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Hazardous Waste Dump: A Recycling Process on the Globe Using Social Media

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ABSTRACT

As the old saying goes, "One man's trash is another man's treasure". And that line applies to more than just antique sales. A lot of people don't know about the value of scrap things – something that's too often treated as trash to be disposed of, even though its value to recyclers is high. And there's a strong push globally to promote, encourage and expand scarp recycling opportunities. There's a strong environmental lesson in doing so many of them not aware of the effect of scarp things like plastic, metal, glass etc. which contains toxins that pose dangers to the soil and groundwater when they're dumped in community landfills. The alternative way is to make use of scrap things that can be successfully recycled and used to make new products

Keywords: Recycle, Scrap, Waste, Environment, QR,

INTRODUCTION

Creative Scrapyard is an e-commerce website that aims to be a platform where people can sell their old or scrap items. From this website, an artist can buy those scrap items and customize that scrap items to make useful and decorative items. These creative items can be sold on the website itself and other people can buy these items. It helps people to earn by selling their scrap, it helps the artists to buy stuffs on cheap rate and earn money by showing their creativity on it and it will also promote the initiative of #Vocal-For-Local and make the world "a better place" by recycling old items. Recycling is the process of converting waste materials into new materials and objects. It can also prevent the waste of potentially useful materials and reduce the consumption of fresh raw materials, reducing energy use, air pollution (from incineration) and water pollution. As a fact The World produces 2.12 billion TONS of waste every single year. And making use of the scarp materials by recycling them can save the planet. Now to overcome such issue we have to create awareness among every individual the benefits of recycling the materials and understanding the benefits of scrap recycling is important to educate the students about this subject as a learning process, by conducting the recycling event activities or special projects.

The increasing of recycling rates will have the two key components that is Environment and the Economy. Some of the things that can be recycled to create a balanced environment are

- Newspaper
- Plastic bottles
- Paper rolls
- Clothes
- Books
- Vegetable peelings
- Plastic Pots
- Glass bottles
- Shoe boxes

- Bottle caps
- CDs and DVDs
- Light bulbs

LITERATURE REVIEW

Conducted a comprehensive analysis of the economic and environmental benefits of scrap recycling. Their study highlighted the cost savings associated with recycling materials such as metal, plastic, and glass, as well as the reduction in greenhouse gas emissions compared to virgin material production.[1,5,8]

Investigated the environmental consequences of land filling scrap materials, focusing on the release of toxins into soil and groundwater. They emphasized the importance of diverting scrap materials from landfills through recycling to mitigate these environmental risks. [2,3]

Identified common barriers to scrap recycling, such as lack of infrastructure, limited awareness, and economic disincentives. Their research proposed strategies for overcoming these barriers, including investment in recycling infrastructure, education campaigns, and policy incentives. [4, 6, 10]

Explored the role of community engagement in promoting scrap recycling efforts. Their study highlighted successful community-led initiatives and identified key factors contributing to their effectiveness, such as grassroots organizing, collaboration with local businesses, and incentivizing participation. [7,9]

I. METHODOLOGY

The methodology behind the creative scrapyard are:

* Admin
* User

Admin Login has the following access:

* Admin can login using credentials
* Admin can manage user accounts
* Admin can manage the creative and scrap item categories
* Admin can View/manage order details
* Admin can view payment details
* Admin can also view review and rating

