

Software Requirements Specification

Version 0.1

November 10, 2018

Cocktail recipes online builder

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Revision History

Date	Description	Author	Comments
10.11.2018	Version 0.1	Mosina M.	

Document Approval

The following Software Requirements Specification has been accepted and approved by the following:

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1. Introduction

1.1 Purpose

The purpose of this document is to present a detailed description of the Cocktail recipes online builder. It will explain the purpose, features of this system, and user interface, what the system will do, constraints under which it must operate and how the system will react to external stimuli. This document is intended for both stakeholders and developers.

1.2 Scope

This system is intended to be a web service for everybody who wants to create new cocktails with their ingredients. The software products name is “Cocktail recipes online builder”.

More specifically, this system goes to help you to manage your bar, choose ingredients, combine them into one cocktail.

The whole system is a web service which is connected to the database.

1.3 Glossary

Term	Definition
<i>Service</i>	<i>“Cocktail recipes online builder” application</i>
<i>Database</i>	<i>Collection of all the information which is stored in system.</i>
<i>User, Admin</i>	<i>Manager, who was logged into the system.</i>
<i>Ingredients</i>	<i>Goods to be used.</i>
<i>Category</i>	<i>Group of related ingredients.</i>
<i>Attributes group</i>	<i>Attributes, which were grouped by similar topic or ingredient.</i>
<i>Attribute</i>	<i>One field of ingredient characteristics.</i>
<i>Cocktail</i>	<i>Set of ingredients which customer wants to create.</i>
<i>Work example</i>	<i>Set of photos and videos with description.</i>

<i>Software Requirements Specification</i>	<i>A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.</i>
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1.4 References

IEEE. *IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications*. IEEE Computer Society, 1998.

“Методичні вказівки до виконання лабораторних робіт для студентів напряму підготовки 6.050101 «Комп'ютерні науки», спеціальностей 8.05010102 «Інформаційні технології проектування» та 8.05010103 «Системне проектування» денної та заочної форм навчання”, Dph Konstantin Kharchenko.

1.5 Overview

The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

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Overall description

Product features

Actor	Process	Data storage	Notation
User	Sign in	Users	Create new user
	Log in		Log in to system
	Request	Merchandise	Get the collection of m., satisfying request
Superuser	Log in	Users	Log in to system
	Edit	Merchandise	Edit m., in case of need

Operating environment

Server side:

Item	Solution
OS	Ubuntu 16.04
Translators	Python 3.7
DB	MongoDB 4.0.4

Client side:

Any combination of any popular desktop (Windows 10/7, MacOS, Debian) or mobile (Android 4-9, iOS) OS and browser (Chrome, Firefox, Safari, Edge, IE, Opera, both desktop and mobile version if exists).

Design and implementation constraints

We should use **Flask 4** to build web-application. As our DB is MongoDB, we use PyMongo as ORM and driver. Data should be transmitted via default Flask ways or vis JSONs if needed.

System features

System feature 1 View all drinks categories // site.mainpage

Description and priority

High priority. The main page of the site. The basic feature, that allows the user to view all categories as 3-4 column grid, and select which drinks are needed.

Response sequence

Entering the site's main page.

Functional requirements

The user is entering the main page. The grid of most popular categories is displayed with a list of all categories in alphabetical order at left sidebar and search bar at the top of the page. The user should choose the category, he is looking for. If he is looking for something specific, the user is able to search some drinks with search request in the search bar.

System feature 2 View all drinks inside category // site.category.merch

Description and priority

High priority. The basic feature, that allows the user to view all drinks inside the category (as 3-5 column grid) and commit basic sorting (price, time, popularity). drinks are sorted by popularity by default. The page also contains a deeper filter (price interval, specific producer, specific characteristic, etc) as a sidebar.

Response sequence

Selecting the category at the main page.

Functional requirements

After entering the page, all drinks are displayed (more popular is at the top). Between the header and drinks, there are basic filters for sorting by price, popularity and time. Deeper filter (price interval, specific producer, specific characteristic, etc) as a left sidebar. After the user has chosen all filter, he clicks the Select button, which is at the top of sidebar and drinks refreshes. If there are no drinks, which meet user's requirements, then "drinks not found" message should be displayed instead of the grid.

System feature 3 View drinks details // site.merch.details

Description and priority

High priority. View all photos of drinks, view all characteristics. View rating, created by votes of all logged in users.

Response sequence

Selecting the item of drinks at category page.

Functional requirements

The user enters the page of the specific unit of drinks. He can view all the characteristics of the unit, several photos of unit, comments, created by authorized users and user's rating. There is also a list of available e-markets, with reduced price on this unit and reason for reduction.

System feature 4 Search box // site.header.searchbox

Description and priority

Medium priority. Allows user to search items or categories.

Response sequence

After clicking on the search button.

Functional requirements

User enters string to search box and hits enter. Then page with result is displayed. The page contains 1 column grid with searching results, which can be either categories or goods. If searching request returns none than no goods found message is displayed.

System feature 5 Logging system // site.logging

Description and priority

Medium priority. Allows user to create and manage accounts, that allow using personal page with favorite drinks, leave comments and vote for drinks` rating.

Response sequence

With log in / log out / sign in buttons at header.

Functional requirements

User enters string to search box and hits enter. Then page with result is displayed.

System feature 6 Cocktail creator system //site.cocktailcreator

Description and priority

High priority. Allows the user to create a cocktail using web interface. The user can choose or modify cocktails based on selected ingredients.

Response sequence

Click on cocktail creator button.

Functional requirements

The user must be logged in to have an ability to save cocktails.

Tests

Test 1

Interaction with DB. Select some filters and click confirm.

Scenario 1

No data meets the requirements.

Expected Result

“No drinks found” message is displayed

Scenario 2

There are some data, that meets the requirements (at least one ingredient).

Expected Result

All the drinks, which meets the requirements is displayed as a grid at the web-page.

Test 2

Authorization system. Commenting.

Scenario 1

User is logged in. When the drinks` page is open, then there is a Leave a comment form, that allows user to leave a comment. User tries to leave a comment

Expected Result

New comments are added to DB, drinks` page is reloaded with a new comment

Scenario 2

User is not logged in. Leave a comment form should be unreachable. If commenting URL is used explicitly, user is readdressed to Log in page.

Expected result

New comments are added to DB, drinks` page is reloaded with a new comment

Test 3

Site's routing system.

Scenario 1

User tries to explicitly (via URL line in the browser) open some existing URL, which is normally acceptable and not protected with the authorization system.

Expected result

The user should normally open the page, which stands behind the URL.

Scenario 2

User tries to explicitly (via URL line in browser) open some existing URL, which is normally acceptable and protected with authorization system. User is unlogged.

Expected result

The user should be thrown back to log in page.

Scenario 3

User tries to explicitly (via URL line in the browser) open some unexisting URL. Then the 404 page is returned.

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Expected Result

The 404 page is returned. 404 exception is raised.

Test 4

Cocktail online builder system

Scenario 1

The user tries to save a cocktail without ingredients.

Expected Result

The error message is displayed.

Scenario 2

The user tries to save a cocktail which can be validated.

Expected Result

The success message is displayed. New cocktail is added to DB.