

Software Requirements Specifications of BPP Software		
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## REVISION HISTORY

Date	Version	Description	Author
17.10.2019	1.0	Assigned the parts to members and moved everything to Google Docs.	Kerem Güre
21.10.2019	1.1	Added User Requirements Specifications and Use Case Diagram	Kerem Güre
22.10.2019	1.2	Added Abbreviations	Denizcan Özpınar
22.10.2019	1.3	Added a Sequence Diagram	Caner Karaörs
22.10.2019	1.4	Added System Requirements Specification	Barış Özbaş
22.10.2019	1.5	Added System Overview and System Architecture	Burak Deniz
23.10.2019	1.6	Updated User Requirements Specification	Denizcan Özpınar
23.10.2019	1.7	Updated System Requirements Specifications	Barış Özbaş
23.10.2019	1.8	Updated the Abbreviations and Table of Contents.	Kerem Güre
23.10.2019	1.9	Did minor fixes.	Kerem Güre
02.10.2019	2.0	Added a new user requirement for resetting the password.	Kerem Güre



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## 1 INTRODUCTION

### 1.1 Document overview

This document presents the software requirements specifications of the BPP software development project. It describes functional requirements, quality requirements, constraints, use cases, and usage scenarios. It also provides an overview of the system architecture.

### 1.2 System overview

Our system will be a shopping web page where people can buy their desired computer parts. On our web page, you can create an account which will create a new user in the database. The database contains all the information of the users(address, email, username, etc...). People who visit our web page can see all the items that are available for purchase. These items will also be stored in our main database. Users have their own baskets. Users can add/remove items to their baskets. Users' baskets will also be stored in our main database.

### 1.3 Abbreviations

BPP: Build a PC Project  
UML: Unified Modeling Language  
SDP: Software Development Plan  
SRS: Software Requirement Specification  
STP: Software Test Plan  
SQL: Structured Query Language  
BPMT: PcBuild Management Tool

### 1.4 References

#	Document Identifier	Document Title
1	BPP-SDP	Software Development Plan of BPP Software

### 1.5 Conventions

Requirements listed in this document are constructed according to the following structure:

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#### SRS-BPP-000

Description of XXX-000 requirement  
Version of XXX-000

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Every system requirement id includes the id of the corresponding user requirement as a prefix.

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#### SRS-BPP-000.1

Description of XXX-000.1 system requirement, which is related to the user requirement XXX-000  
Version of XXX-000.1

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## 2 REQUIREMENTS

### 2.1 *User Requirements Specification*

#### **SRS-BPP-001**

Users are able to create accounts from the WebApp.  
V1.0

#### **SRS-BPP-001.1**

While creating an account, the chosen username must not match any of the usernames stored in the DB. That is, it has to be unique.  
V1.0

#### **SRS-BPP-001.2**

All the fields provided on the Signup page must be filled to register.  
V1.0

#### **SRS-BPP-002**

Users are able to add/remove items to/from the basket.  
V1.0

#### **SRS-BPP-002.1**

Users can add any amount of items given that stock is available.  
V1.0

#### **SRS-BPP-003**

Users can buy the basket through the checkout process.  
V1.0

#### **SRS-BPP-003.1**

The checkout process must not store any credit card information as plaintext anywhere throughout the system.  
V1.0

#### **SRS-BPP-003.2**

Users can change their stored credit card info anytime.  
V1.0

#### **SRS-BPP-004**

Users can see their history of bought products.  
V1.0

#### **SRS-BPP-004.1**

Users should be able to see their history as a table format.  
V1.0

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#### **SRS-BPP-004.2**

Users should be able to export the history data as CSV.

V1.0

#### **SRS-BPP-005**

Users can update their information anytime.

V1.0

#### **SRS-BPP-005.1**

username can not be changed.

V1.0

#### **SRS-BPP-005.2**

Ask for user confirmation with authentication before updating any information.

V1.0

#### **SRS-BPP-006**

Users can see all the products the website provides.

V1.0

#### **SRS-BPP-006.1**

Users can dynamically categorize the items and search by name and type.

V1.0

#### **SRS-BPP-007**

Users can reset their passwords.

V2.0

#### **SRS-BPP-007.1**

The password can be reset by the link sent to the users' email. The password must satisfy the required strength of the system.

#### **SRS-BPP-BPMT-001**

The tool should add an item.

V1.0

#### **SRS-BPP-BPMT-001.1**

If the item is already existing, the tool must not add the item.

V1.0

#### **SRS-BPP-BPMT-001.2**

All fields must be filled for successful creation.

