PARSHWANATH CHARITABLE TRUST'S



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Department of Computer Science and Engineering
Data Science



RENTAL PLATFORM FOR SPORTS EQUIPMENTS

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> Project Guide Ms. Anagha Aher

Outline

- Introduction
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- Limitations of the existing systems
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- Technologies and methodologies
- Implementation
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Introduction

- Sports play a crucial role in fostering a healthy lifestyle and building a sense of community.
- However, the challenges associated with owning sports equipment, ranging from financial constraints to storage limitations, hinder many students from fully participating in these activities.
- To address this gap, our project aims to develop a comprehensive Sports
 Equipment Rental platform tailored specifically for students.

Motivation

- Purchasing sports equipment can be expensive, and students may not want to invest in items they may only use occasionally.
- A rental option thus provides a more affordable solution, allowing students to access equipment for a specific period without the financial commitment of buying

Objectives

The main objectives of our project are-

- Create and design pages for user registration, login, equipment listing, rental checkout using vscode.
- Set up a MySQL database instance for storing application data information about users, sports equipment, rentals, and payments.
- Configure the Flask application to connect to the MySQL database for payment checkout of the rental equipments.

Literature Survey of the existing system

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SR. NO	TITLE	AUTHOR	YEAR	OUTCOMES	METHODOLOGY	RESULT
1.	The Rental zone (House renting website) [1]	Joy Paul	2022	Implementing Python scripts or applications to streamline various processes involved in house rental, such as property management, rent collection, and maintenance scheduling	Data collection is conducted from various sources such as rental listings, user reviews, and property details, which including handling missing values, encoding categorical variables, and feature scaling.	creating a user-friendly interface for property owners to list their rentals and for tenants to search for and book properties.

Literature Survey of the existing system

SR. NO	TITLE	AUTHOR	YEAR	OUTCOMES	METHODOLOGY	RESULT
2.	A Study of Rental Cycle System using Location Informati on and Contributi on to City Planning [2]	Yumeto Kojima; Kouki Hayashi; Kenta Akamatu; Kyouiti Hasegawa ; Mikiko Sode Tanaka	2019	The system's voice-based interface enhances safety by eliminating the need for users to interact with mobile phones while cycling but also provides tailored regional-specific tourist information, improving the overall tourism	Based on the identified needs and literature review, a conceptual framework for the rental cycle system is developed. This involves designing the architecture of the system, including the IoT terminals, communication infrastructure	The rental cycle system represents a promising solution for addressing the challenges of urban transportation and tourism while contributing to safer and more sustainable city planning.

experience

Literature Survey of the existing system

SR. NO	TITLE	AUTHOR	YEAR	OUTCOMES	METHODOLOGY	RESULT
3.	Developm ent and implement tation of peer to peer self driving car rental app [3]	Zarak Jahan, Manav Chauhan Nazia Parween Megha Chhabra	2023	improved efficiency in managing rental bookings and inventory, enhanced customer experience through a user-friendly interface and automated processes, increased revenue through data-driven pricing strategies, and improved decision-making through data analysis and machine learning algorithms	data collection is crucial, including information on available cars, rental prices, and customer data. Next, data preprocessing is performed to clean and prepare the data for analysis	developing a system for managing car rentals, including features such as booking, availability tracking, customer manageme nt, and billing

Limitations of existing systems

- There is no such platform for sports rentals which mainly aims for ensuring that all students, regardless of their economic status, have equal opportunities to participate in sports and recreational activities.
- A sports rental platform thus comes up with a solution and a belief in empowering students to explore and engage in various sports without the burden of high upfront costs, allowing them to discover and pursue their interests more freely.

Problem statement

- Students face numerous challenges when it comes to accessing sports equipment.
- Limited budgets and the high cost of purchasing sports gear pose significant barriers to active participation of students.
- The challenge involves the need to establish such a platform for sports equipments which aims to address the challenges faced by students.

