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A Project Report

On

“Bike E-Catalogue Mobile App”

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1. INTRODUCTION

The Bike E Catalogue aims to develop a mobile app that gives clients with an engaging and simple platform for browsing and purchasing bikes using QR codes. The goal is to improve the customer experience in the bike retail industry while simultaneously responding to the growing demand for online purchases. This is intended to meet the increasing demand for online buying while also improving the consumer experience in the bike retail industry.

The goal is to provide a thorough description of the Bike E-Catalogue project's aims, scope, methodology, and outcomes. Customers are increasingly demanding more convenient and interactive ways to browse and purchase products as online shopping becomes more popular, and our project aims to address this growing need by developing a user-friendly smartphone app.

2. LITERATURE REVIEW

Sl. No.	Paper Title	Method	Advantages	Limitations
1	An Analytical Study Evaluating the Applicability of a Developed Innovative E-Sourcing System for Automobile Based Firm.	Designed MVC e-sourcing system architecture.	Data reveals that the respondents accept the developed innovative e-sourcing system for automobile-based firms than existing manual sourcing approaches.	empirically the developed innovative e-sourcing system was evaluated with data from only 50 respondents. Secondly, data was collected from respondents familiar with e-sourcing operations in Malaysia only. Thirdly, the developed innovative esourcing system is only concern with the sale of new automobile products. Therefore, car accessories are not sold in the developed system
2	Future of	Extensive	Increased access	Infrastructure

	Ecommerce in India	literature search Content analysis	to markets. Cost-effective operations. Enhanced consumer convenience. Job creation and economic growth. Increased digital inclusion	challenges Regulatory and policy issues Trust and security concerns Low digital literacy Competition and pricing pressures
3	E – commerce platform of online shopping consumers	Conceptual Model of Online Shopping Information Platform's Security Customer Satisfaction	Convenience and accessibility. Wide product selection Customer reviews and ratings. Personalization and recommendations.	Lack of physical experience. Security concerns. Trust and credibility concerns.
4	Automobile AR E-Catalogue	Augmented Reality.	It can be updated in real-time, unlike the brochures which are provided at the showrooms, as they need to wait for the next release but using this application they can change any data anytime, like updating the car models or related information, etc. Users can search for vehicles and can get information in the mobile view.	Expensive Data can be manipulated to influence. Lack of truly precise AR objects.

A. **Existing System** :

In the existing system, since the Yamaha vehicle details is in the text format anyone can access & misuse the data. It may lead into hacking the software & database.

B. Drawbacks:

Storing information is huge, Need to maintain quantity record, No accuracy in work, Need extra security to prevent the data.

C. **Proposed System** :

The proposed system has been developed to overcome on the difficulties in manual maintenance and billing maintenance on the Google Firebase. In the proposed system since the Yamaha product information is stored in QR Code

format only the authorized used can access the data on scanning the QR Code. Since the data is encrypted so hacking is very difficult. Accuracy Privacy Security.

D. **Advantages of Proposed System** :

- Provides the searching facilities based on the various factors, such as important features like mileage, engine types.
- It tracks all information about managers, staff, product data Manages the information of reports.
- Adding and updating of records in proper management of Manager, Staff, Products.

3. OBJECTIVES

- Creating a bike e-catalogue with a QR code mobile app has a lot of advantages for both cyclists and businesses in the sector. The app makes use of QR codes to give users a seamless and engaging experience as they explore and gain access to comprehensive information on various bikes.
- A bike e-catalogue's performance, security, usability, may determine the bike e-catalogue app's strengths, flaws, and potential areas for improvement by assessing it using these criteria. This review procedure will make sure that the app fulfils user expectations, provides a seamless user experience, and helps the bike e-catalogue effort succeed. And user happiness is all evaluated while utilizing a QR code mobile app.
- this technology aims to improve bike accessibility, convenience, and information dissemination. By highlighting its potential benefits and ensuring originality without plagiarism, this analysis seeks to provide an in-depth examination of the advantages and implications of the bike e-catalogue with QR code integration.

4. EXPERIMENTAL DETAILS/METHODOLOGY/ DESIGN PROCEDURE

- The front-end element that users interact with is known as the user interface (UI). It has visual components including screens, menus, buttons, and others that make navigation and information display easier. The UI is made to be intuitive, aesthetically pleasing, and user-friendly, giving consumers a seamless experience.
- Backend server manages data exchanges between the database and the mobile app. Requests are received from the mobile app, and then it finds the desired bike data in the database and transmits it back to the app so it may be shown.
- The app's QR code scanner is an essential part. Users can use it to scan QR codes that have been placed on bicycles or marketing materials. The information from the QR code is read by the scanner, which then causes the database to retrieve information about the related bike.
- The database contains all the necessary details about the bikes, including models, features, pictures, videos, and pricing information. It is set up so that data may be stored and retrieved effectively. The database can be accessible and scalable by being hosted on a server or in the cloud.
- Additionally, user authentication, data synchronization, and other server-side tasks are managed by the server. API (Application Programming Interface) gives mobile apps a standardized method of interacting with backend servers. The communication between the app and the server is streamlined and secure thanks

to the API, which specifies the protocols and techniques for data exchange.

- Image and Video Hosting, the app may make use of image and video hosting services to deliver a rich multimedia experience. High-quality pictures and videos related to each bike model are stored and sent by these services. The software displays multimedia content to users after retrieving it from the hosting service.
- Analytics and Tracking, in order to collect information about user behavior, such as the number of scans, the most popular bike models, and user preferences, the app may include analytics and tracking technologies.

5. TIMELINE OF THE PROJECT/ PROJECT EXECUTION PLAN USING GANTT CHART

S. no.	Reviews	Date	Preformed task
1	Review - 0	13/oct/2023	Title finalization with supervisor, literature survey, finalization objectives, deciding the methodology.
2	Review - 1	22/nov/2023	Title, literature survey, objectives, exiting methods Drawbacks, Proposed method, time line by Gantt chart, references.

6. OUTCOMES

- Improved Accessibility: Prospective buyers can browse the bike e-catalogue whenever and wherever they want via the QR code smartphone app. Users may rapidly obtain complete information about different bike models with just a quick scan, doing away with the need for hardcopy brochures or catalogues.
- Rich Multimedia Experience: Bicycle merchants and manufacturers can offer a rich multimedia experience by inserting QR codes into the e-catalogue. Users may get a thorough grasp of the motorcycles on sale by looking at high-resolution pictures, watching movies that highlight bike features, and even listening to audio descriptions.
- Real-Time changes: The bike e-catalogue's digital nature allows for real-time changes, unlike traditional printed catalogues. Any modifications or additions to bike models, features, or costs can be immediately reflected.

7.CONCLUSION

In conclusion, the usage of a mobile QR code app to access bike e-catalogue has the potential to completely change how people discover, understand, and interact with bikes. The software may continue to expand and adapt to the changing needs of bike lovers and the cycling industry as a whole through ongoing development, maintenance, and updates. The bike e-catalogue app has the potential to become a go-to platform for bike lovers, businesses, and people interested in the world of cycling by focusing on user-centric design, ongoing improvement, and staying up to date with technical improvements.

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