#### **SRS-BPP-BPMT-001.3**

Item can not be added if one of the required fields are empty.

V1.0

**SRS-BPP-BPMT-001.4**

The upload size of the picture should be less than 5 MB.

V1.0

**SRS-BPP-BPMT-001.5**

The uploaded picture should be in png format.

V1.0

**SRS-BPP-BPMT-002**

The tool should list all users.

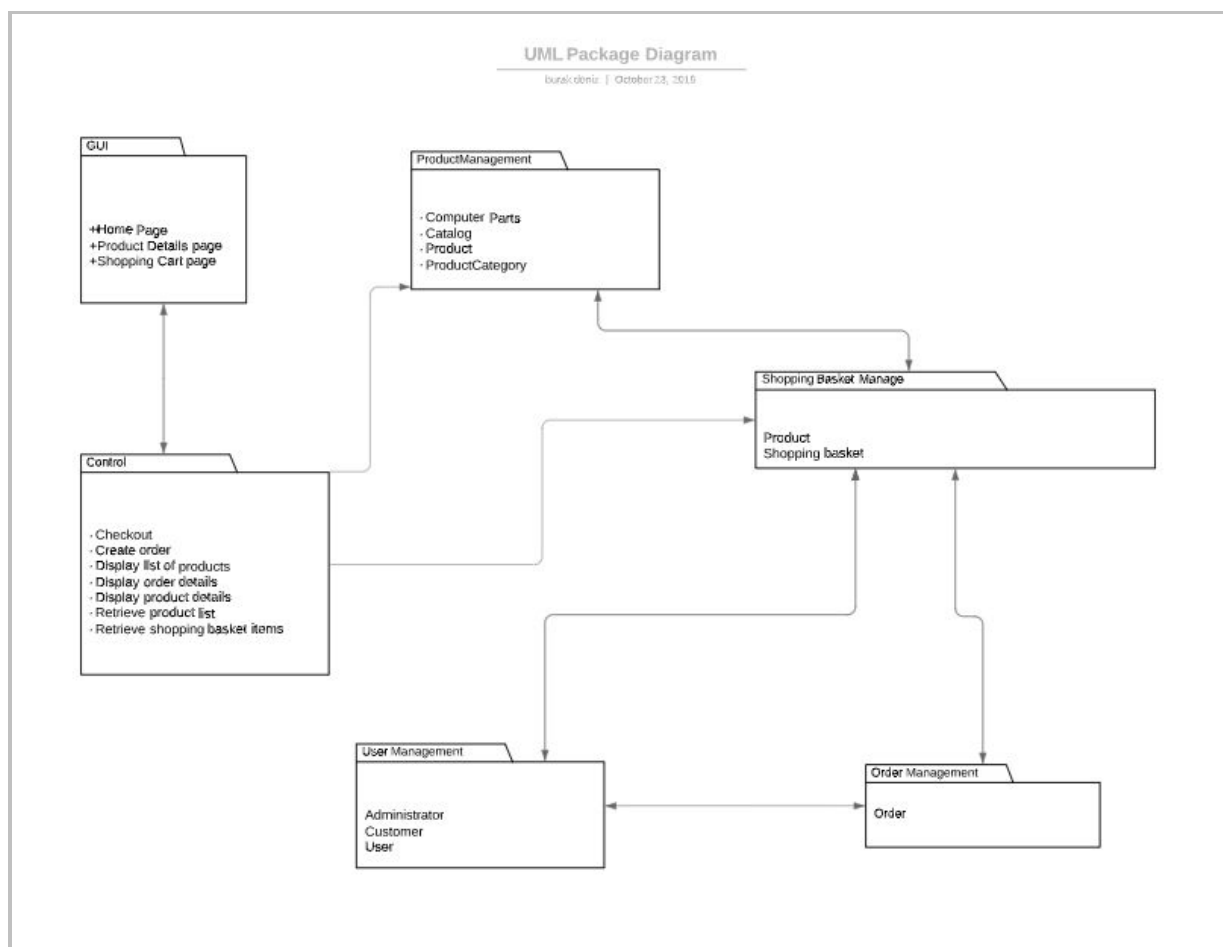
V1.0

**SRS-BPP-BPMT-003**

The tool should list all items.

