**Software Requirements Specification**

**for**

**Distributor 2 Restaurant**

**Version 1.00 approved**

**Prepared by Mario Velasco, Zach Tapia, Judith Cabrera, Spencer Young**

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# **Table of Contents**

Table of Contents................................................................................................................... pg 3

Revision History..................................................................................................................... pg 4

1. Introduction................................................................................................................ pg 4
   1. Purpose........................................................................................................... pg 4
   2. Intended Audience and Reading Suggestions................................................ pg 4
   3. Product Scope................................................................................................ pg 4
   4. Definitions, Acronyms, and Abbreviations .................................................. pg 4
   5. References......................................................................................................pg 4
2. Overall Description.................................................................................................... pg 6
   1. Product Perspective........................................................................................ pg 6
   2. Product Functions...........................................................................................pg 6
   3. User Classes and Characteristics....................................................................pg 6
   4. Operating Environment.................................................................................. pg 6
   5. Design and Implementation Constraints........................................................ pg 7
   6. User Documentation...................................................................................... pg 7
   7. Assumptions and Dependencies.................................................................... pg 7
   8. Apportioning of Requirements...................................................................... pg 7
3. External Interface Requirements............................................................................... pg 8
   1. User Interfaces............................................................................................... pg 8
   2. Hardware Interfaces....................................................................................... pg 8
   3. Software Interfaces........................................................................................ pg 8
   4. Communications Interfaces........................................................................... pg 8
4. Requirements Specification....................................................................................... pg 9
   1. Functional Requirements............................................................................... pg 9
   2. External Interface Requirements................................................................... pg 10
   3. Logical Database Requirements.................................................................... pg 10
   4. Design Constraints......................................................................................... pg 10
5. Other Nonfunctional Requirements........................................................................... pg 11
   1. Performance Requirements............................................................................ pg 11
   2. Safety Requirements...................................................................................... pg 11
   3. Security Requirements................................................................................... pg 12
   4. Software Quality Attributes........................................................................... pg 12
   5. Business Rules............................................................................................... pg 12
6. Other Requirements................................................................................................... pg 12

Appendix A: Glossary............................................................................................................ pg 13

Appendix B: Analysis Models............................................................................................... pg 14

Appendix C: To Be Determined List......................................................................................pg 15

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# **Revision History**

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| **Name** | **Date** | **Reason For Changes** | **Version** |
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# **1. Introduction**

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## **1.1 Purpose**

The goal of this project is to provide a professional online ordering tool, that connects small restaurants to local food distribution warehouses for the purpose of ordering restaurant supplies.

**1.2 Intended Audience and Reading Suggestions**

The intended audience of this document is the team of software developers responsible for the original deployment, and the future teams of developers that maintain the already launched product.

Some recommended reading that should be done beforehand, corresponds to the computer languages used in this project: HTML5, CSS3, mySQL, and PHP 7.0. Fundamental knowledge of each language should be understood before full comprehension of this product could be understood.

## **1.3 Product Scope**

Distributor2Restaurant (D2R) is an online web application, which will facilitate a quick service that allows a restaurant client to quickly find an appropriate warehouse distributor that is offering the products needed. D2R will also allow warehouse users easily manage incoming orders, and quickly locate the associated items ordered in their physical warehouse.

## **1.4 Definitions, Acronyms, and Abbreviations**

D2R - Distributor2Restaurant (product name)

## **1.5 References**

Some listed reading requirements include:

HTML & CSS: Design and Build Web Sites, Book by Jon Duckett

Modern PHP: New Features and Good Practices, Book by Josh Lockhart

HTML Official Documentation, Documentation by Mozilla (<https://developer.mozilla.org/en-us/docs/Web/HTML>)

(or sufficient skills in above mentioned subjects)

**2. Overall Description**

## **2.1 Product Perspective**

Distributor 2 Restaurant is a web based application that gives the user the ability to access a professional business tool that will allow their business to thrive and grow.

Typically, the implementation of a full inventory management tool would not be available to smaller businesses that may still be in need of one. That is what makes Distributor 2 Restaurant so amazing, it’s accessibility to smaller businesses. Software products that is comparable to our product are usually developed ‘in house’ by the large corporations for use in their own stores.

D2R brings this professional tool to smaller businesses looking for a professional solution.

**2.2 Product Functions**

Distributor 2 Restaurant will be a medium between a warehouse wholesaler to retailers via online webpage. The webpage will be compatible to view in mobile devices for a faster, more efficient way to send out bulk products.

**2.3 User Classes and Characteristics**

There will be two user classes. The wholesaler and the client.  
The most important user will be the wholesaler as they will be responsible for directly communicating with their clients. Clients will only use the webpage to in order to order directly from their wholesaler, or check their purchase history.

**2.4 Operating Environment**

Restaurant 2 Distributor will be ran through a an online server. It will be a compatible with any operating system that has the ability to browse online webpage

**2.5 Design and Implementation Constraints**

The entire web page will be programmed under PHP and SQL. The minimum hardware requirement to edit the webpage would be any computer with a keyboard and a text editor. The Memory required should be just enough to hold about 1000 lines of text code and an growing SQL Database.

## **2.6 User Documentation**

All clients will be given an Online Guide prior to their account creation. The format will be delivered through a PHP text webpage.

