on items in-store using the app.

J.'s app offers a unified shopping experience across online and offline channels, enabling users to browse products, make purchases, and redeem loyalty rewards both online and in-store.

Literature Review / Background Study

3. Interactive Lookbooks:

Alkaram Studio's app features interactive lookbooks that showcase the brand's latest collections in a visually appealing and engaging format, allowing users to explore different styles and trends.

Sapphire Retail's app offers virtual styling consultations through interactive lookbooks, where users can receive personalized fashion advice from expert stylists based on their preferences and body type.

4. Real-Time Inventory Updates:

Bonanza | Satrangi's app provides real-time updates on product availability, ensuring that users have accurate information about stock levels before making a purchase.

Sapphire Retail's app features real-time inventory updates and notifications, alerting users when their favorite items are back in stock or when new arrivals are added to the platform.

5. Secure Payment Options:

All featured apps prioritize security by offering secure payment options such as credit/debit card payments, digital wallets, and cash on delivery to ensure a safe and seamless checkout experience for users.

6. Customer Support:

Bonanza | Satrangi's app offers in-app customer support, allowing users to chat with customer service representatives in real-time to resolve any queries or concerns they may have.

J.'s app provides multilingual customer support, catering to a diverse user base by offering assistance in multiple languages.

Comparative Analysis:

A comparative analysis of these key features reveals the diverse strategies employed by fashion apps to cater to the evolving needs and preferences of online shoppers. While some apps focus on enhancing the shopping experience through personalized recommendations and interactive content, others prioritize omnichannel integration and real-time inventory updates to streamline the purchasing process and improve customer satisfaction.

Conclusion:

In conclusion, the proliferation of feature-rich fashion apps in the Pakistani retail industry reflects a concerted effort by brands to leverage technology and innovation to enhance the online shopping experience. By offering a wide range of features such as personalized recommendations, interactive lookbooks, and real-time inventory updates, these apps are reshaping the way consumers interact with fashion brands and making online shopping more convenient, engaging, and enjoyable. As competition intensifies in the digital marketplace, brands will continue to innovate and evolve their apps to stay ahead of the curve and meet the ever-changing demands of online shoppers.

Overall System Architecture:

The Pakistani Fashion Marketplace app will be built using a client-server architecture, with separate components for the frontend client application and the backend server infrastructure.

Project Implementation Method (less than 2500 characters)

1.Frontend Client Application:

• The frontend client application will be developed as a mobile app for iOS and Android platforms using cross-platform frameworks such as React Native or Flutter.

- It will provide an intuitive and user-friendly interface for browsing collections, exploring designers and boutiques, and making purchases.
- Key features such as user authentication, product browsing, virtual try-on, and secure payments will be implemented within the frontend client application.

2. Backend Server Infrastructure:

- The backend server infrastructure will comprise a set of cloud-based services for managing user accounts, product data, transactions, and other core functionalities.
- Data storage will be managed using cloud-based databases such as Firebase Realtime Database or Firestore, providing real-time synchronization and offline capabilities for users.

Methodology: Approach Towards Proposing a Solution:

1.Requirements Gathering:

Define functional and non-functional requirements for the Pakistani Fashion Marketplace app, prioritizing features based on their importance and feasibility.

2. Agile Development Methodology:

Adopt an agile development methodology to iteratively build and refine the app in sprints or development cycles.

Break down the development process into smaller tasks or user stories, each representing a specific feature or functionality of the app.

Prioritize tasks based on user feedback and project timelines, adjusting the development roadmap as needed.

3. User-Centered Design Principles:

Conduct usability testing and gather feedback from users at various stages of development to identify usability issues and areas for improvement.

4. Technology Stack Selection:

Evaluate different technologies, frameworks, and platforms for building the frontend and backend components of the app.

Choose technologies that align with project requirements, development expertise, scalability, and cost considerations.

5. Continuous Integration and Deployment (CI/CD):

Use version control systems such as Git/GitHub for collaborative development and code management.