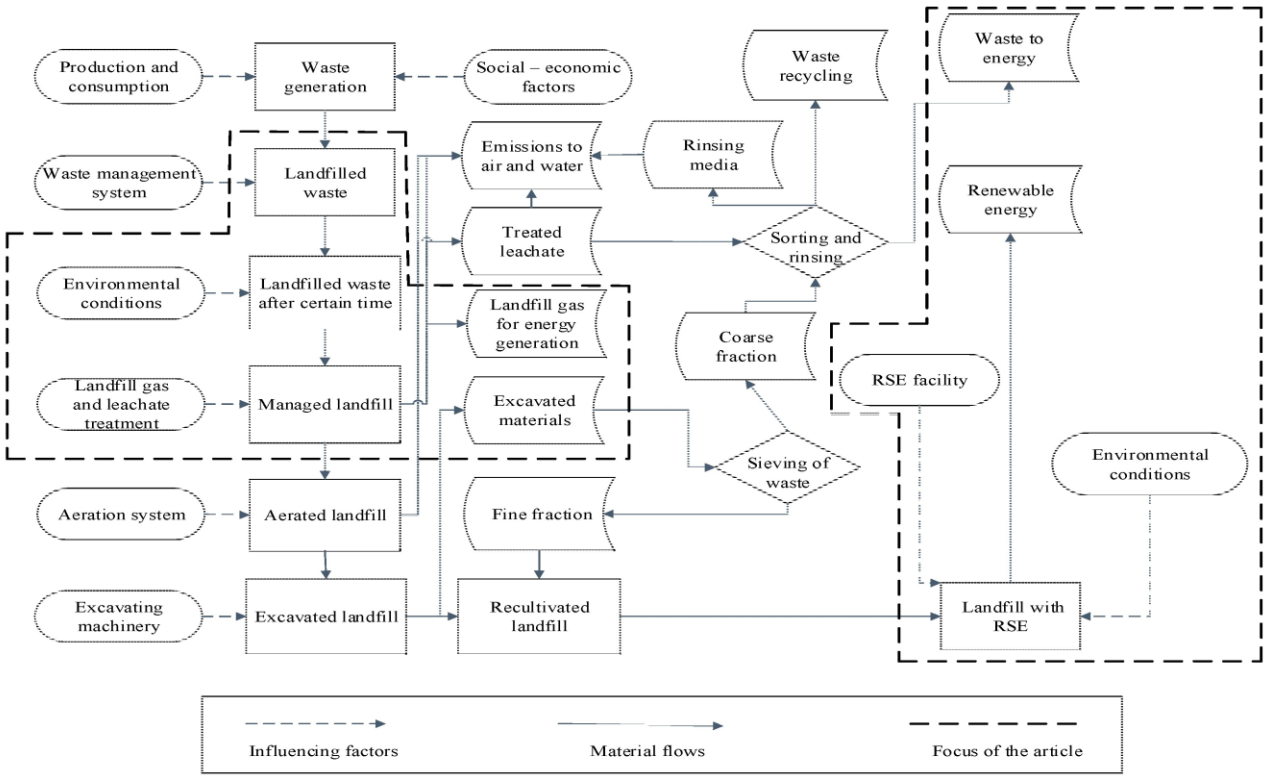
User Login has the following access:

* User can log in on the website
* User can manage his/her account.
* User can view/search/filter creative & scrap items
* User can view the category of the creative or scrap items
* User can buy & sell creative or scrap items
* User can manage the items details
* User can manage the items in the shopping cart
* User can view details related to orders
* User can give rating and review
* User can ask query & report to the admin about the inappropriate items & user

Guest User has following access:

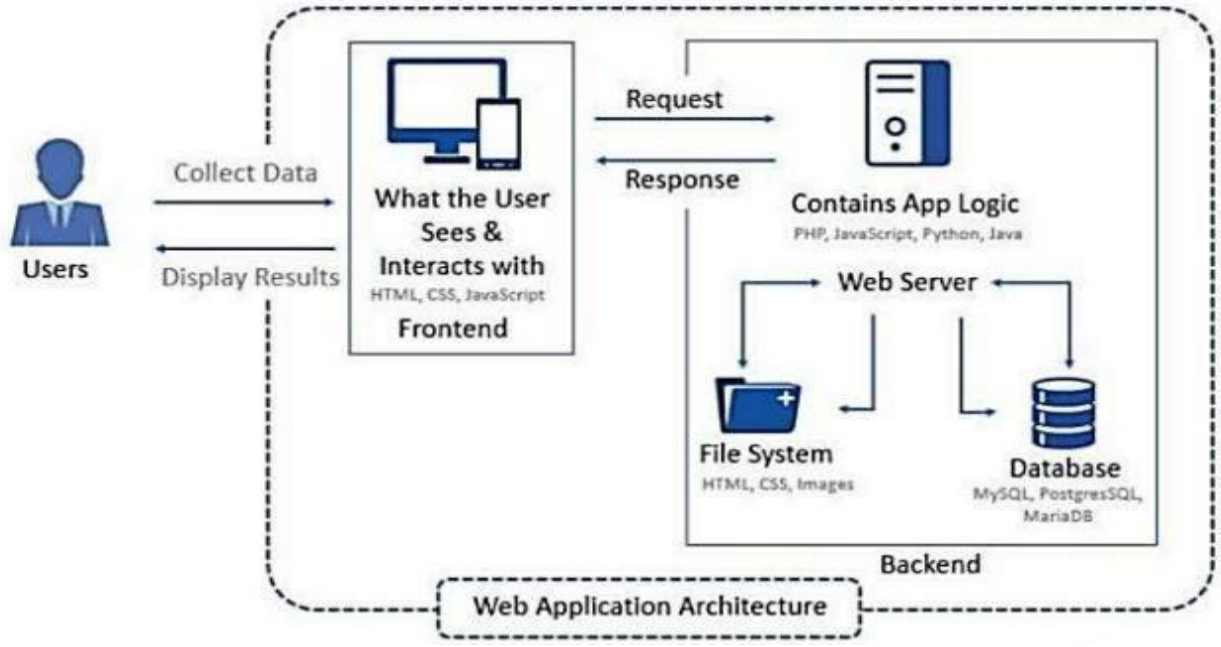
* Guest User can create an account on the website
* Guest user can only search /view/filter creative or scrap items
* Guest user can view creative & scrap item category

II. BLOCK DIAGRAM



III. ARCHITECTURE

This system architecture has three modules: Admin, Scrap Collector and User or Customer. Scrapyard is the Web based Online Portal for door-to-door Free Scrap Collection and Recycling Service. Scrap collector brings transparency to the age-old ways of waste paper collection. Our First Priority at scrapyard is Customer Satisfaction which we try to achieve by giving the Best Price, Accurate Weight and 100% assurance of Recycling the Scrap Material Provided by our Customers. We purchase waste paper of all kinds at a fair price, including newspapers, notebooks, magazines, steel, brass, glass, iron, plastic, etc.



IV. MODELING AND ANALYSIS

Model shows the explanation of each modules.

There is no way to know beforehand that the person is coming hence we aren't prepared. Secondly, the person comes with a small stall hence the capacity of his cart is less. Not every house of the society can give him the waste. Thirdly, there is no way to know if the person is paying us the right price for our waste. Only the elders of our house know the correct prices. Our application aims to solve the problems in this area. The Scrapyard follows the traditional model and pays for scrap by weight. The scrap is then segregated and given to recycling plants. The Scrapyard aims to organize the waste collection vendor network. Scrapyard brings transparency to the age- old ways of waste paper collection. We have introduced the use of electronic weighing scales at the doorsteps of clients. Our First Priority at scrap collector is Customer Satisfaction which we try to achieve by giving the Best Price, Accurate Weight (Electronic Weighting Machine) and 100% assurance of Recycling the Scrap Material Provided by our Customers. We purchase waste paper of all kinds at a fair price, including newspapers, notebooks, magazines, steel, brass, glass, iron, plastic, etc. Scrap is a term used to describe recyclable materials left over from every manner of product consumption, such as parts of vehicles, building supplies, and surplus materials. Often confused with waste, scrap in fact has significant monetary value. Scrapyard make use of technology in the whole process of collecting waste. Give away your recyclables used paper, plastic, metal, glass etc. in a most environment friendly manner.

