**Software Requirements Specification (SRS)**

**Case Study 3**

**Chocolate Customizer**

**accomplished at the Business Informatics study program**

**of the University of Applied Sciences Technikum**

**Version 0.1**

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**Date: 2013-23-09**

Change Log

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| --- | --- | --- | --- |
| **Version number** | **Date** | **Change** | **Person** |
| 0.1 | 2013-23-09 | First draft, basic informations | mw, ph |
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Table 1: Change log

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| **Legend** | | |
| **State** | **W**  **R**  **F** | In work  In review  Released, freed version |
| **Versioning** | **0.1, 0.2**  **1.0**  **1.1, 1.2**  **2.0** | Not approved version  First released version  Extended first version  Second released version |

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Table 2: Contact persons

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# Introduction

## Purpose

This document describes all requirements belonging to the project „chocolate customizer“.

With this project, people all over the world shall be able to buy their favourite chocolate creations again and again.

The following features must be realised:

* Visitor registration
* Searching and browsing through products
* Buying existing products (chocolate products, vouchers, gifts for corporate customers) using credit card
* Rating products
* Create or customize chocolate products and gifts (for corporate customers)

## Scope

The project produces a web application called “chocolate customizer” (will be registered using a similar domain name). The web application will be reachable all over the world and allow users to buy existing or to create new chocolate creations. Additionally vouchers and gifts will be sold.

This web application is not intended to sell anything else than chocolate products, or products related to this chocolate products (vouchers, gifts).

## Definitions, Acronyms, and Abbreviations.

## References

* http/https: <http://tools.ietf.org/html/rfc2616>
* Smtp: <http://tools.ietf.org/html/rfc2821>
* Imap: <http://tools.ietf.org/html/rfc3501>
* E-Mail: <http://tools.ietf.org/html/rfc5322>
* Telephone Number Syntax: <http://www.itu.int/rec/T-REC-E.123-200102-I/e>

## Overview

This document is created after the IEEE 830-1998 standard. Some of the following points are not specified in detail (in cause of missing information). Chapter 1 (Introduction) contains important information about purpose, scope, definition and references.

In chapter 2 is a common (overall) description defined. It contains information about the functionality of the web application, a description about the affected users and a list of constraints for the project.

Chapter 3 is the most incomplete part of this document, in cause of missing information. It contains (and will contain in a more detailed way) specific requirements for this web application like functional requirements, external interfaces, design contraints, performance requirements and quality requirements.

# The Overall Description

## Product Perspective

The project “chocolate customizer” can be compared with many other existing web application for customizing standard products, like for example “mymuesli”, “myparfum”, et cetera.

### System Interfaces

Because the web shop of the application allows only credit cards, the interface of the credit card institute has to be used. (A list of valid credit card institutes has to be specified).

### Interfaces

The web application will be presented to it’s users with a nice looking and clear GUI, which has to be handicapped accessible. It must use an efficient design, so that the click count is as low as possible. Designers have to make sure, that the GUI is easy to understand and follows a clear structure.

### Software Interfaces

E-Mail Server

For sending information and confirmation mails a mail server has to be fed via smtp or queried using imap. A decision about the server product has to be made.

Database

A decision on which database shall be used has to be made.

### Communications Interfaces

As the project produces a web application, the HTT-Protocol (RFC 2616) is used. To make sure that payment information and personal information is save, HTTPS (RFC 2818) is used. For information and confirmation emails a mail-server using SMTP (RFC 2821) and IMAP (RFC 3501) is used.

### Site Adaptation Requirements

TBD

## Product Functions

The following pages will list all major functions for this web application. Please note that the second section of this list is just a placeholder for the backend, which will be implemented in “case study 4”, so it will be described there.

**Major functions:**

* **Web shop:**the web shop is one of the two major functions. It will provide all products (in this case it’s chocolate products only) and provides the possibility to search, mark and buy those products. It has a state-of-the-art stock shopping cart.  
  Normal customers can buy standard chocolate articles, their own created or customized articles, and vouches. If a customer is registered as corporate customer he is also able to order three different types of chocolate gifts. These chocolates can either be standardized or individually created. The packaging of those gifts can be created individually too.  
  The order process will be finished by paying via credit card (independent from the customer type).  
  Individually created products or gifts will automatically be added to the public web shop (so any customer can buy those products) and can be rated by every buyer.
* **Chocolate editor:**the chocolate editor (called “chocoladitor”) is the second of the two major functions. It gives the possibility to personalize existing products of the web shop or to create new products from the scratch. It contains tools to specify the size of the chocolate bar, the cocao ratio in the chocolate, to add additional ingrededients (e.g. nuts, strawberry, et cetera) and to define the grid of pieces (like chessboard, triangles …).

**Standard functions:**

* **Registration:**visitors are able to use both of the major functions, but they have to register themselves to finish the buying process. So a registration formular is needed to take personal, address and buying information from the future customer. A customer also has to decide whether he is normal “private” customer or a corporate customer.
* **Maintain personal information:**logged in users can maintain their personal information (in case of change – e.g. marriage)
* **History:**logged-in users can take a look at their already bought products and reorder them directly.

**Common functions:**

* About us
* FAQ
* Contact formular

**Backend functions (detail description in “case study 4”):**

* Article administration (add/delete/change articles)
* User administration (add/delete/change users)
* Chocolate editor administration (add/delete ingredients, grid forms …)

## User Characteristics

Personalized chocolate is a perfect gift, so most of the customers will be people that are looking for those. Chocolate is also something that everybody loves, so we cannot define a clear list of customers. The UI of the web application will make sure, that every user, independently from his educational level or technical skills, can use the shop and the chocolate editor. It’s handling will be easy and clear.

