## C2C Software Requirements Specification v1.0

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# Introduction

## Purpose

This software requirements specification covers a proposed ecommerce site to aid the trading process particularly in the Ugandan market. This document will give an explanation of the system from both a customer and technical point of view.

It is intended for system users and future product developers as modifications may be required. Additionally, product developers and systems integrators should reference the operating system framework definitions to ensure system-level interoperability.

## Scope

The system will implement a secure and automated consumer to consumer interaction mechanism and will include consumer product submissions and reviews within the Ugandan market.

The main contribution of this system is that it offers a combination of features for a typical e-commerce system like EBay, Amazon and Consumer-to-Consumer (C2C) features of ePinions. This kind of implementation is useful for deterring bad behavior in a market with little presence of e-commerce trading systems.

The implementation of such a system is expected to give consumers a platform for broadcasting their experiences about products that they would have purchased offline. In that way sellers would care to take care of consumers to avoid receiving negative reviews in the online reputation system.

Unlike the current manual interaction systems in the country, C2C will allow both sellers and buyers automate their tasks in a business model. Hence, users including consumers will be able to save time and money in accessing information about products on the local and national market.

## Definitions and Acronyms

C2C – Consumer to Consumer

## Overview

This document covers the overall description of the system including the system perspective, interfaces and the overall functionality of C2C.

# The Overall Description

## Product Perspective

Although there a number of ecommerce sites on the web today such as Amazon and ebay, C2C tries to build on and contrast from them in the following occasions:

* The types of products under consideration
* C2C user reputation depending on a user performance as regards his/her reviews
* Local stores considered in the system
* The type of consumer interaction with the system
* Inability to shop online by C2C

MIS will ensure an organized and secure communication of basic, but necessary and important, information between end to end consumers.

## Product Features

* + 1. **User management/Accounts**

Access to the system shall be for both registered and unregistered users with varying access control features for both sets of users. C2C has the right to disable any user who commits inappropriate behaviour on the system. If a user is inactive for half a year, his/her account will be disabled by the administrators and a notification will be delivered via email.

1. **User Login**

Only registered users will go through the login procedure. The login form will process username and password combination and retrieve its profile. Beyond this page, any unauthorized access will be strictly filtered since consumer information contains sensitive personal material such as their home address. Once a login is granted, a system user will be taken to the user account page.

The user account page is used to view and process deletion of products attached to the logged in user account, change password and edit profile information (details in user registration below)

1. **User Registration**

The user registration feature is provided to register a user so as to gain more system privileges. Although the administrator has access to the feature of adding new users, this page will only self-serve users registration. This way, an administrator will not need to add users manually. The user registration form will accept a username, password, and e-mail chosen to be registered by the new user. For security purposes, all this information is subject to thorough validation.

On registration, an account is inactive until a confirmation link sent to the new user email is followed.

After confirmation, an account is active and a user has the ability to update his/her profile as additional information may be required. This includes names and relevant contact information.

1. **User reputation**

Usage of the system by a registered member entitles him/her to a reputation. This is a value between 0 and 1000 inclusive. The more the reputation, the more impact your ratings make. If a user with a reputation 0 makes a rating, it does not make any impact on the number of rates in the system and overall rating of a product.

Users earn reputation from managers and users as a reward for their outstanding reviews and constant usage of the system

Consumer

Browse products

Register

Login

Contact C2C

Receive confrmation email

Activate account

Browse products

Contact C2C

Submit products

Review products

Comment on a review

(rate user)

Request to Delete product

Update profile

Search products

Report review

Figure 1: A simple consumer interaction model

1. **Main Menu (User Mode)**

Once a user is logged in with their username and password, he/she is able to perform the following tasks:

* **Update Personal Information:** A system user can update his/her own information including contact information, permanent address, emergency contact and a URL.
* **Account maintenance:** A user can change his/her password for the login and e-mail address under the user registration. This information will be used for an account information reminder in case one forgets his/her user information. A user will also be able to check their product listings if they have posted any.
* **Submit Products:** A logged in user will be able to post his/her own product information into the system from which other users can get to check products. Product informatio includes:
* Name
* Image if available
* Price
* Brief description
* Category
* Store
* Submitter
* **Submit Product Reviews:** A user can be able to review a product as regards his/her usage by writing a comment about it and giving a rating. The rate value given by a user depends on the his/her reputation. Comment information includes:
* Title
* Content
* Store
* Product rating
* Reviewer
* **Comment on a Product Review:** Once logged in to the system, a user can post a comment on a product review. To rate a reviewer, a commentor with a good reputation contributes much to the reviewer reputation. Information on this includes:
* Comment
* Reviewer Attribute Ratings (Depends on Objectivity and Completeness of a review)
* Commenter

1. **Main Menu (Administrator Mode)**

A logged in system administrator will be able to perform all the above normal user tasks but with more control that includes creation and deletion of products and their categories. An administrator will also be able to approve product reviews before they are published.

* + 1. **Product management**

The activities that involve product management include:

* Submission of products
* Product reviewing
* Deletion of products
* Users will be able to search for products in the system
  + 1. **Category management**

The activities that involve category management include:

* Creation of new categories
* Deletion of categories (Products are not affected)
* Update of existing categories
  + 1. **User Review Management**

For security purposes and user integrity, all product reviews shall be treated with utmost attendance. Information to be tracked includes the review content, review date and source of the reviews using IP addresses and ensuring only logged in users perform the reviewing. All product reviews have to be approved by the system administrator before their publication.

# 

## User Classes and Characteristics

In order to perform the features described in section 2.1, there are two user classes required: A normal user class and an administrator class. All logged in users will have a normal user class account; only site administrator will have access to the administrative console. However, an administrator can be added from their console as needed. Each access class is referred to a certain access level throughout the process. When a login is performed, each user class is taken to their appropriate menu.

## Operating Environment

C2C will run on Apache2 operating on an ubuntu Server (Lucid). The ubuntu server will be running a MySQL database, python 2.4 and Django 1.2.5.

## Design and Implementation Constraints

**Funding**

To develop and implement this system into a fully functional one will require funding to purchase tools such as a domain name for the site, a dedicated hosting server and a full time system administrator.

## User Documentation

All user documentation links will be provided on the website where the system shall be running. All user documentations will be in PDF format. Following is the expected amount of user documentation:

* Administrator’s manual for C2C
* User’s Manual for C2C

Along with the above, any document published for development purposes will be available through the same web site.

## Assumptions and Dependencies

This proposal is made under the assumption that users have basic computer skills

A simple Context Diagram of the C2C system

Consumer

Consumer

C2C

1

2

3

4

Key

1

Products

2

Product reviews

3

Product details

4

User Ratings