V. RESULTS AND DISCUSSION

Fig-1 Home Page

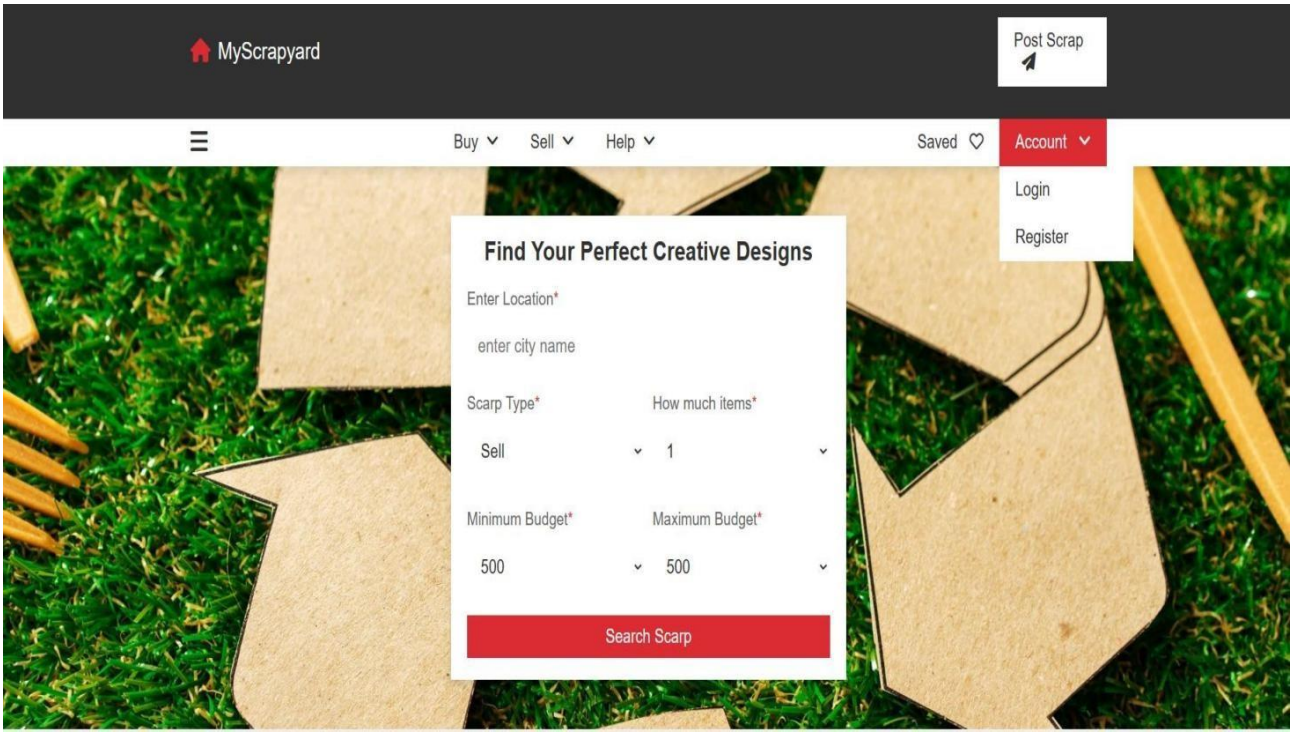


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Fig-2 Creative Section of the page

