Pizza Ordering System

System Requirements Specification
Version: 1.0

Table of Contents

1. Introduction

1.1 Purpose of this Document

The purpose of this document is to clarify all needs from the side of the customer and other stakeholders. This document will only include the specifics of the implementation where it is necessary – to describe how the requirement or goal can be met on high level.

The project uses the scrum – agile methodology during development, thus in this document we documented the requirement in an agile way whenever possible – through user stories and story acceptance criterias (test cases).

1.2 Scope of the Project

The project consists of three main phases. The first phase will incorporate the gathering and analysis of requirements and the development of the system. During the second phase, the system will undergo user acceptance testing and the application administrators will be trained. In the third phase, the system will begin working in production and customer support will be available from our side.

2. Business Level Requirements

2.1 Customer Motivation

The customer (a pizzeria) is moving into the online world and in need of a system that enables them to expand their business. The customer wants to increase their revenue and profit through selling pizzas to a much higher number of potential buyers.

2.2 Project Goal

The objective of the project is to deliver a public web application, that pizza buyers can use to make orders from the customer. The system consists of a public website that buyers use and a private administration site that the customer can use to maintain the system.

The project will meet the requirement of increasing the number of potential buyers by the means of the public website. The exact number of the actual number of new buyers is not agreed upon by the parties.

3. Stakeholder Requirements

3.1 User Stories

3.1.1 User Handling

As a user, I want to

- register my myself into the system,
- log in and out of the system,
- save basic information for later use: name, address(es), telephone number, e-mail,
- be able to change this basic information,
- recover my password by e-mail.

3.1.2 Item Browsing

As a user, I want to

- browse pizzas and other items (soft drinks, ketchup, etc.) in a pageable list,
- filter pizzas based in what ingredients it contains or not contains,
- select allergens which I don't want in my pizza – these pizzas will appear with a pink border,
- add pizzas and other items to my shopping cart.

3.1.3 Ordering a Pizza

As a user, I want to

- order the items in my shopping cart,
- receive e-mail feedback about my order,
- follow the delivery live and online.

3.1.4 Making a Payment

As a user, I want to

- make a payment by simple pay, SZÉP card or cash,
- receive my receipt by e-mail.

3.1.5 Pizza Customization

As a user, I want to

- assemble a custom pizza by hand picking ingredients and selecting the size,
- order mixed pizzas (where the two halves of the pizza are of different types),
- share my custom pizza on online community sites (Facebook, Instagram, etc.).

3.1.6 Convenience Features

As a user, I want to

- save my favorite pizzas (custom pizzas as well), so I can order them quickly,
- see my last three orders in a well visible space,

- use a flashy, well-designed, responsive user interface (with blue as primary color),
- use the system on mobile devices,
- use the system in multiple, but at least two languages (Hungarian, English),
- switch to a design that is accessible to visually impaired users.

3.1.7 Providing an Admin Site

As an administrator, I want to

- have an admin site, so I can customize the user system,
- log in to the admin site with predefined credentials.

3.1.8 Adding Items to the System

As an administrator, I want to

- add pizzas to the customer system by defining ingredients, pizza name and price,
- add soft drinks and sauces,
- upload pictures to items.

3.1.9 Pizza Sales

As an administrator, I want to

- define sales periods for certain items, giving a percentage or fixed amount off the price,
- provide user specific sales to my customers,
- provide extra amounts off the price above a specific order value threshold or after a certain number of pizzas.

3.1.10 Constraints on Orders

As an administrator, I want to

- restrict drinks to non-alcoholic beverages,
- restrict the maximum price of an order on 100000 HUF,
- restrict the delivery area to Hungary,
- restrict the available pizzas to the ones ingredients are available to (I want to select an ingredient as run out, so pizzas with this cannot be ordered).

3.1.11 Ripping Off Customers

As an administrator, I want to

- put extra price on custom pizzas based on the number of ingredients,
- have mixed pizza price to be the more expensive half of the pizza,
- have my customers to subscribe for newsletters, so they might order more pizzas.

3.1.12 Google Search

As an administrator, I want to

- have my site to appear in Google search as top hit.

3.1.13   GDPR regulations

As a regulator, I want to

- apply GDPR regulations on the pizza site,
- want the users to be notified about their rights according to GDPR,
- not store data on below 16 years individuals.

3.2 Acceptance Cases for User Stories

3.2.1 User Handling

User registration:

1. Navigate to the opening screen.
2. Click the "Sign Up" option.
3. Enter your desired username and password.
4. Click sign up. The site will redirect you to the login screen.

Error handling for User registration step 3:

- If your password matches your username, an error message is displayed.
- If your password is less than 8 characters, an error message is displayed.
- If your password is a commonly used one according to our dictionary, an error message is displayed.
- If your password is entirely numeric, an error message is displayed.
- If your password and the password confirmation don't match, an error message is displayed.

User login:

1. Navigate to the opening screen.
2. Click the "Log in" option.
3. Enter username and password.
4. Click the "Login" button.
5. The system will log you in and redirect you to the home page.

Error handling for User login step 3:

- If a wrong username and password combination is given, an error message will appear. Usernames and passwords are case sensitive.

Logging out:

1. Make sure you are logged in.
2. Click the "Log out" option on the menu bar.
3. You will be redirected to the home page.

Resetting your password (if you are logged in):

1. Click "Reset password" on the menu bar.
2. Enter your email address.

3. Click "Send me instructions!".
4. You will receive an email and can follow the instructions to reset your password.

Resetting your password (if you are logged out):

1. Click "Log in" on the menu bar.
2. Click the "Reset password" button.
3. Enter your email address.
4. Click "Send me instructions!".
5. You will receive an email and can follow the instructions to reset your password.

3.2.2 Item Browsing

These steps require you to be logged in.

Pizza browsing:

1. Click "Pizzas" on the menu bar.
2. You can see the pizzas in the list.
3. Go to the second page at the bottom of the first page.

Filtering allergens:

1. Use the tick boxes on the top of the "Pizzas" page.
2. The pizzas containing the ticked allergens will appear marked in the list.

3.2.3 Ordering a Pizza

These steps require you to be logged in.

1. Put some pizzas in the shopping cart.
2. Click "Pay" on the left side of the screen.
3. …

3.2.4 Pizza Customization

These steps require you to be logged in.

1. Click "Pizzas" on the menu bar.
2. Click the "Create custom pizza" button.
3. Select your pizza size, toppings and sauces.
4. Click the "Add to cart" button.
5. The popup will close and the pizza will be added to your cart.

3.2.5 Convenience Features

These steps require you to be logged in.

Saving a custom pizza

1. Click the "Create custom pizza" button.
2. Select your pizza size, toppings and sauces.
3. Enter your pizza's name and click the "Save pizza" button.
4. Your saved pizza will be available at …

Last orders

1. Navigate to the home page.
2. Click "My orders" on the menu bar.
3. Your last three orders will be visible.
4. Click the "Reorder" button to navigate to the payment screen.

Languages

1. The language switch list is available at the top right corner.
2. Select the desired language.
3. The system will change language and the flag of the selected language will be visible.

4. Other requirements

4.1 Hardware Requirements

The system is expected to run in the following environment:

- 16 GB RAM,
- A modern, multi-core processor,
- Disk space depends on userbase.

This environment applies for the docker image containing the database and the application server.

4.2 Reliability and Performance Requirements

The system must have a 99% uptime in production. The system is expected to handle 20 parallel user sessions on the hardware defined above. This can be scaled later using clustering and additional hardware resources.

4.3 Software Requirements

The website must be accessible from browsers in all common operating systems with specific attention to Windows and Internet Explorer.