# SOFTWARE REQUIREMENT SPECIFICATION

## 1. Introduction:

Software Requirement Specification is a document that completely describes what the proposed software should do without describing how the software will do it. The basic purpose of SRS is to bridge the communication gap between the parties involved in the development of the software. SRS is a medium through which the client and user needs are accurately specified. A good SRS should satisfy all the parties- something very hard to achieve- and involves trade-offs and persuasion. Another important purpose of developing an SRS is helping the users understand their own needs.

**The main advantages of SRS are:** It establishes the basis of agreement between the client and the supplier on what the software product will do. It provides a reference for validation of the final product.

* 1. **Purpose:**

The main purpose of this project is people invest their money to get maximum profit and knowledge about our Online trading system. Here all type of user can go and analyses the data of different field and get maximum profit for future investment.

* 1. **Scope:**

The Project investigates the entry threshold for providing a new auction service channel via the real options approach, where the entry threshold is established by using an Online auctioning system designed for the use of normal users (individuals), Industrialists, Entrepreneurs, Organizations and Academicians under transaction rate uncertainty.

* 1. **Definitions, Acronyms, Abbreviations:**

1. **DFD:** Data Flow Diagram.
2. **ADMIN:** The Administrator.
3. **CFD:** Context Flow Diagram.
4. **PHP:** Hypertext Preprocessor.
5. **SQL:** Structured Query Language.
6. **IEEE:** Institute of Electrical and Electronic Engineering.

**1.4 References:**

**Books:**

* Pankaj Jalote, An integrated approach to software engineering, ed. 3 ,

Publication: Narosa Publishing House.

* Nixon (Robin), Learning PHP MySQL and JavaScript,

Publication: Shroff publishers & Distributors Pvt Pankaj Jalote Ltd.

**Website:**

* http://[www.ebay.in](http://www.ebay.in)
* http://[www.w3schools.com](http://www.w3schools.com/)
* https://www.slideshare.net
* https://www.listia.com

**1.5 Overview:**

This system provides an easy solution to users to buy or sell their product with maximum profit online. SRS includes two sections Overall description and Specific requirement.

* Overall description will describe major role of the system components and interconnections.
* Specific requirements will describe roles & functions of the users.

**2. Overall Description:**

This section will contain information about the project as a whole including perspective & constraints.

**2.1 Product Perspective:**

The Online auction system is an independent system. This system involves two users i.e., buyer and seller. The Database connection is provided online to make faster and easy access to data retrieval.

**2.2 Product Functions:**

* Customer must have a valid User Id and Password to login to the system.
* If there is a new user he has to register for this auction process.
* If a wrong password is given three times in succession, that account will be locked and the customer will not be able to use it. When an invalid password is entered a warning is given to the user that his account is going to be locked.
* User can search for the product he wants.
* User can view his monthly as well as annual auctions. He can also view future auctions.
* Administrator can take a backup of the database for every auction that is happening periodically.
* All users are authenticated to avail the services.
* FAQ section is also included for end users benefit.

**2.3 User Characteristics:**

* User should have basic Knowledge about Computers.
* User should be familiar with internet.
* No prior knowledge about PHP is required.
* No prior knowledge about database management is required.
* This is basically a multiple user system, with different login id and password.

**2.4 General constraints:**

* This application can be installed in any Operating System.
* Each user must keep their password as confidential.
* Only admin can control user addition and deletion.
* No error condition shall cause the application to exit prematurely.
* The users access the online auction system from any computer that has internet browsing capabilities and an internet connection.

**2.5 Assumptions and Dependencies:**

* This system can be used only if the user login with correct User Id and password.
* The future transaction can be carried on only with the permission of the administrator.
* The Administrator should be careful while modifying or deleting any data which will cause inconsistency in the database.
* There is only one Administrator.
* The code should be free with compilation errors/syntax errors.

**3. Specific Requirements:**

**3.1 External Interface Requirements:**

The external interface should be an interactive interface. The interface should be simple and easy to use. It should allow the administrator to login the system and perform appropriate operations.

**3.1.1 User Interfaces:**

There are two types of users for this system. One is Seller and other is Bidder. Both the user’s user interface will be graphical user interface. The graphical user interface mainly consists of Hyperlinks, data entry fields such as the email Id field, password, etc. The user interface for the software shall be compatible to any browser such as Internet Explorer, Mozilla or Netscape Navigator by which user can access to the system.