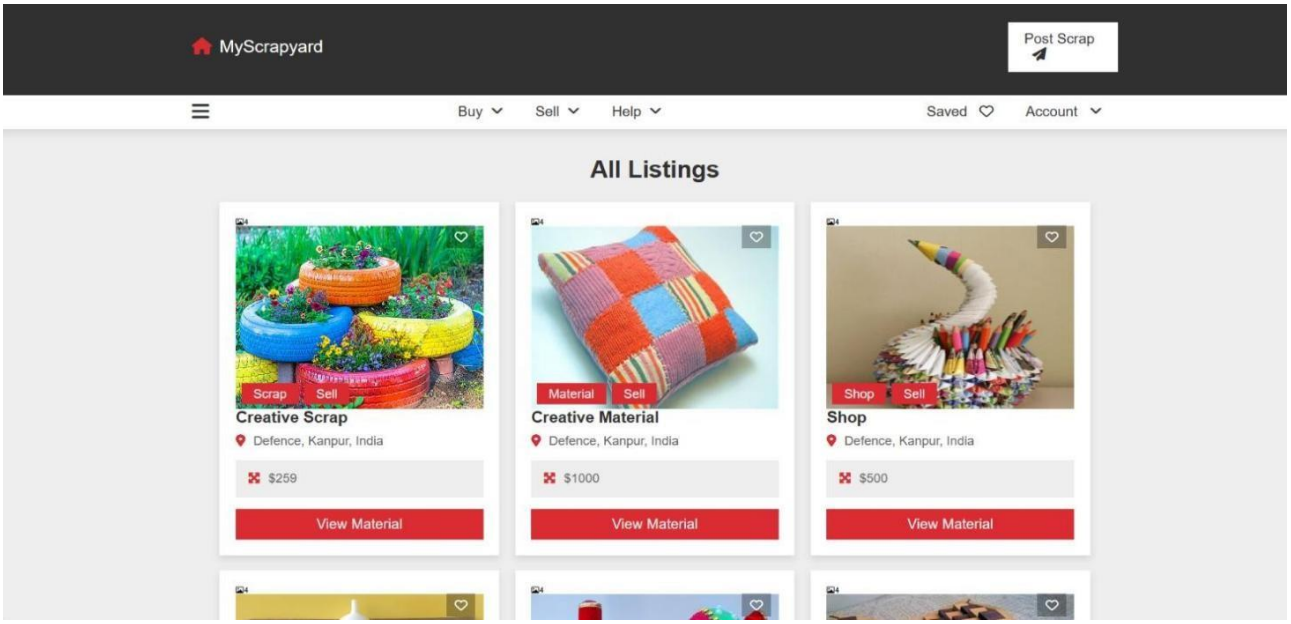


Fig-3 Service Page

