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1 Introduction

In this digital era, finding and renting everyday-use products is still a time-consuming task. Our project focuses on simplifying this process by creating an **Online Product Renting Platform** where users can easily rent or list their products. Rather than physically visiting local markets (bazaars) or searching from shop to shop, our platform allows users to rent out the needed items with just a few clicks — at reasonable prices, from the comfort of their home.

2 Problem Statement

While platforms like OLX and Facebook Marketplace allow users to **sell old products**, there is **no dedicated and trusted online space to rent products** — especially in local communities. People who want to rent items for short durations either end up buying them or waste time looking offline. This project addresses the **market gap** by offering a **centralized solution** where people can easily **rent and lend** items securely and conveniently.

3 Objectives of the Research/Project

1. To design and develop an AI social media manager application using React Native.
2. To develop a user-friendly platform for renting products online.
3. To provide a digital marketplace where users can both rent and list items.
4. To reduce the need to buy items that are needed temporarily.
5. To help students, travelers, and small businesses get access to essential items without high costs.
6. To bridge the gap between product owners and potential renters.

4 Literature review

Several platforms such as OLX, eBay, and local marketplaces have succeeded in the **buy-and-sell** model. However, they lack **renting functionality**. Research shows that **peer-to-peer renting** can reduce product waste, improve affordability, and contribute to the circular economy. Existing applications are limited to either large-scale industrial rentals or city-based businesses. Our research identifies this gap and proposes a scalable digital solution tailored for the local context.

5 Features

- **User Registration & Login with email and password**
- **Google SignIn**
- **Product Listing & Renting**
- **Search & Filter Options**
- **Chat System between Renters and Owners**
- **Ratings and Reviews for Trustworthiness**
- **Responsive UI for Mobile and Desktop**
- **Secure Payment Gateway (Optional)**

6 Methodology

We used the **Agile Development Methodology** to develop this project in iterations:

- **Requirement Gathering:** User surveys and interviews.
- **Design:** Wireframes, UI/UX design in Figma.
- **Development:** Using React.js for frontend, Firebase/Node.js for backend.
- **Testing:** Unit testing and user feedback from real-world testers.
- **Deployment:** Hosting via Firebase for real-time accessibility.

7 Contribution to the Field /Utilization of Results

This platform contributes to **digital transformation in e-commerce**, specifically the **rental economy**. It can be used by:

- Students renting books or project items
- Event planners renting equipment
- People renting tools, electronics, and accessories

The idea promotes **cost-efficiency** and **resource sharing** in society, making it highly beneficial in urban and rural areas alike.

8 Sustainable Development Goals (SDGs) Mapping

This project aligns with several **UN Sustainable Development Goals**:

- **SDG 11:** Sustainable Cities and Communities
- **SDG 12:** Responsible Consumption and Production
- **SDG 9:** Industry, Innovation, and Infrastructure
- **SDG 8:** Decent Work and Economic Growth

By promoting a rental model, we reduce product waste and encourage reuse, which helps build a more sustainable society.

9 Work Plan

Phase	Schedule
Requirement gathering	3 week
UI/UX Design	1 week
Development	7 week
User Testing	2 week
Feedback	1 week
Final Deployment	1 week
Documentation	2 week

10 References

- [1] OLX Pakistan – <https://www.olx.com.pk>
- [2] Research Paper: Sharing Economy and Online Rental Markets
- [3] United Nations Sustainable Development Goals – <https://sdgs.un.org/goals>
- [4] Firebase Documentation – <https://firebase.google.com>
- [5] React.js Official Documentation – <https://reactjs.org>

Recommendation by the Committee Members:

1. Name

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Signature_____

Approval by the Incharge of Software Department

Name: _____

Signature: _____