



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 13 Issue: II Month of publication: February 2025

DOI: https://doi.org/10.22214/ijraset.2025.66939

www.ijraset.com

Call: © 08813907089 E-mail ID: ijraset@gmail.com

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 13 Issue II Feb 2025- Available at www.ijraset.com

### **SCRAPZON - With 3R's**

Mathukiya Mihir Natubhai<sup>1</sup>, Mrs. Keyaben Sanketkumar Patel<sup>2</sup>
Dept. of Computer Science & Engineering, Parul Institute of Technology, Vadodara, Vadodara, Gujarat, India

Abstract: This paper presents New Trend is Scrap consists of recyclable and leftover stuff from the product manufacturing and consumption, such as parts of vehicles, building supplies, newspapers, notebooks, etc. Our vision to divert recyclables from India's unsanitary landfills. We provide users can schedule a doorstep pickup for their scrap material which is recyclables. Unlike waste, scrap has a monetary value and you will be paid in exchange for your scrap. Scrap materials are taken to the scrap yard where the process of recycling and melting takes place. Online Scrap materials platform is connecting the local scrapers to the company which follow the 3R's [reduce, recycle and reuse]. Online Scrap materials platform is taken to the all type of scrap material. specially for the construction waste(material), Furniture waste.

Keywords: Full-stack development, Operating system, Web Browser, Front-end, Backend,

#### I. INTRODUCTION

This is our scrapzone 3R's web application. This site for the scrap material. Our site provide the online platform to the local scrapers, customers and recycling company. Our site is connect the local scrapers to the company. Some time people not available and some time scrapers not available for all time to take the scrap material. construction site, where construction work completed after that some construction waste not use in proper way, they not reuse and recycle. Save the Electronics waste (E-Waste) material.

#### II. PROBLEM STATEMENT

Local scrapers are not connected the any online scrap material web application, so they all time go to the all-area but no having more profit because some time people not at home so they not able to sell that scrap material to the scrapers. E- waste material is harmful for the environment and land, now noany awareness about the e-waste how to reuse How to recycle and when scraper is taking that e- waste from the people after they sell that e-waste some random local waste yard and then that yard sell that some illegal company so that they not use in proper way. Construction waste, people are notaware about this construction waste how to reuse and recycle. Furniture waste are not recycle and reuse in proper way

#### III. OBJECTIVES

Scrapzon-with 3R's aim to connect to the local scrapers to the government license legal company. Our aim is to help in cleanness in the area and help to the green environment. It solves the time flexibility through our web application, on demand doorstep pickups and givesbest rates. Recycle and reuse in legal way. Good price profit to the local scrapers and customers. Recycle Electronics waste material in legal way.

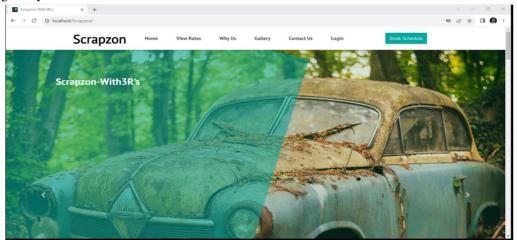


Figure 1 Home Page of system



#### International Journal for Research in Applied Science & Engineering Technology (IJRASET)

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 13 Issue II Feb 2025- Available at www.ijraset.com

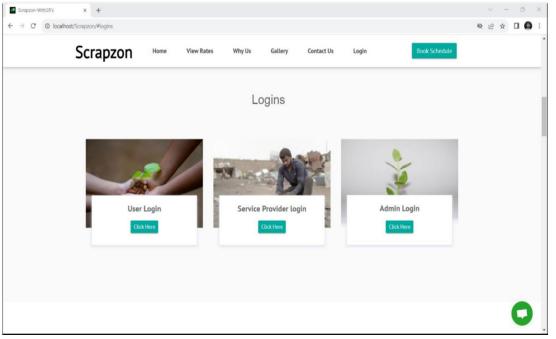


Figure 1.1 Login Page in Scrapzon-with3R's

#### IV. METHODOLOGY

Concept: The concept stage comes first. Here, a lead will choose the project's parameters. The user will give the schedule to the service provider for about the scrap material and provide details of scrap material, including what time, date, address, scrap material type and weight will be fill.