V1.0

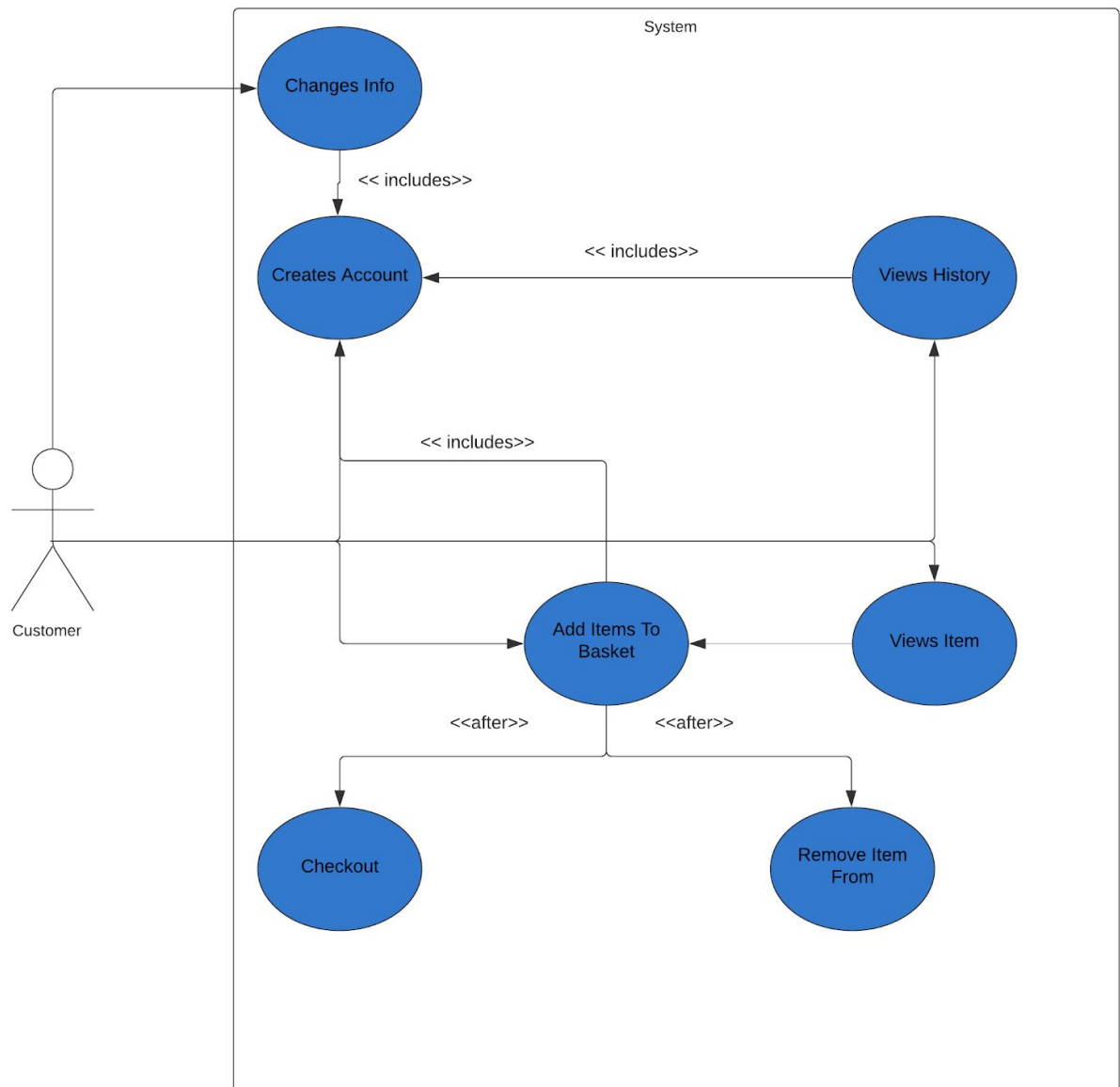
**2.2 System Architecture**



## 2.3 Use Cases and Usage Scenarios

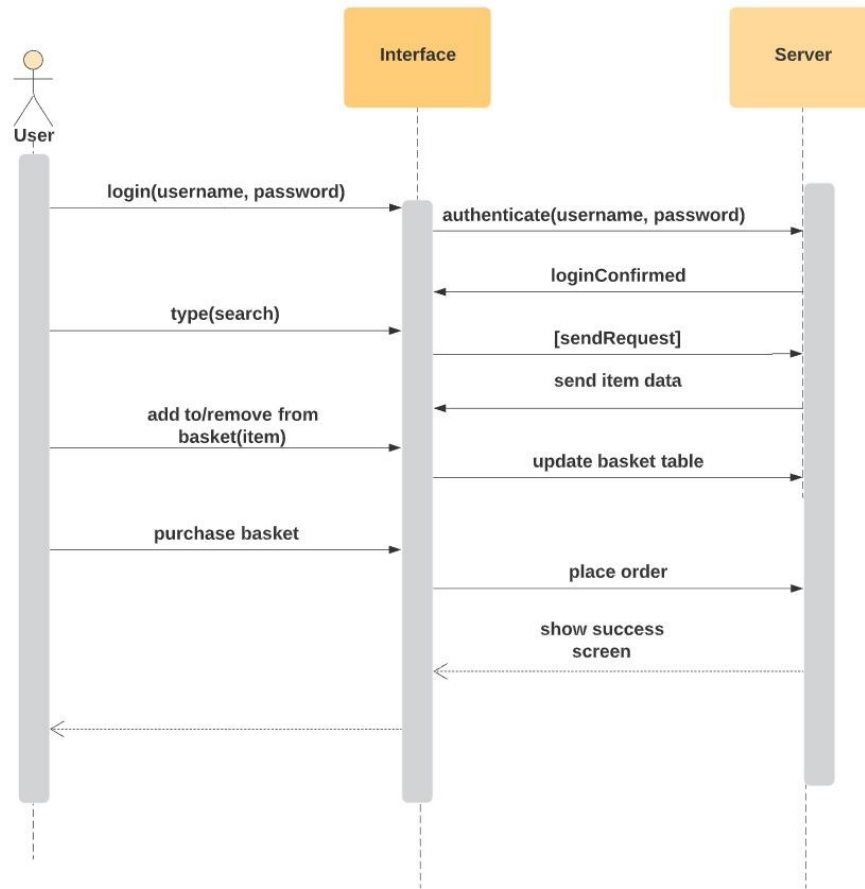
### BPP-Use Case Diagram

Kerem Gure | October 21, 2019



## BPP-Sequence Diagram

Caner Karaors | October 22, 2019





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## 2.4 System Requirements Specification

### **SRS-Requirement-001**

- ❖ Functional
  - WebApp will gather the information from the signup page and will create a new user in the database.
- ❖ Non-Functional
  - WebApp will check if the username is unique.
  - WebApp will check if the password is strong according to the zxcvbn algorithm.
  - WebApp will check if all the fields on the signup page are filled.

V1.0

### **SRS-Requirement-002**

- ❖ Functional
  - WebApp will create a basket for every customer.
- ❖ Non-Functional
  - WebApp will allow that users can add any amount of item given the stock is available.
  - WebApp will allow that users can remove items from their baskets the amount they added.

V1.0

### **SRS-Requirement-003**

- ❖ Functional
  - WebApp will allow users to buy their basket through the checkout process.
- ❖ Non-Functional
  - WebApp won't store the credit card as a plain text in the database
  - WebApp will allow users to change their credit card info will save only the new credit card in the database

V1.0

### **SRS-Requirement-004**

- ❖ Functional
  - Ensures that users can see their history.
  - WebApp will store the users' order history in the database and users are able to see their order history.
- ❖ Non-Functional
  - WebApp will show to the users their order history as a table format on our website.
