SRS Documentation

# Introduction

## Purpose

The purpose of this project is to be an interface of interaction between the user(students) and the web portal(server),wherein the students search for the desired utilities and books (reusable) and find their sellers, who are willing to sell their reusable products at an agreed price.

## Document Conventions

The above head description has been underlined to denote the various fields that give information about the project,where every requirement statement has it own priority.

## Intended Audience and Reading Suggestions

This srs document is meant to be read by the developers, project managers ,users, testers and document writers. The rest of the srs can be broadly classified into the following

Overall description of software

External interface requirements

System features

Other nonfunctional requirements

Other requirements

And this is the order the srs should be read

## Product Scope

The software will be designed and implemented to serve the needs of the people who consider reusing products rather than buying newer ones such as books and other utilities in a college or university scenario. The benefits include the user getting a product at a lower price compared to the newer price, only drawback being that it is used. On the other side the seller is profited as he is able to get rid of things he does not need and also earns some quick money selling his product. The objective and the goal is clear, it is to promote reusability and recyclability through a small college/university setup. Due to users and traffic on the web app/website, the web app/website holders also get to earn money by allowing advertisements to be linked to their application/website through google adsense and others. We can build a good customer base through advertising it in shows , functions in colleges ,advertising it in things bought and sold in college stores and sponsoring events in order to familiarize people with our software.

## References

For the time being we do not have any references but on completion we will have references to this project

# Overall Description

## Product Perspective

This is a new ,self-contained product which will denote the characteristics of creativity and innovation by implementing the ideals of reusability.

## Product Functions

1. The user makes an account with our web application
2. The user enters his/her details(name, email, mobile number etc)
3. The user is given the freedom to buy/sell products
4. He can set the price of his product that he wants to sell and in turn can see the price of the product that he wants to buy
5. If he wants to buy an item he can do so by searching it from our database and as soon as he find the desired product , the seller’s contact details such as email address and mobile number will be provided so that he can contact him, meet him do the necessary negotiation and buy the product of his choice.

## User Classes and Characteristics

The different classes of users in this scenario can be students , workers ,staff etc. The most important ones being the student through which most of the use of the software will be carried out followed by the workers and other staff members who want to use this software for their benefit either for selling a piece of product they have or adding to their inventory a product of their choice

## Operating Environment

The software will be platform independent and will operate as a web application running on android, ios ,and windows operating systems with no special hardware requirements or memory space.

## Design and Implementation Constraints

Implementing the web application as a platform independent entity without much lag and access time making it a smooth hybrid across all platforms would be challenge for the developers .Often after a particular product has been sold ,it is not required to be present in the inventory of the user’s account, this removal of the sold product is required from the user’s side , so that the next time if any other user’s queries a similar product he will be given the option of choosing the same product which we know is already sold.So this sort of maintenance is required from the user’s side , database design and administration issues could result if inexperienced or improper methods are adopted so proper maintenance of the database would also be a challenge

## User Documentation

User manual has not been made explicitly for this software

## Assumptions and Dependencies

We assume to have a proper web hosting package setup , will all available database space needed and extendable database feature as an when the database grows , we depend on our users to provide us with proper information about the products that they want to sell and be distinct and clear in providing their details(name, product name, email address ,phone number)

# External Interface Requirements

## User Interfaces

The typical user interface shall be designed using bootstrap ,css and color.css in order to extend the interactivity between the user and the software , layout constraints, standard buttons and functions shall be used UI to facilitate the addition of new user,addition or deletion of an item by the user , edit/update a user profile by the user etc

## Hardware Interfaces

The Hardware used could either be the user’s mobile phone or tablet, operating systems supported is android ,ios ,windows since it will be a hybrid application

## Software Interfaces

The database used will be My Sql , will run on android ,ios and windows operating systems .Google adsense will be linked to this software for advertisements and monetization

## Communications Interfaces

The software application involves the user giving his own email address, he can also see the email address of the seller, he can click on the seller’s email ,to which he will be redirected to the a secure email sending platform through which he can send his email and contact his potential seller. We will use gmail for this the user can use uploads method to submit the pictures of his product ,which would be visible to the buyer on his laptop screen. Communication security or encryption issues, data transfer rates, and synchronization mechanisms would be illustrated on implementation

# System Features

**User login**: The user can make an account with us wherein he can fill his profile details including his name ,email address, phone number

**Search:** the user can do a search of items that he wants to buy or simply search the list of items available in the database

**Contact** : if the user is interested in buying a certain item then he can avail the contact option which is present to provide the user with the details of the seller such as the email address of the seller, and his mobile phone number

**Upload**: if the user wants to put up an item on sale then he can do so by clicking on the add an item option and can upload the picture and fill in the required details of the product he wants to sell

**Feedbac**k: a suggestions or a feedback form will be provided to the user of each account so that he can provide us with the necessary feedback to improve our services and if possible enhance or add more features.

**Suggestions**: we will have an automated module that generates the picture and details of some products and details about them such as its seller ,its condition and price , related to the user’s previous search history

* FR01: The students shall be able to view the source code for the entire application.
* FR02: The students shall be able to, individually, view and understand the code for all pieces on the UI.
* FR03: The students shall be able to debug the application’s source code using Firebug, which is an online tool to inspect, edit, and monitor HTML, CSS, and JavaScript requests directly on the web

## User: View Categories and items

### Description and Priority

The users shall be able to see the home page of the OLA application when they first run the program. The users shall be able to view the different categories, select categories, browse through the items in each category, and add items for ADD. The users shall be able to view more information about each item.