## Constraints

TBD

# Specific Requirements

## External Interfaces

Most interfaces aren’t defined yet, therefore there are no technical informations about external interfaces available.

### E-Mail Interface

The E-Mail interface has to be defined in cooperation with the customer.

### Payment Interface

The Payment interface has to be defined in cooperation with the customer.

## Functions

### Registration

The registration shall be done with an HTML Form and has to contain following fields:

1. First Name (required)
2. Middle Name (optional)
3. Last Name (required)
4. Birth Date (required, dd.mm.yyyy)
5. E-Mail Address (required, for syntax refer to RFC5322 section 3.2.3 and 3.4.1)
6. Passwort (required, has to be given twice and equal each other, min 8 char no furtur complexity requirements)
7. Address (Country, ZIP Code, City, Street, Housenumber) (optional)
8. Telephone Number (optional, for syntax refer to E.123)

The E-Mail Address has to be verified after the Registration. For this the external E-Mail Interface described in 3.1.1 will be needed.

Every field shall be validated. If any field is wrong, the user shall get the exact information wich value failed the validation. The error message shall be positioned over the HTML Form.

### Maintain personal information

The System has to give the user the possibility to maintain the personal informations. This Page shall be done with an HTML Form and has to contain the same fields as the registration.

### Web Shop

#### Search

A searchfield for searching Products has to be available. Further search requirements aren’t declared yet.

If the search fails because there are no matches available, a message has to be shown that there arent’t any matches available.

If results are given, the total count of results shall be shown at the top.

#### Category List

The category levels have to be defined in cooperation with the customer.

The user will get a navigation field in which all Categories and possible subcategories are listet. If he clicks on one, a further product list shall be shown.

#### Product List

The product list shall be shown in the content area of the webpage. The title, a picture, the price, stock status and a short descrition shall be given for each entry.

The customer shall be able to choose how many entries he wants to have displayed on one page in a combo box. Possible values ar 10, 25, 50 and 100. If the user changes the value of the selected entries, the webpage shall automatically start regenerating itself.

The current and number available pages shall be shown at the top and at the bottom of the list. Navigation thru the pages shall be also available at the top and at the bottom of the product list.

The user shall have the possibility to add products to the cart right away from the product list by pressing a “add to cart” button.

#### Product Details

In the product details page, every available attribute of the selected product shall be displayed. The definition of these attributes isn’t set yet and will be specified in the next version.

The user shall have to possibility to add products to the cart by pressing a “add to cart” button.

#### Cart

All selected products of this user shall be listed (picture, title, short description, quantity) in the cart. For corporate customers a possibility to create gift packages individually shall be given. Further details about the packages have to be defined.

#### Order

After the user has proceeded to the order page, the selected products (picture, title, short description, quantity) shall be shown read only.

Additional costs for packages shall be listed at the bottom of the list. The user has to fill out an HTML Form for shipping address. If an address is given in the personal details, it shall prefill the form. After he proceeds, a pop up for payment will open (further details refer to 3.1.2 Payment interface). After the payment succeeded, a final confirmation which includes all ordered items, the total price and the estimated shipping date shall be displayed. After each successful order a confirmation email (refer 3.1.1 E-Mail Interfache) which includes a list of all ordered products as well as the total price and the shipping informations shall be sent to the customer.

If the payment fails, an error message will be shown and the customer shall be asked to contact the company.

#### History

The user can review all his orders. A summarize of all orders shall be given in a list which contains total price, total number of items shipped, shipping date and shipping address. After selecting a single order, a detail view which contains every information (list of ordered products, package informations, total price, shipping informations) about the selected order.

### Chocolate Editor

There are currently no informations on how customers shall be able to create their own chocolate creations. Informations about the possible sizes and ingredients shall be defined in cooperation with the customer.

### Static Contents

Static pages for About us, FAQ and General Terms and Conditions and Contact informations are needed. There shall be a hyperlink to each static page in the bottom bar of the website. The text for these pages will be given in a separate document

### Article administration

The article administration is part of the backend functionality which will be defined in a later version of this document.

### User administration

The user administration is part of the backend functionality which will be defined in a later version of this document.

### Chocolate Editor administration

The chocolate editor administration is part of the backend functionality which will be defined in a later version of this document.

## Performance Requirements

There are currently no estimations about the usage of the website and therefore no requirements for performance can be given at this stage of the project.

In general 95% of the HTTP Response times shall be under 5 seconds.

## Logical Database Requirements

There are currently no detailed informations about the products and their attributes available. An ERD will be given in the next version of this document.

## Design Constraints

Design Constratins have to be defined in cooperation with the customer.

### Standards Compliance

Standard compliance will be defined in a later version of this document.

## Software System Attributes

TBD

### Reliability

TBD

### Availability

TBD

### Security

Informations about the maintainability depend on the CMS. A decision on the CMS has not been made yet

### Maintainability

Informations about the maintainability depend on the CMS. A decision on the CMS has not been made yet.

### Portability

The frontend application is a web application and therefore should be able to run on any server sizes system. Further informations can be deliverd after a decision on the CMS was made.

# Figures

**Es konnten keine Einträge für ein Abbildungsverzeichnis gefunden werden.**

# Tables

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# Glossary

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