

# Elaboration Phase Specification

## Barker's Bakers

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# Systems Requirements

For the system requirements section, we were able to see how the different systems would work to make our database function. Within the system requirements, there were a series of functional and nonfunctional requirements. These requirements also help to make the system easier to use for the customer, administrators, and managers of the company. We put the different nonfunctional and functional requirements into 5 different categories. The categories helped to aim focus on the overall main parts of the system.

A few categories we had within the nonfunctional requirements were the Operation Requirements, Performance Requirements, Security Requirements, and Cultural Requirements. The Operation Requirements is the section that will give information about how the system itself will work. Also, in this, we can show what compatibility the system has with other systems. For any system to be a working system, it must be able to work with other systems. The Performance Requirements represents how the system will perform. The system that is used has to be an ideal system, that performs smoothly because if it lacks then the company and the customers won't be getting the best service they need. The Security Requirements section serves more as a protection for the e system. Each aspect should be protected so everything that our customers use within the database won't result in an error. The Cultural Requirements represents a part of the system that will broaden the system to other cultures outside of American culture. Being able to diversify and expand business is big for companies that plan to move forward.

A few categories within the functional requirements were the Customer Account Creation, Scheduling, Ordering Functions, Order Request, and Expenses. In the Account Creation section, we want customers to be able to create an account, so they can keep track of previous and future orders, while also keeping track of personal information used for orders. In the Scheduling section, we want customers to be able to see the schedule of events created by the company, so they are aware of dates the business is in service. For the Order Functions and Request section, we want customers and managements to be able to track which customers ordered which items and keep track of what they ordered for future orders that may be placed. Also, this is a good way of keep delivery information, so they customers location can won't have to constantly be repeated when placing an order. The Expenses section is for the management and administration to see how much the company is spending verse how much is coming in. This will give them a big idea on if the company is making a profit based on all the products being sold.

## **Non-Functional Requirements**

### **Operation Requirements:**

- The system shall be able to be used on mobile platforms.
- The system shall be able to be accessed through desktop platforms.
- The system shall Backup all created orders and information used.
- The system shall be able to restore a previous day's work.
- The system shall support updates to keep up with compatibility of mobile and desktop platforms.
- The system shall be available 24/7 unless the Administrators/Management choose to change website operation
- The system shall only allow the Administrators/Management to current inventory.

### **Performance Requirements:**

- The system shall be able to support all orders made
- The system shall be able to save existing customer information
- The system shall establish an option to save passwords and usernames of account creation.
- The system shall be able to support guest checkout functioning, to prevent saving of information
- The system shall support the order detail placed.

### **Security Requirements**

- The system shall be able to support safe payment methods
- The system shall be able to save payment history only to the account it is entered in.
- The system shall allow only the Administrators/Management to see customer payment details
- The system shall only allow the Administrators/Management to update personal company information
- Customers shall be able to see their orders anytime as long as the site is in operation
- The system shall only allow the Administrators/Management to adjust event dates created by the company.
- The system shall only allow Administrators/Management to contact customers directly.

# Design Procedures

## Procedures for Non-functional Requirements

### **Non-Functional Requirements**

1. The website content will be easily editable by Karoline
2. The website will be able to handle multiple purchases at the same time without downgrading performance.
3. The website will be visually distinguishable from similar organizations.
4. The system will be secure from outside attack
5. System data will be backed up regularly
6. Data transferred to and from the server will be encrypted
7. No sensitive user data will be stored on the website.
8. Permissions to application data will only be modifiable by an administrator
9. System will maintain receipt of all transactions.
10. The system will maintain relational integrity in the database
11. The system will be accessible from any location and at any time by both the administrator and customers.
12. The system will use a firewall

### **Designed Procedures for Non-Functional Requirements**

1. We will use WordPress to make the website easily editable.
2. The website will have enough bandwidth for multiple users to make purchases.
3. We will use a visually distinct color palette from the current one.
4. We will be secure from outside attack by using encryption and sanitizing data inputs.
5. We will back up our data automatically using a WordPress plugin.
6. SSL will provide encrypted transmissions.
7. Sensitive information will not be stored on the website.
8. Karoline will be the only one to give permissions to other people who need higher levels of access
9. The system will record all transactions, only containing Member Info, date of transaction, and amount.
10. Most RDBMSs enforce relational integrity on their own. The front end will notify the user of a failed input should one occur.
11. The system will have a reliable internet connection and be web hosted wisely.
12. The firewall will be able to be accessed securely in multiple places. SonicWall TC400 is a good option to be able to do this.