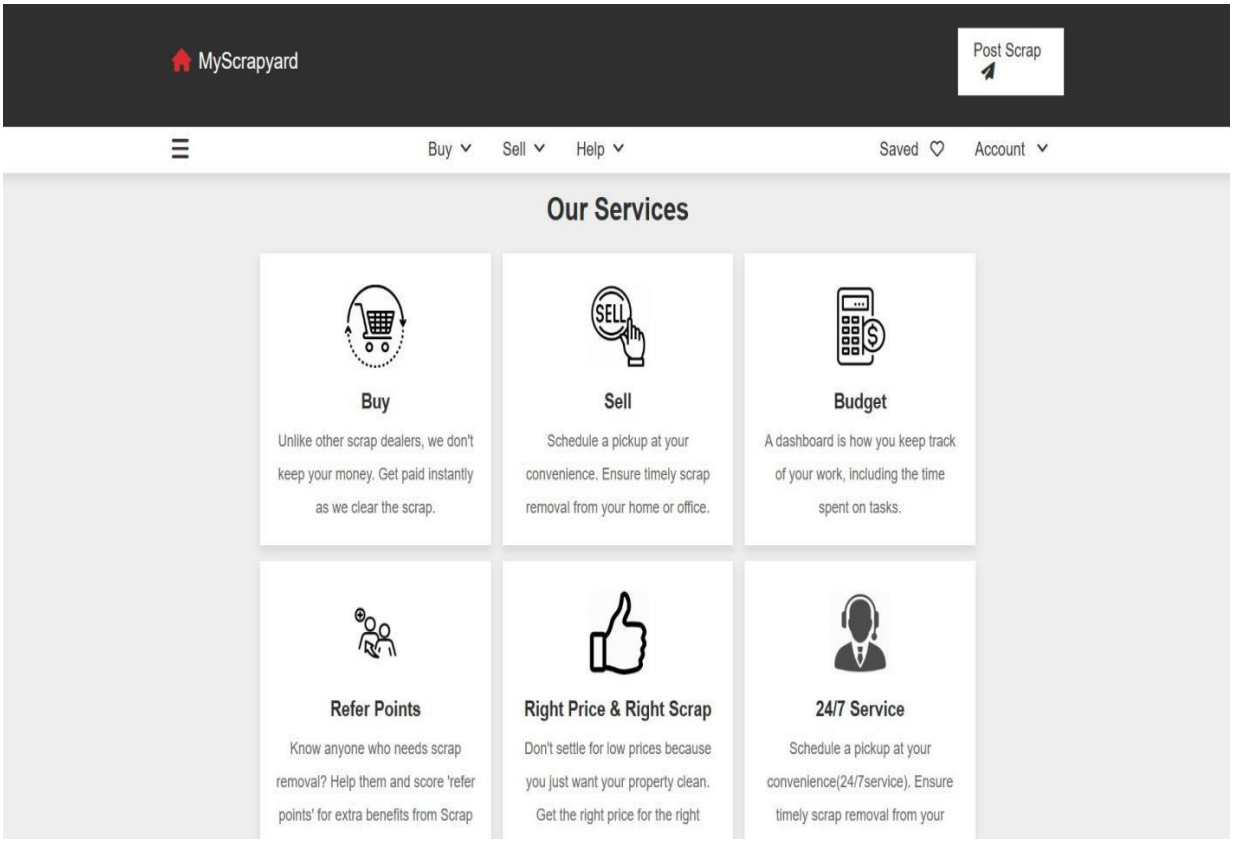
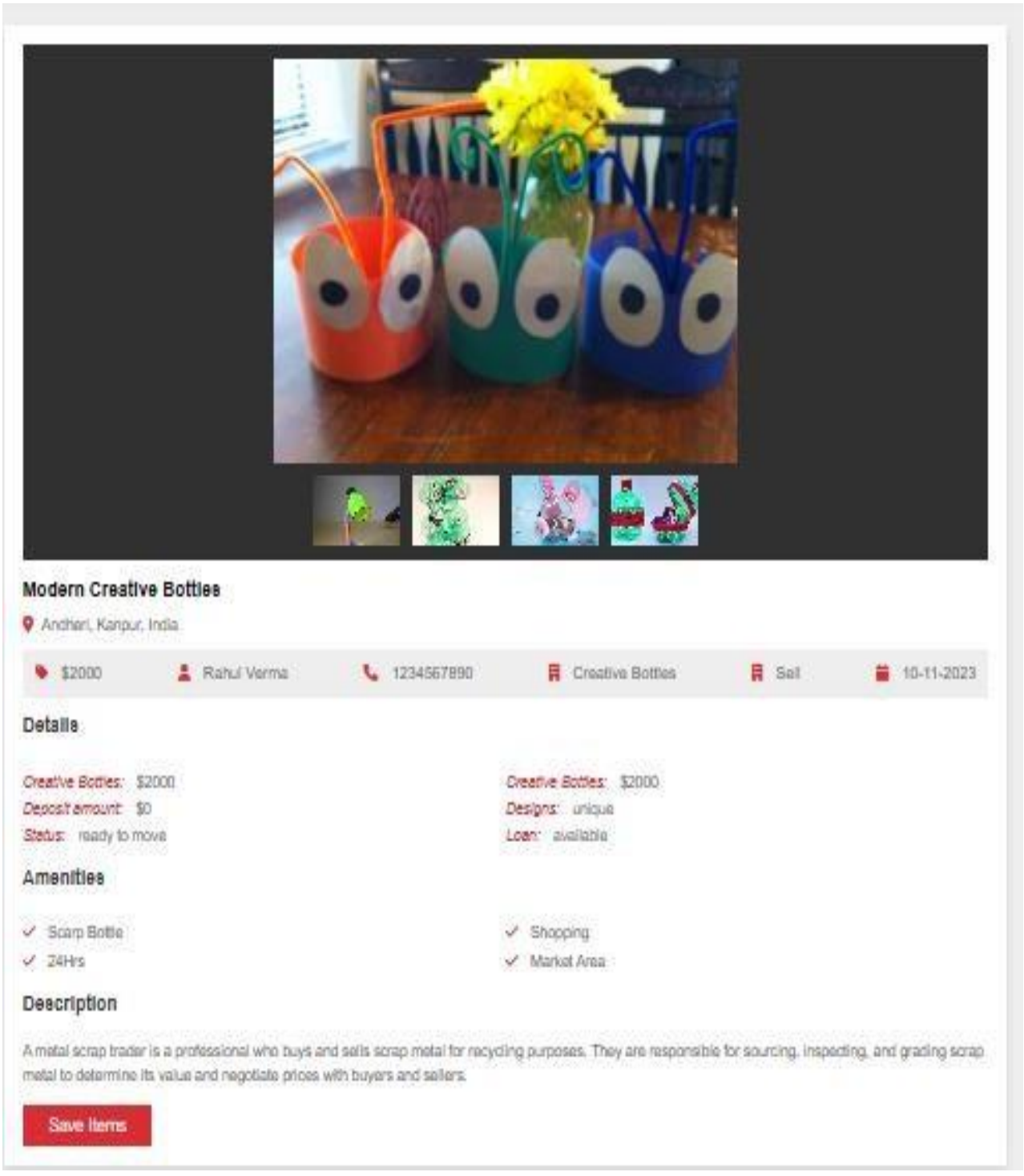