- 1) Our system is useful for users and local service provider
- 2) It will save your time and give best rate.
- 3) It can be accessed from anywhere.

Inception: The software development team needs to be assembled after the concept has been described. A product owner will evaluate the availability of their coworkers, select the best candidates for the project based on their qualifications, and provide them with the required tools and resources.

#### DFD Level 1

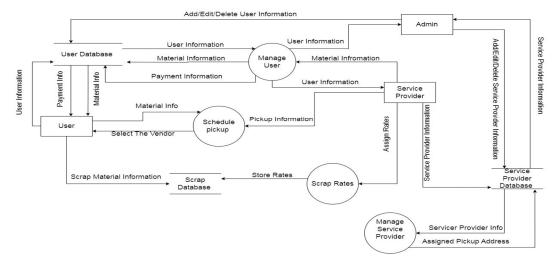


Figure 2 Data Flow Diagram

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 13 Issue II Feb 2025- Available at www.ijraset.com

#### Use-case Diagram

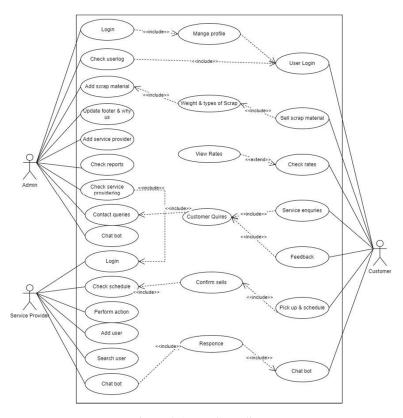


Figure 2.1 Use Case diagram

#### V. RESULT

The Scrap materials are often recycled to reduce waste and conserve natural resources. Recycling scrap materials is an important step towards sustainable production and consumption. Recycling helps reduce the amount of waste sent to landfills and incinerators, conserves natural resources such as timber, water, and minerals, and prevents pollution by reducing the need to collect new raw materials. The Steel Scrap Recycling Policy is a worldwide trend that aims to increase steel production using scrap as the main raw material. The three golden rules of sustainability are Reduce, Reuse, and Recycle. Reducing waste by consuming less is the most effective way to minimize environmental impact. Reusing items leads to generating less trash, preserving natural resources, using less energy, causing less pollution

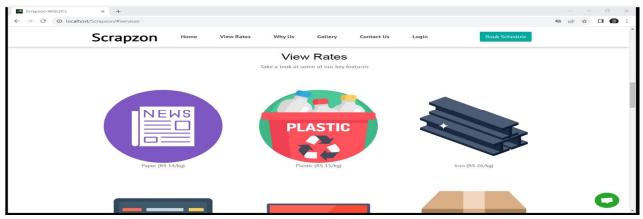


Figure 3 Rates page in Scrapzon-with3R's



#### International Journal for Research in Applied Science & Engineering Technology (IJRASET)

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 13 Issue II Feb 2025- Available at www.ijraset.com