6.Monitoring and Maintenance:

Provide ongoing maintenance and support to address bugs, issues, and feature requests, ensuring the app remains reliable and up-to-date.

By following this methodology, we aim to propose a solution that addresses the objectives of the Pakistani Fashion Marketplace project, delivering a high-quality, user-centric app that connects users with Pakistani fashion designers, boutiques, and brands in an intuitive and seamless manner.

The Pakistani Fashion Marketplace app will significantly change the way the existing system works by introducing a centralized platform that connects users with Pakistani fashion designers, boutiques, and brands in a seamless and efficient manner. Here's how our research and proposed solution contribute to the field:

- **1.Streamlined Access to Pakistani Fashion:** The existing system often lacks a dedicated focus on Pakistani fashion, leading to fragmented experiences for users. Our app will provide a centralized platform where users can easily discover and purchase a diverse range of Pakistani fashion items, overcoming the limitations of traditional retail channels and fragmented online platforms.
- **2.Enhanced Visibility for Designers and Brands:** Emerging designers and boutique labels struggle to gain exposure and reach a wider audience in the competitive fashion industry. By providing a platform for designers to showcase their collections to a global audience, our app will increase their visibility and opportunities for growth, contributing to the development and sustainability of the Pakistani fashion ecosystem.
- **3.Personalized Shopping Experience:** Many e-commerce platforms offer generic recommendations that may not align with users' individual preferences. Through innovative features such as virtual try-on and personalized recommendations, our app will enhance the shopping experience, allowing users to discover items that resonate with their unique style and preferences, thus fostering greater engagement and satisfaction.
- **4.Contribution to Knowledge:** Our research contributes to the field by identifying key challenges and opportunities in the Pakistani fashion e-commerce sector, synthesizing existing literature and empirical findings to inform the development of the Pakistani Fashion Marketplace app.

By addressing these challenges and leveraging technological innovations, we propose a solution that not only meets the needs of users but also contributes to the advancement of knowledge in the field of fashion e-commerce and digital retailing. Overall, our product aims to revolutionize the way users engage with Pakistani fashion, providing a comprehensive and user-centric platform that enhances accessibility, visibility, and personalization within the industry. Through our research and proposed solution, we strive to contribute to the growth and sustainability of the Pakistani fashion ecosystem while delivering tangible benefits to users and stakeholders alike.

Benefits of the Project (less than 2500 characters) Technical
Details of Final
Deliverable (less
than 2500
characters)

1. User Authentication Module:

This module handles user registration, login, and authentication processes.

2. Product Management Module:

This module manages the inventory of products available on the platform.

It allows designers and boutiques to add, edit, and delete product listings, including images, descriptions, prices, and availability status.

3. Search and Filtering Module:

This module enables users to search for specific products or browse collections based on various criteria.

It implements search algorithms and filtering options to help users narrow down their search results based on categories such as type, size, price range and designer.

4. Shopping Cart and Checkout Module:

This module manages the shopping cart functionality, allowing users to add, remove, and modify items before proceeding to checkout.

It integrates with secure payment gateways to facilitate online transactions, supporting various payment methods such as credit/debit cards, digital wallets, and cash on delivery.

5.User Profile Management Module:

This module enables users to create and manage their profiles within the app.

It allows users to view and update their personal information, order history, favorite designers, and saved payment methods.

6.Designer/Boutique Profile Management Module:

This module provides designers and boutiques with tools to manage their profiles and product listings.

It allows designers and boutiques to upload images, descriptions, and pricing information for their collections, as well as track sales and customer interactions.

7. Notification and Messaging Module:

This module handles notifications and messaging functionalities within the app.

It sends push notifications to users for updates on new arrivals, promotions, and order status, as well as facilitates communication between users and designers/boutiques for inquiries and customer support.

8.Content Management Module:

This module manages the content displayed within the app, including fashion articles, trends, and styling tips.

It allows administrators to create, edit, and publish content, as well as organize it into categories and collections for easy browsing by users.

Additional Features

9.Personalized Recommendations: Utilize sophisticated algorithms to provide personalized product recommendations based on user preferences and past interactions.