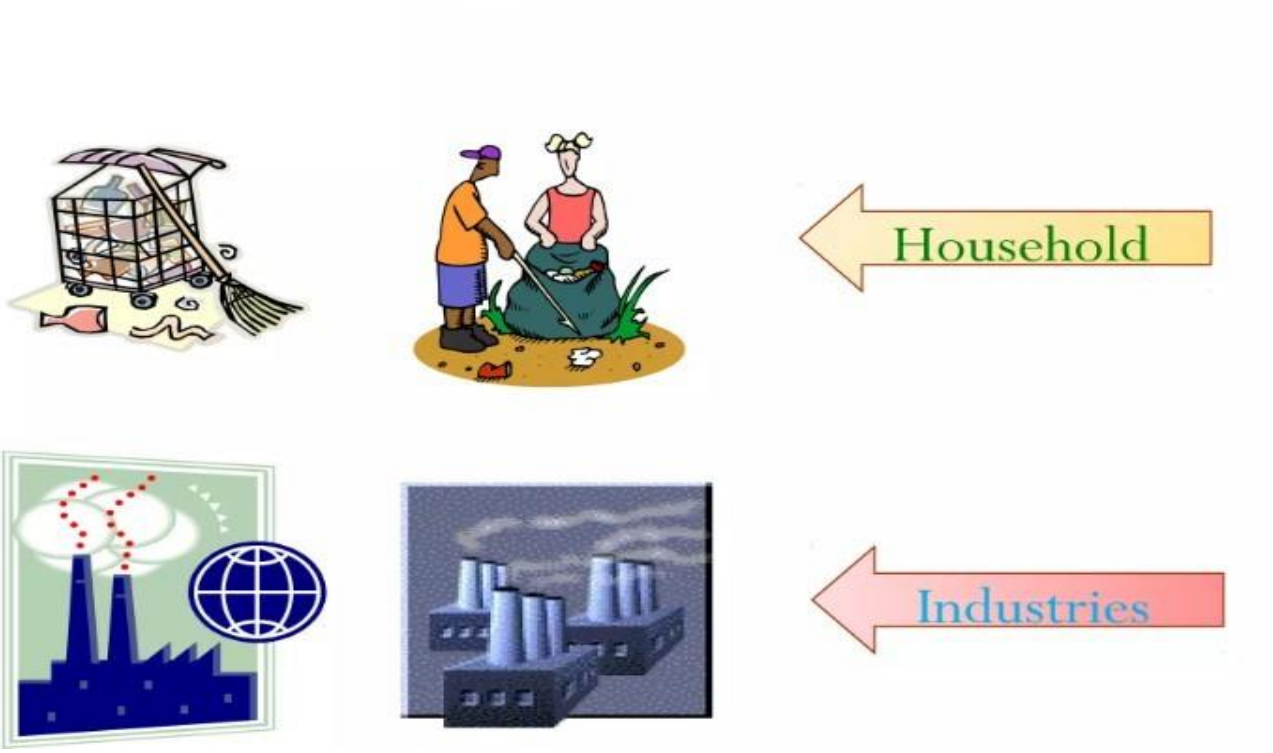