4.2.2 Functional Requirements

* FR04: The users shall be able to view the categories on the application’s home page.
* FR05: The users shall be able to view items in different categories.
* FR06: The users shall be able add items for ADD.
* FR07: The users shall be able to view more information about an item.
* FR08: The users shall be able to browse through the available items.

## User: View Saved Items:

### Description and Priority

After the first run of the application, the users shall be able to see their designated home page. After browsing through the items and adding items to the shaved items, the users should be able to view the items in the Saved Items category. The users shall be able to delete items from the saved items.

4.2.2 Functional Requirements

* FR09: The users shall be able to view the items added to the saved items list.
* FR010: The users shall be able to continue viewing items .
* FR011: The users shall be able to delete items from the saved items list.

## Login/User Authentication

### Description and Priority

No description as such.

4.2.2 Functional Requirements

* FR012: The users shall login or register using the user authentication form.
* FR013: The users shall not login or register if the information is incomplete or invalid.

## User: Place Advertisement

### Description and Priority

The users can post an advertisement on his profile.

4.2.3 Functional Requirements

* FR014: The users shall place an ADD by completing the information in the advertisement form.
* FR015: The users shall not be able to place an advertisement if the information in the advertisement form is invalid or incomplete.

## Admin: View User Information

### Description and Priority

The admin can see the database and can changes in the UI.

4.2.2 Functional Requirements

* FR016: The administrator shall be able to view all the users’ information that place the advertisement form.
* FR017: The administrator shall be able to delete items from the main page of the OLA application.

# Other Nonfunctional Requirements

## Performance Requirements

All efforts will be taken to make the system more interactive and delays will be lessened. In case of opening of window forms ,of popping javascript error messages and saving the settings and sessions there will least delay as possible. Also efforts shall be made to realise the connection betweem the web app and the server as soon as possible

## Safety Requirements

We will try to implement a no robot use test so that it is ensured that the software is only used by humans . Adopt methods to prevent sql injections and unauthorized access of users accounts , removal of data which is of no longer use

## Security Requirements

The srs will contain authentication requirements in detail. These include preferred strategy for resolving forgotten passwords by sending the link to rest the user’s password once after the users enters his/her email address, secondly implementing expiring inactive sessions, thirdly multiple user access from the same account can also be eliminated.

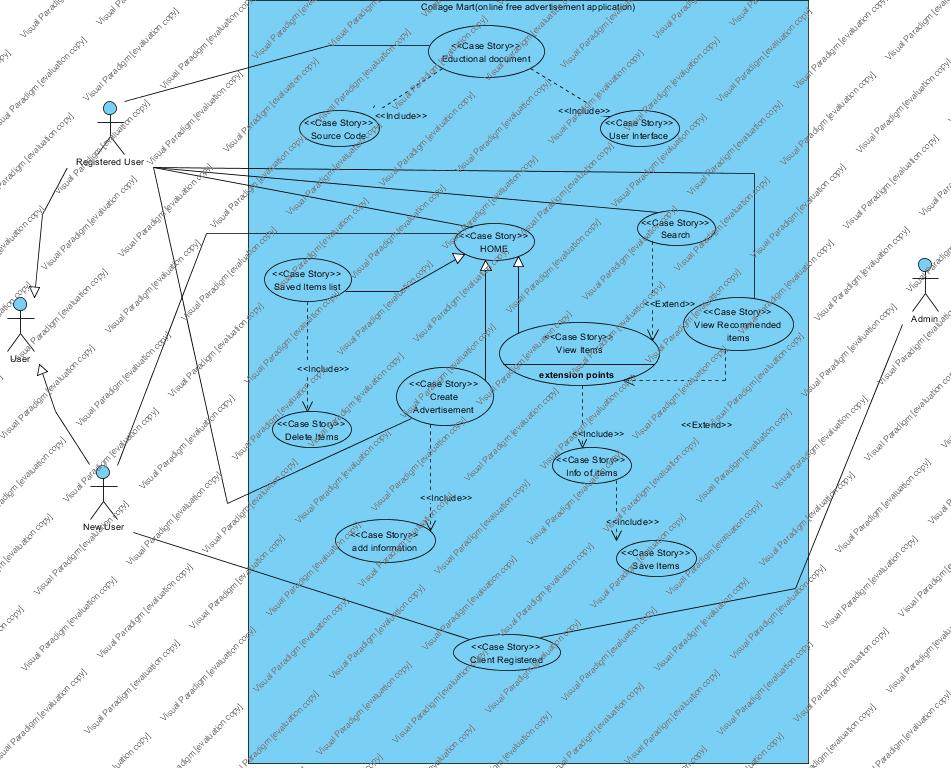
## Software Quality Attributes

The software shall be updated as and when required to do so, it will be adaptable to the requirements of the users ,its availability will be made to college students , the correctness of the language or text shall be ensured , information represented will be verified , the application will be made flexible to adapt to the changing environment and the needs of its users enhancing its interoperability ,portability, reliability, error control coding shall be done till a certain extent so that the users are guided if they make a mistake and rectify the same.

## Business Rules

We have planned to link our web application software to google adsense through which our application will be monetized, due to traffic on our website , advertisements will be displayed and so revenue will be generated.

Use case diagram

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