**3.1.2 Hardware Interfaces:**

* Processor : Pentium® dual core or above
* RAM : 2GB and above
* Hard disk Utilization : 40GB and above
* Input Devices : Mouse, Keyboard
* Output Devices : Monitor, Printer

**3.1.3 Software Interface:**

* Operating system : Any Operating System
* Browser: Internet Explorer, Google chrome, Mozilla Firefox.
* Application Server: Wamp Server.
* Other Software: Adobe Reader, Sublime Text Editor.
* Language: PHP 5.4
* Database (Back End):My SQL
* Web components:HTML5, CSS

**3.1.4 Communication Interface:**

The main communication protocol will be Hyper Text Transfer Protocol (HTTP). This will be used to transfer information back and forth from the client to the server. HTTP GET & POST will be used to send the information securely over the web browser.

**3.2 Functional Requirements:**

**3.2.1 Module 1:**

**Admin Module:** Admin can manage the users as well as Admin can generate the pay slip and Reports of the users.

* **Manage Users:** The Administrator assigns new users when a new client joins the online auctioning. Also he can delete an account when any of the user leave the auctioning organization.
* **Category Management:** This module provides all faculties to admin for managing the different product category.
* **Manage Bid:** An Admin can manage the Bidding activity and can decide the winner based on highest bidding price.
* **Generate Reports:**  The Administrator can generate report of Product, users, bidding report, payment & winners report.

**3.2.2 Module 2:**

**Seller Module:** Here the seller can upload the product and also can view his own bidding details, Purchase report, auction winning report, etc.

* **Login:** Login module includes various utilities like User registration, Authentication, Change password and Forgot password.
* **Add Product:** Seller can add a product. He will specify the product name, select category, minimum bid price and description. An image of the product can also be uploaded for the bidders who want to buy the product.
* **Edit Product:** Seller will be able to edit information of an uploaded product.
* **View winners list:** The seller can view the winners list.

**3.2.3 Module 3:**

**Bidder module:** This module is for the buyer or the product bidder who can see the list of products up for bidding and place his/her bid on the product.

* **Login:** Login module includes various utilities like User registration, Authentication, Change password and Forgot password.
* **Search:** Search module helps the user to search the product they want.
* **Bid module:** User can bid his desired products. If the bidder wants to bid a product he must bid with a higher amount than the last bid.
* **View details:** Users can view the details of the product such as, product name, minimum prize of the product, product image and other information about the product.
* **Feedback:** Bidder can send the feedback or satisfaction of a bidding and based on this user may give ratings for different sellers.

**3.3 Non-Functional Requirements:**

**3.3.1 Performance Requirements:**

* The physical machine to be used in the Online Auction needs to have internet access in order to connect to the database.
* The software shall take initial load time depending on internet connection strength which also depends on the media from which the product is run.
* Queries will return results based on internet connectivity speed.

**3.3.2 Design Constraints:**

* Labels, Textboxes, Text area & Dropdown List boxes, Submit Button etc help in selecting user options easily.
* Validation whenever applicable based on the database.
* Keyboard & mouse can be interoperable.
* It has GUI which provides better Look & Feel.

**3.4 Other Requirements:**

**3.4.1 Safety Requirements:**

* In case the user forgets or loses Password, the repair functionality helps by choosing “forgot password” option in the main login window.
* The online auction system will use the secure authentication for the system administrator. Login Id & Password is associated with the system administrator to provide security over the system.
  + 1. **Security Requirements:**

In this section we will look at the most common security requirements.

* **Fairness:** is properly the most important property required for an auction. Roughly it means that all participants should be treated equally.
* **Confidentiality:** of bids is often seen desirable.
* **Anonymity:** of bidders is often seen desirable.
* **Minimization of trust:** is one party, particularly the auctioneer, is a generally desirable property for any secure system. The trust may be required for different properties, particularly for anonymity and for fairness.
  + 1. **System Attributes:**
* Maintainability: This system can be easily maintained, since it is simple to use.
* Availability: Availability of the system is guaranteed for 24\*7 hours. Therefore, auction can be conducted at any time.
* Scalability: System can be scaled later according to the requirements of the user. It can be extended to the other departments of the college if necessary.
* Compatibility**:** This System will be Compatible with almost all the web servers.