	10.Real-Time Inventory Updates: Provide real-time updates on product availability to ensure accurate stock information for users.
	11.Secure Payment Options : Offer secure payment options such as credit/debit cards, digital wallets, and cash on delivery for a safe and seamless checkout experience.
	12.Customer Support: Implement in-app customer support, enabling users to chat with representatives in real-time to resolve queries or concerns. Additionally, provide multilingual support to cater to diverse user bases.
	Each module will be developed using appropriate technologies, frameworks, and best practices to ensure scalability, reliability, and security. Additionally, they will be integrated seamlessly to provide a cohesive and feature-rich user experience within the Pakistani Fashion Marketplace app.
Final Deliverable of	At the conclusion of the project, the following modules will be presented: 1.User Authentication Module: This module will be presented to demonstrate the secure registration, login, and authentication processes implemented in the app to ensure user data security. 2.Product Management Module: The product management module will showcase the functionality for designers and boutiques to add, edit, and delete product listings, along with features like image uploads, descriptions, and pricing. 3.Search and Filtering Module: This module will demonstrate the search and filtering options available to users, enabling them to find specific products or browse collections based on various criteria such as category, size, color, and price range. 4.Shopping Cart and Checkout Module: The shopping cart and checkout module will be presented to showcase the functionality for users to add items to their cart, modify quantities, and proceed to checkout securely using various payment methods. 5.User Profile Management Module: This module will demonstrate the user profile management functionality, allowing users to create and manage their profiles, view order history, and update personal information. 6.Notification and Messaging Module: The notification and messaging module will showcase features such as push notifications for updates on new arrivals and order status, as well as messaging functionality for user interactions with designers and boutiques. 7.Content Management Module: This module will be presented to demonstrate the management of fashion-related content within the app, including articles, trends, and styling tips, allowing administrators to create, edit, and publish content. These modules collectively represent the core functionalities of the Pakistani Fashion Marketplace app and will be presented at
the Project Core Industry (Optional)	the conclusion of the project to demonstrate the successful development and implementation of the app. Mobile App, Fashion Industry.
Core Technology	React Native/Flutter

	1)	S. Idrees, G. Vignali, and S. Gill, "Technological Advancement in Fashion
		Online Retailing: A Comparative Study of Pakistan and UK Fashion
		E-Commerce," https://www.researchgate.net/publication/341070063 Technological-
		Advancement-in-Fashion-Online-Retailing-A-Comparative-Study-of-
		Pakistan-and-UK-Fashion-E-Commerce_1
	•	
	2)	S. Kashif and S. Mubarik, "An Evolutionary Historical Perspective of Pakistan Retail Fashion Industry."
		Fakistan Retail Fasilion industry.
		https://jisrmsse.szabist.edu.pk/index.php/szabist/article/view/46
References		

Project Key Milestones

Elapsed time in (days or weeks or month or quarter) since start of the project	Milestone	Deliverable	
Month 1	Project Kickoff	- Finalized project scope and objectives - Completed requirements gathering -Defined technical stack and architecture	
Month 2	Design Phase	- User interface wireframes -Design documentation - Frontend design approval	
Month 3	Backend Development (Database)	- Backend server setup and configuration - User authentication module - Product management module	
Month 4	Frontend Development (Design)	- User authentication UI - Product browsing UI - Search and filtering UI	
Month 5	Feature Implementation	- Virtual try-on module - Shopping cart and checkout module - User profile management module	
Month 6	Integration and Testing	- Integration of frontend and backend components	

		- Testing of core functionalities - Bug fixes and optimizations
Month 7	User Acceptance Testing	- Beta testing with selected users - Feedback collection and iteration - Finalization of app features
Month 8	Final Presentation and Launch	 Application launch and presentation with complete demonstration of implementations including all above deliverables. App deployment to playstore (if required)

Project Equipment Details

Item(s) Name	Туре	No. of Units	Per Unit Cost (in Rs)	Total (in Rs)
			Total in (Rs)	