## **2.7 Assumptions and Dependencies**

The third party components to be used with D2R will be Google Chrome, Safari, and Mozilla Firefox. It is assumed that the webpage will have full viewing compatibility with the software listed. Any other third party web browser may not run the same. Operating system intended will be Windows 7,8,10, and Mac OSX.

## **2.8 Apportioning of Requirements**

There are no current plans in the future to implement other requirements.

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# **3. External Interface Requirements**

## **3.1 User Interfaces**

Restaurant2Distributor shows a simple table for restaurants managers that will show all local warehouse distributors. In each row of the table shows the name, address, phone, and web site of a warehouse which the user can also save individual or all results by clicking add to list. Once user has chosen warehouses for their restaurant, the user can click on and they can either order from the website directly or use the built-in feature that the user can order from within R2D . In the save list page, the search box connects to the to other databases from one or more warehouses and search items. The built-in feature allows the user to order from different warehouses as one purchase.

**3.2 Hardware Interfaces**

Restaurant 2 Distributor connects to SQL databases to collect and send data back to the user.

**3.3 Software Interfaces**

Restaurant2Distributor uses bootstrap and wordpress frameworks. Additionally, it uses google maps api to collect the necessary information for local warehouses.

## **3.4 Communications Interfaces**

Restaurant 2 Distributor will not have a registration link mainly targetted for restaurant managers. New users will need to call the number or email that is shown at the bottom of the page and follow the instructions. Once an id has been given, users can use the id as the user-name and password to log in temporarily and fill out the registration form from there.

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# **4. Requirements Specification**

## **4.1 Functional Requirements**

The system shall have a:

* Log in page for both Distributor and Client.
  + Username and password check
  + Check password key with pre-existing SQL database

Distributor shall have access to the item database containing all items for sale. The distributor will be responsible for managing the list however, the database should be self updating. If any item becomes out of stock, the system should notify the distributor by either changing the row color or in a notification window.

The client shall have a completely different interface that allows them to browse the products. When the client decides to purchase an item, the system shall will notify the distributor and automatically update the database. The items listed for the client will be updated in real time based on the distributor’s item database. Client side will have very few inputs, usually just one-click purchases with a drop down list of quantity. In an event where a client attempts to purchase an item that is out of order, the user shall be relocated to a error page stating that the object is out of stock.

## **4.2 External Interface Requirements**

Username Input.

This information will be provided by the Client and must be exact, but not case sensitive. It will be in the format of a text string. The information will be passed through a servlet and matched with the SQL database.

Password Input.

This information will be provided by the Client and must be exact, but not case sensitive. A password will only be allowed if the Username input has a valid key. It will be in the format of a text string. The information will be passed through a servlet and matched with the SQL database.

Both username and password input will be located on the same window on the same online directory.

## **4.3 Logical Database Requirements**

There will be two databases. One to contain the client usernames and their password key.

The second database will contain Warehouse location, Item ID, Quantity, and possibly more based if the vendor wants to add more. Only the developer will have access to the database username keys and the vendor will only have access to the second database.

## **4.4 Design Constraints**

The entire web page will be programmed under PHP and SQL. The minimum hardware requirement to edit the webpage would be any computer with a keyboard and a text editor. The Memory required should be just enough to hold about 1000 lines of text code and an growing SQL Database. Depending on the success of D2R, the memory for database of users may grow large enough to require more server database space.

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# **Other Nonfunctional Requirements**

## **5.1 Performance Requirements**

● Local about 100 terminals

● System should accommodate 400 users at anytime

● No limit towards amount purchased, unless out of stock.

This software will know the numbers of transactions that will succeed. The terminal will constantly update with the date and time. Therefore, performance won’t be an issue based on the server queries involving data. The server updates should only take less than 10 seconds as long as the bandwidth from the Internet of the user’s computer is good. Using mobile purchases should also take 10 seconds or less, as long as the cellphone has a steady signal. A good 90% of the transactions will be processed within seconds for any time frame.

## **5.2 Safety Requirements**

**Hazard Communication Standard: Safety Data Sheets**

With the [Occupational Safety and Health Act of 1970](https://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=OSHACT&p_toc_level=0&p_keyvalue=), Congress created the [Occupational Safety and Health Administration (OSHA)](https://www.osha.gov/Publications/3439at-a-glance.pdf) to assure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education and assistance.

Besides the OSHA certification, no other safety requirements have been identified yet.

## **5.3 Security Requirements**

This software program assumes restaurant owner and/or manager created a username and password to be able to access the warehouse. The program, for the project, has a hard coded login. The program will be implementing the paypal through the checkout system.

The PayPal **API** provides all of the security checks where it is certain that no fraud will be committed.

## **5.4 Software Quality Attributes**

Availability: **R**estaurant **t**o **D**istributor system will be available to users anytime. Delivering the items will be during 99% of the time between business hours.

Robustness: In case the connection within the system malfunctions in a middle of an order being confirmed or cancelled

Correctness: The algorithm will be correct with respect to the specification

## **5.5 Business Rules**

* **Identify the objectives of the facility**
* **Maintain safety stock levels**
* **Control the flow of goods**
* **Maintain quality control**
* **Use the right software**

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# **6. Other Requirements**

No other requirements have been identified yet.

# **Appendix A: Glossary**

# **Appendix B: Analysis Models**

# **Appendix C: To Be Determined List**