**Requirements Document**

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| Course | CIS 4911 |
| System | (IBM) Track and keep score of and compute a group's sustainability efforts |
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| Date | 9-8-2014 |
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# Overview

The main goal of the project is to develop a software application which entices people to recycle and keeps track of their efforts. The application will also have a “competitive spirit” built in, which means that recycling efforts will be compared against other registered users and groups. Users who excel in recycling will be provided some sort of reward in order to entice them in continuing the recycling behavior.

# Introduction

Introduce the introduction (one or two paragraphs)

## Problem Definition.

Currently, there is no software application that tracks peoples recycling efforts. We want to build an application that tracks recycling efforts.

Since recycling and keep track are completely voluntary we also want to build in some sort of reward aspect into the application, to entice people to keep track of their efforts.

## Scope of system.

## Terminology - Definitions, acronyms, and abbreviations.

## Overview of document – brief explanation of what to expect in chapters 2 through 6.

In Chapter 2 we will go over what is currently being done in terms of recycling efforts. Since there is no real software behind recycling efforts done by individuals, the manual process being done will be explained.

# Current System (limitations and problems) – either existing system or manual system that is being automated.

From my brief research, I combed the WWW in regards to what behavior is related to recycling.

The earliest form of recycling that comes to mind, is not the big blue bins I have sitting in front of my yard as I write this. Rather, it is being 8 years old and standing in front of a supermarket with a very slow line of about 15 people in front of me. These 15 people had about 4 huge trash bags of nothing but aluminum soda cans that they slowly pushed into a machine, one by one. The ultimate goal you was to collect 5 cents per can.

Today I’m 36 and I still find these same people at the gas station rummaging through the green trash bin for cans (among other things).

Before I did my research I assumed the 5 cents was given because that is the value of the scrap metal amount, but I was wrong. The 5 cents is for the cost of doing business of recycling the bottles by the bottling company. There is actual legislation in place for doing such a thing, commonly called, Container Deposit Legislation (see <http://en.wikipedia.org/wiki/Container_deposit_legislation>). Unfortunately, in the United States, the law is not a federal matter, it is a state matter, and so only a few states have passed it. Fortunately, even though no law has been passed, the bottling companies still abide by it in most states.

# Project Plan (This deliverable only)

Introduce the project plan section (one or two paragraphs)

## Project organization – assignment of roles for this deliverable.

Monica Del Prado will be working on all the front-end website aspects of the application.

Jorge McGarry will be working on all the front-end mobile aspects of the application.

Monica Del Prado and Jorge McGarry will work jointly between the backend aspects of the application, for both the website and mobile platforms.

Monica Del Prado and Jorge McGarry will work jointly on the documentation of the application.

## Work breakdown – identification of milestones and deliverables (refer to project schedule in Appendix A and the diary in appendix B).

## Cost Estimate – cost to develop the software system.

# Proposed System Requirements

Introduce the chapter (one or two paragraphs)

## Functional Requirements – describes high-level functionality

Use the following format:

*The system shall …*

For each functional requirement state the associated non-functional requirements, if any, for *Usability, Reliability, Performance,* and *Supportability*.

## Analysis of System Requirements

Analysis models – contains the complete functional specification and is mainly for the designers and programmers. This section describes the diagrams in the Appendices B - D and validates the models against the use cases.

### Scenarios

### Use case model

### Static model e.g., object diagrams, class diagram

### Dynamic model e.g., sequence diagrams or state machines

# Glossary - define terms used in document, especially domain specific terms.

# Appendix

## Appendix A - Complete use cases

## Appendix B - Use case diagram using UML

## Appendix C - Static UML diagram

## Appendix D - Dynamic UML diagrams

## Appendix E - User Interface designs.

## Appendix F - Diary of meeting and tasks.

# References

***Please email me the UML diagram in one file before the presentation.***