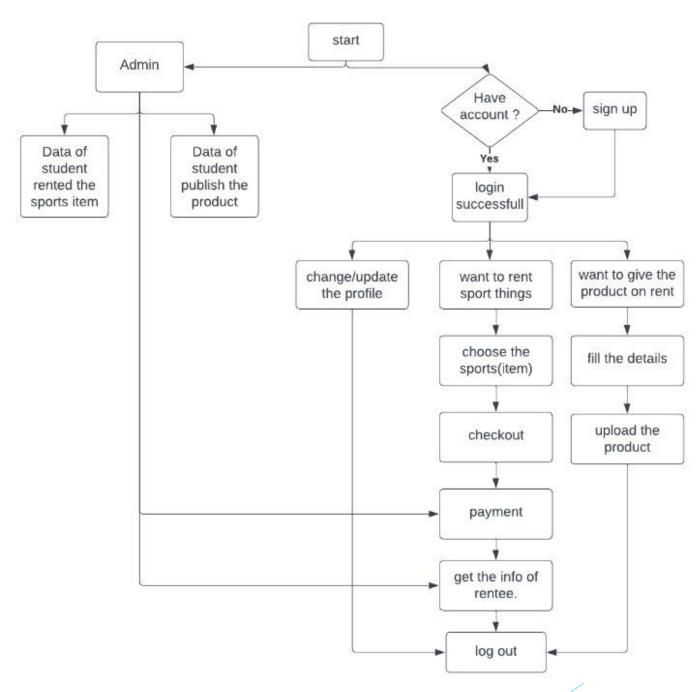


Fig. Flowchart

System Design

- It will consist of a user interface that allows students to browse, search, and rent sports equipment.
- Users can browse through available sports equipment or use search functionality to find specific items.
- Users can view item details, select rental duration, and proceed with the rental process.
- Users can manage their profiles, view rental history, and update personal information.
- Handling of payment processing and ensuring data security and privacy will also be taken care of.

Technologies and methodologies

Front-End:

- Tkinter(version 8.6.14)
- Python(version 3.12.2)

Back-End:

- MySql(version 8.1.0)
- Python(version 3.12.2)

Implementation

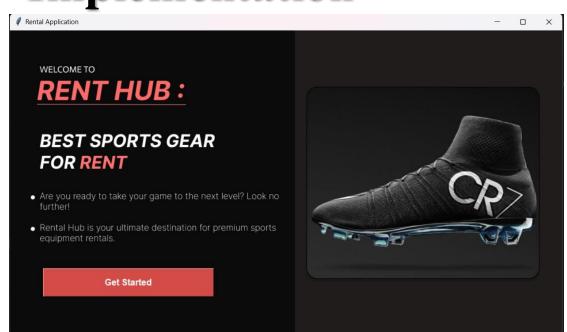


Fig.1.Welcome page

Fig.2.Login page

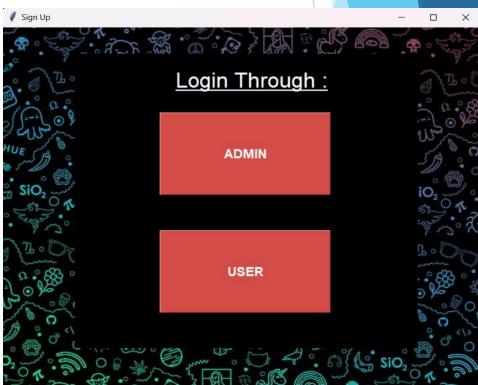
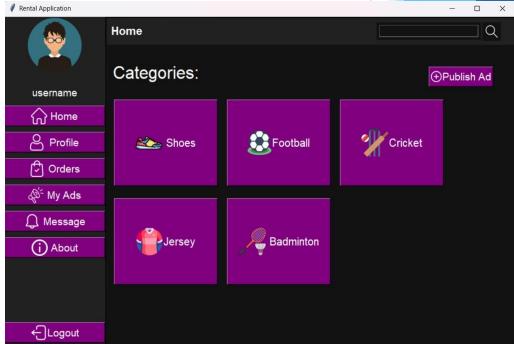




Fig.3.Sugnup page





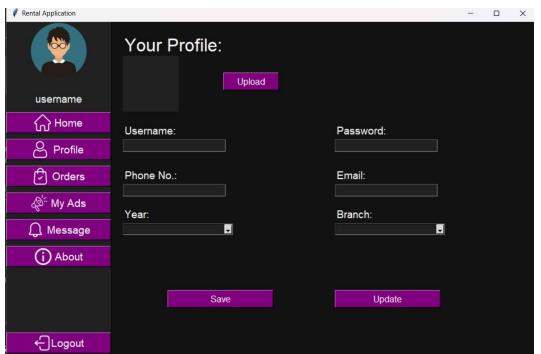


Fig. 5. Profile page

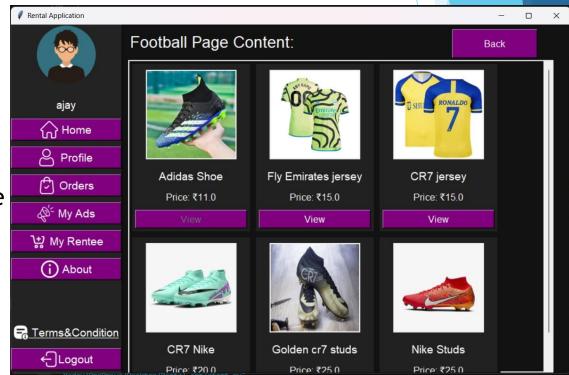


Fig.6.Product page

Conclusion

- In conclusion, the development of a rental platform for sports equipment tailored for students represents a holistic solution that addresses the multifaceted needs of the student community.
- This platform not only facilitates affordable access to sports gear, promoting inclusivity and empowering students to engage in physical activities without financial constraints, but also fosters a culture of sustainability by encouraging the reuse of equipment and minimizing environmental impact.

References

- [1] Joy Paul ,THE RENTAL ZONE (HOUSE RENTING WEBSITE) Volume:04,2243-2253, August-2022
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Thank You...!!