A

**MAJOR PROJECT REPORT**

On

**“KNIT KART – KNIT’s Arcade of Recycled Treasures”**

Submitted by

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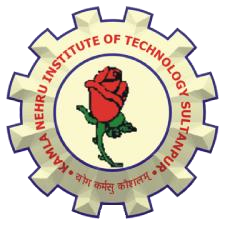
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A project report in partial fulfilment of the

Requirement for the award of degree

**MASTER OF COMPUTER APPLICATION**

Department of Computer Science & Engineering

**Kamla Nehru Institute of Technology, Sultanpur, (U.P.)***(An Autonomous State Government Institute)*

Affiliated to

Dr A. P. J. Abdul Kalam Technical University Lucknow (U.P.) India 2023-2024

**CERTIFICATE**

**T**his is to certify that **Arshil Amaan Ansari (22709), Rahul Saini (22742), Rakesh Kumar (22743), Shantanu Saini (22751)** have carried out the project work in this report entitled “KNIT KART – KNIT’s Arcade of Recycled Treasures” for the award of **Master of Computer Application** at **Kamla Nehru Institute of Technology**, affiliated to **Dr. A. P. J. Abdul Kalam Technical University**, Lucknow. This report is the record of the candidates’ own work carried out by them under our supervision and guidance. This project work is the part of their Master of Computer Application curriculum. Their performance was excellent and we wish them good luck for their future endeavours.

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**ABSTRACT**

**K**NIT KART is a platform designed to foster sustainable practices and community engagement among hostellers by facilitating item exchanges. This project aims to address the surplus of unused items in hostel environment by providing a platform where users can trade items they no longer need for items they require, thereby promoting a circular economy model within hostel communities. Through personalized surveys and comparative analysis with platforms like OLX.in, KNIT KART emerged as a solution to overcome the limitations of traditional ad-centric platforms. The platform prioritizes community engagement and direct item exchanges over monetary transactions. The implementation phase focused on collaborative development practices, iterative design iterations, and technology integration using modern tools like CSS Modules, Tailwind CSS, and ShadCN UI. Challenges in feature development, integration complexity, and scalability considerations were addressed through adaptive problem-solving and teamwork. As KNIT KART enters user adoption, strategies are aimed at enhancing community engagement and ensuring continuous improvement. The platform represents more than just a trading platform; it embodies a dynamic ecosystem committed to sustainability and positive user experiences. This report presents the development journey and key insights gained from the KNIT KART project, emphasizing its significance in promoting sustainability and fostering community interactions within hostel settings.

**ACKNOWLEDGEMENT**

**W**e wish to express our sincere gratitude to **Prof. Baburam** & **Prof. Sonam Arya (Project Guide)** for their valuable suggestions and guidance throughout our work at **Kamla Nehru Institute of Technology, Sultanpur**. They have guided us through the difficulties and made us understand the concepts needed for the project work. Their experimental and theoretical knowledge has been very helpful. We feel privileged in expressing our gratitude to all faculty members of computer science and engineering department for their encouragement and moral support.

We feel privileged to acknowledge **Dr. Awadhesh Kumar, Head of the Department, Computer Science & Engineering**, for fostering a supportive and disciplined environment that enabled our project's success. His encouragement and leadership have significantly contributed to our growth and learning experience.

We are also deeply indebted to all those without whose firm support encouragement and guidance, this project would have seen this stage.

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**INTRODUCTION**

**I**n recent years, the rapid growth of e-commerce and online marketplaces has transformed the landscape of buying and selling goods, offering convenience and accessibility to consumers worldwide. However, within specific communities such as hostel environments, a distinct challenge arises concerning the surplus and underutilization of items among residents. Hostellers often accumulate various items during their stay, ranging from electronics and appliances to clothing and accessories. As their needs and preferences evolve, many of these items become redundant or unused, leading to a buildup of surplus goods within hostel rooms.

This project seeks to address the prevalent issue of surplus and underutilization of items in hostel communities by developing a novel platform called KNIT KART. Unlike traditional e-commerce platforms that primarily facilitate monetary transactions, KNIT KART is designed to foster item exchanges and promote a circular economy within hostel environments. The platform encourages hostellers to trade their unused items with others in exchange for things they need or value, thereby minimizing waste and promoting sustainable practices.

**Motivation**

The motivation behind KNIT KART stems from the observed surplus of unused yet valuable items in hostel rooms. Many hostellers possess items that they no longer need or use, which often end up being discarded, contributing to unnecessary waste. By creating a platform that facilitates item exchanges and encourages reuse, KNIT KART aims to reduce this wastage and promote a more sustainable lifestyle among hostel residents.

**Problem Statement**

Hostel environments often lack effective mechanisms for exchanging items among residents. Existing classified platforms primarily focus on monetary transactions and fail to foster a sense of community or encourage direct item exchanges. This project seeks to address these limitations by providing a platform dedicated to item swapping and fostering a collaborative living environment.

**Objectives**

The primary objectives of *KNIT KART* are:

* To reduce waste and promote sustainability by facilitating item exchanges among hostel residents.
* To provide a user-friendly platform that prioritizes community engagement and direct item swaps.
* To create a circular economy model within hostel communities, encouraging resourceful interactions and reducing unnecessary consumption.

**Summary**

In summary, KNIT KART is envisioned as an innovative solution to tackle the surplus of unused items in hostel environments. By leveraging technology and community engagement, the platform aims to foster sustainable practices and collaborative living among hostellers.