**Software Project Lab - II**

**Project Name :**

Mr. Bin

A commodity exchange and recycling application

**Submitted To :**

SPL Program Committee

**Submitted By :**

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**Date of Submission :**

5 February, 2022



## Introduction

Mr. Bin is a dynamic web application which serves as a medium of increasing the reusability of commodities that are left unused at households. Through this app, a user can exchange a commodity with other users. The most common unused items are old Books, clothes, plastic Items, electronics, glassware etc.

A certain item can be exchanged or recycled based on its current physical conditions. If a product has recycling certifications, then and only then it can be traded with other items as per the seller’s wish list. A buyer can bid on a product and can make contact with the seller regarding confirmation and exchange information. If the seller opts to recycle, then an estimated value will be generated against the product, and a recycler will be informed to collect the product against the generated price. Furthermore, a user can donate items like clothes, books to libraries, NGOs through our app.

Based on recycling, trading & donations, a user will get loyalty points which can be further availed to get discount from collaborated brands.

## Scope of the Project

#### Project Goal

The goal of this project is to build a web application which will create a platform to connect users in order to exchange, recycle and donate useless commodities.

#### Features:

1. Seller will upload the information of the commodity (Image, amount, age and physical conditions)
2. Seller will select any of three modes in the app:
   1. Exchanging
      1. Seller will upload the wish list of things that she wants to exchange with
      2. Other uses will see the ad and bid for exchanging with the item
   2. Recycling
   3. App will estimate a value and send it to the user.
   4. If the user confirms it, our recycler will go to the user to collect the recyclable commodities and pay the user
   5. User can connect to him directly

c. Donation

1. User can select a nearby NGO and confirm donation of the item
2. Our app will provide the information of the user to the NGO and they can pick the donation from the user’s doorsteps
3. Application will run the image submitted by seller where it is checked for automatic authentication to check for spammers.

## Technologies to be used

* Frontend : ReactJs
* Backend : DotNet
* Database : MondoDB

## Motivation

Urban areas of Bangladesh generate 633,129 tons/year of plastic waste and out of this, 51% plastic waste (which amounts 3,23,000 tons/year) is being recycled. Waste Concern’s research finding shows that with improved recycling, Bangladesh can save US$ 801 million every year.

Our app fulfills the following goals:

* Wastage & Pollution reduction
* Greener Earth
* ESG principles are fulfilled
* Recycling is encouraged
* Cost Reduction
* Revenue Generation
* Employment

## Work Plan

We plan to continue our project following the given order:

* Project Proposal Preparation
* SRS Report Documentation
* Building the complete Project
* Development
  + Build the Front end
  + Build Database
  + Build Back end
  + Testing & Debugging
* Deployment of the Final Project
* Final Report Writing

**Supervisor’s Approval**

**Project :** Mr. Bin

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**Submission Date :** 5 February, 2022

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**Supervisor’s Signature :**