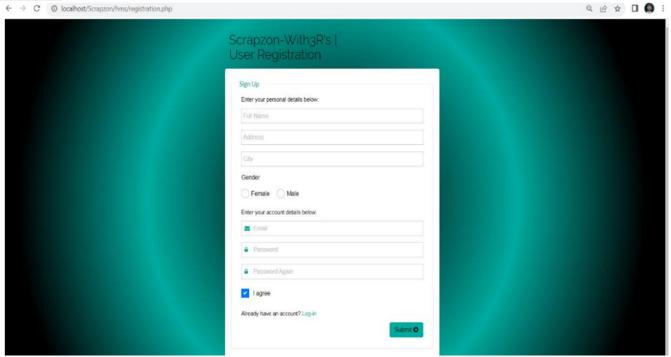


Figure 4 Registration Page in Scrapzon-with3R's

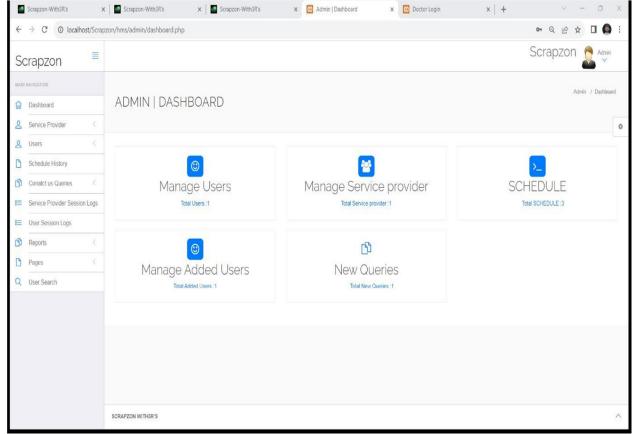


Figure 4 Admin Dashboard



#### International Journal for Research in Applied Science & Engineering Technology (IJRASET)

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538

Volume 13 Issue II Feb 2025- Available at www.ijraset.com

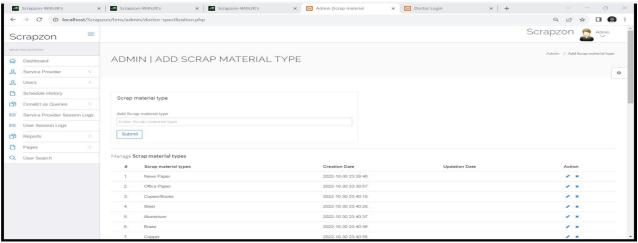


Figure 5 Scrap Material Types Adding Page in Scrapzon-with3R's Admin Panel

#### VI. **CONCLUSION**

We research some papers and application so we get some results. In that result some disadvantages are find that mention in the literature survey. By using that result, we can solve the problem of local service providers connecting to online platforms with users and scheduling pickups. Through in our web application. So that we convert that disadvantage in the advantage. Which are find in the research paper So, we make a web application for that sacrapzon -with 3R's.

#### VII. **ACKNOWLEDGMENT**

The author would like to express sincere gratitude to Nexasoft Technologies Pvt. Ltd., Vadodara, for providing invaluable guidance, resources, during the development of this project. And I would like to thank my university guide Mrs. Keyaben Sanketkumar Patel for their invaluable guidance for this project research.

#### REFERENCES

- [1] K.Saranya, Dr.K.Ramadevi, Sri Ramakrishna "Electronic waste management-An overview "IEEE 2022
- [2] Lynda Andeobu \*, Santoso Wibowo and Srimannarayana Grandhi "A Systematic review of Ewaste generation and Environmental Management of Asia pacific Countries "IJERPH - 2021
- [3] Wenming Liu "Research on product Design method of recycling waste building wood" EDP 2020
- [4] iangang Zhu, Danren Yang "Recycling and Value-added Design of Discarded Wooden Furniture" ResearchGate 2021.
- [5] Kazım Onur DEMİRARSLAN, Deniz DEMİRARSLAN2 "Furniture Wastes and their environmental impacts as being a different Problem of our time" JEPS -2020.
- [6] Muhammad Akram Akhund, Nafees Ahmed Memon, Tauha Hussain Ali, Aftab Hameed Memon and Hafiz Usama Imad "Construction Waste Management Techniques" IEOM – 2019.
- [7] uhammad Akram Akhund, Nafees Ahmed Memon, Tauha Hussain Ali, Aftab Hameed Memon and Hafiz Usama Imad "Construction Waste Management Techniques" IEOM – 2019.
- [8] Jasper H. B. de Groot, Charly Walther, and Rob W. Holland "A fresh look old clothes: Landry small Boots second hand store sales" Brain Sci 2020.
- [9] Radostina A. Angelova, Daniela Sofronova, Kalin Hristov "The 3Rs concept applied in a textile" PEPM 2022.
- [10] Charan Kumar Posina, Asst. Prof. Dr. A. Suneetha "Online book store Management System" IRJMETS 2022.

#### **AUTHORS**

#### **First Author**

Name: Mathukiya Mihir Natubhai

Qualification: Integrated Bachelor's in Technology [6 years] Institute: Parul University, Vadodara, Gujarat

Institute Email: 190345305042@paruluniversity.ac.in

**Correspondence Author** 

Name: Mathukiya Mihir Natubhai Contact Number: +91 7487877676

Email:

mihirmathukiya55@gmail.com









45.98



IMPACT FACTOR: 7.129



IMPACT FACTOR: 7.429



## INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call: 08813907089 🕓 (24\*7 Support on Whatsapp)