Fig-4 Scrapyard section of the page



VI. CONCLUSION

Provided Overview concept shows how much can be done with the household items so many people throw away. There are thousands more creative ideas out there. As mentioned before, Schools today have a lot they can teach students about the environmental benefits of recycling scrap metal. It is great for the environment to do something creative with these items. Also, it potentially saves money when you can build something that you otherwise would have paid for – in turn creating more clutter and more waste. So next time you're about to pitch something into the trash, have a good think about how you could repurpose it.



Link- https://scrapworld.github.io/MyScrapyard/

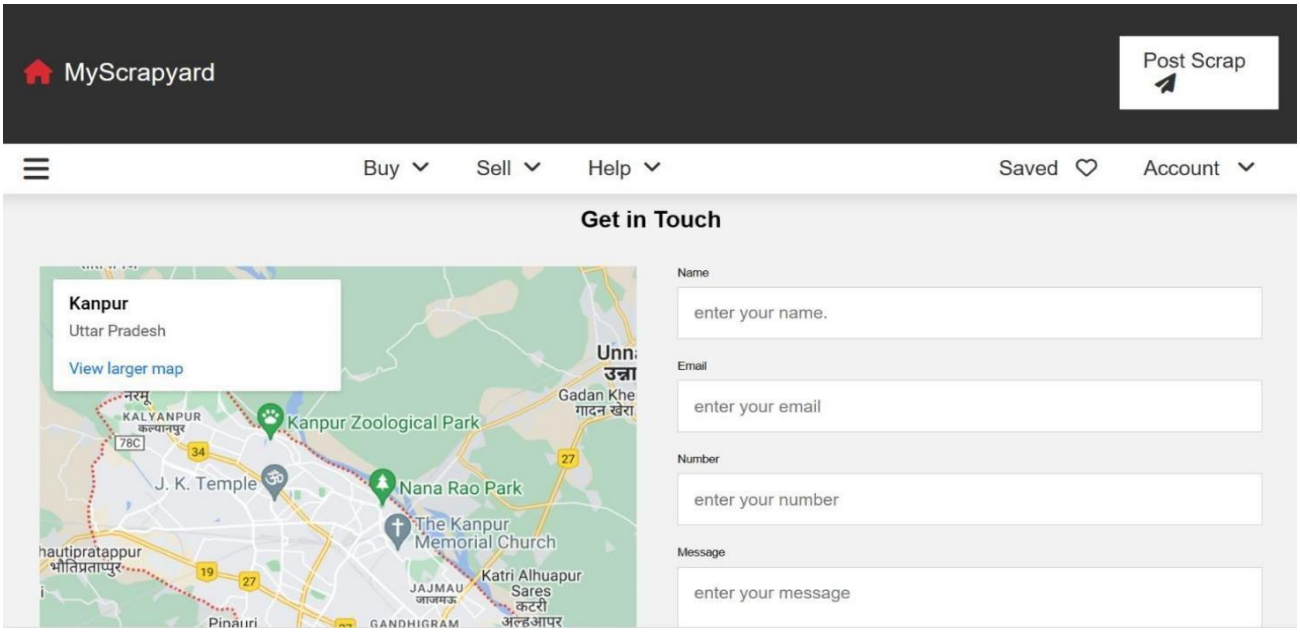


Fig-5 Contact section of the page

VII. FUTURE SCOPE

This Application will be providing an easy-to-use interface. Maximum cities, villages and towns will be covered in future for users to use this application and book a Recycler guy online with just few clicks. Ongoing rates of the Scraps and their types will be provided depending on the Scrap Markets in the area. Receipts will be provided for the confirmation of the exchange of scrap between Recycle Guy and the User. Option to select scrap type will also be provided whether it is a Paper Scrap or old bottles or broken furniture or any sort of E waste etc. Management of the scrap in most efficient way is the primary concern.

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