



**Linnéuniversitetet**

Kalmar Väst

# 2DV608 Assignment 1

## Software Design



*Author:* Rashed\_Qazizada  
*Supervisor:* Mauro Caporuscio  
*Semester:* Autumn 2020  
*Course code:* 2DV608



## Abstract

Place you abstract here

This page was intentionally left unchanged 😊

## Keywords

Place your keywords here

## Table of Contents

<b>1 Stakeholders</b>	<b>3</b>
<b>2 Functional requirements</b>	<b>3</b>
2.1 Requirement 1: Registration of a new customer	3
2.2 Requirement 2: Customer Sign in	4
2.3 Requirement 3: Payment authentication	4
<b>3 Non-functional requirements</b>	<b>4</b>
<b>4 Checklist for requirements Analysis</b>	<b>5</b>
<b>5 Classification on Faceted approach</b>	<b>5</b>
<b>6 Requirements Validation</b>	<b>5</b>
<b>7 Test cases</b>	<b>6</b>

Topic:

OSP – Imagine you are designing and developing an online shopping portal like Amazon.

- SHOESONLY is the name of the online shopping portal throughout this document along with OCL diagrams

## 1 Stakeholders

1. Customers- can view and buy product from “SHOESONLY” online shopping web portal
2. Manager- is responsible for generating revenue
3. HR department is responsible for:
  - ❖ Employee health and safety
  - ❖ Hiring new staff
  - ❖ Upskilling employees
  - ❖ Payroll
  - ❖ Delivery insurance
4. Database developers and administrators are responsible for:
  - ❖ keeping the system up-running
  - ❖ providing transaction security

## 2 Functional requirements

### 2.1 Requirement 1: Registration of a new customer

- New members can directly:
  - ❖ buy goods over the SHOESONLY web browser
  - ❖ can use all available services by agreeing the SHOESONLY policy
  - ❖ can get 10% on the first transaction

## 2.2 Requirement 2: Customer Sign in

- Existing customer
  - ❖ Can add, modify and remove items from shopping Cart
  - ❖ Can keep items in the shopping Cart
  - ❖ Gets latest offers and discounts in real time

## 2.3 Requirement 3: Payment authentication

- Once the customer decides what items needs to be purchased, The customer is directed to the payment page to complete the purchase

## 3 Non-functional requirements

1. Customer name and last name should only consist of letters
2. Phone number should only consist of numbers
3. The minimum age for registration is 16 years old
4. Customer home address should only contain letters and numbers

## 4 Checklist for requirements Analysis

	Req 1	Req 2	Req 3
<b>Requirements ambiguity</b>	No	No	No
<b>Combined requirements</b>	No	No	No
<b>Requirements Gold-Plating</b>	No	No	No
<b>Use of non-standard hardware</b>	No	No	No
<b>Conformance with business goals</b>	Yes	Yes	Yes
<b>Premature Design</b>	Yes	Yes	Yes
<b>Requirements realism</b>	Yes	Yes	Yes
<b>Requirements testability</b>	Yes	Yes	Yes

## 5 Classification on Faceted approach

	Req 1	Req 2	Req 3
<b>System</b>	Yes	Yes	Yes
<b>User-interface</b>	Yes	Yes	No
<b>Database</b>	Yes	Yes	No
<b>Communications</b>	No	No	Yes

## 6 Requirements Validation

<b>Are the requirements complete?</b>	Yes
<b>Are the requirements consistent?</b>	Yes
<b>Are the requirements comprehensible?</b>	Yes
<b>Are the requirements ambiguous?</b>	No
<b>Is the requirements document structured</b>	Yes
<b>Are the requirements traceable?</b>	Yes
<b>Does the requirements document as a whole?</b>	Yes

## 7 Test cases

Requirement 1: Registration of a new customer	
Test ID	TC1
Priority level	High
Main Scenario	Successful registration
Pre-condition	Customer must enter the registration page
Test Steps	<ol style="list-style-type: none"><li>1. enter email</li><li>2. enter first name</li><li>3. enter last name</li><li>4. enter password</li><li>5. enter phone number</li><li>6. confirm sign up</li></ol>
Expected Result	Customer successfully registered in the Data-base and received a confirmation email
Status (Pass/Fail)	pass
Notes	- The test passes, if required input is valid

Requirement 2: Customer Sign in	
Test ID	TC2
Priority level	High
Main Scenario	Customer Sign in
Pre-condition	Customer already exists in the Database
Test Steps	<ol style="list-style-type: none"> <li>1. Click the login button</li> <li>2. The login form is presented</li> <li>3. Customer provides login details/ Email and password</li> <li>4. Click ok button</li> </ol>
Expected Result	The customer should be able to login
Status (Pass/Fail)	pass
Notes	<ul style="list-style-type: none"> <li>- The test passes, if customer details are match with the Database</li> </ul>



Requirement 3: Payment authentication	
Test ID	TC3
Priority level	High
Main Scenario	Payment authentication
Pre-condition	<ol style="list-style-type: none"> <li>1. Customer is logged into the account</li> <li>2. Customer has chosen items</li> </ol>
Test Steps	<ol style="list-style-type: none"> <li>1. Select payment method and submit</li> <li>2. Payment page will be represented</li> <li>3. Enter payment details</li> <li>4. Hit ok to complete the transaction</li> </ol>
Expected Result	The payment transaction has been processed successfully
Status (Pass/Fail)	pass
Notes	<ul style="list-style-type: none"> <li>- The test fails, if the third-party decline the transaction due to invalid credit card number or sufficient money</li> </ul>