  - WebApp will allow users to export their order history as a CSV file.

V1.0

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#### ***SRS-Requirement-005***

- ❖ Functional
  - WebApp will ensure that users can update their information and will change the information in the database according to new information
- ❖ Non-Functional
  - WebApp will ask for the user's password to change their information and will check with the password at the database
  - WebApp won't allow users to change their username

V1.0

#### ***SRS-Requirement-006***

- ❖ Functional
  - WebApp will show every product that is stored in the database to users.
- ❖ Non-Functional
  - WebApp will allow users to dynamically categorize the items and search for them.
  - WebApp will store a description, photo, and price for every item in the database.

V1.0

#### ***SRS-Requirement-007***

- ❖ Functional
  - WebApp will provide an interface and SMTP server for resetting the password.
- ❖ Non-Functional
  - WebApp will make sure the new password entered by the user satisfies the strength requirements.

V2.0

#### ***SRS-BPMT-Requirement-001***

- ❖ Functional
  - BPMT can add a new product to the database
- ❖ Non-Functional
  - BPMT will check if the product already exists in the database and won't add any duplicate products.
  - BPMT will check if all the fields are filled in order to create a new product.
  - BPMT won't create a product in the database if all fields are not filled.
  - BPMT will only accept pictures that are smaller than 5MB.

V1.0

#### ***SRS-BPMT-Requirement-002***

- ❖ Functional
  - BPMT can list all users that are registered to the BuildPC database.
- ❖ Non-Functional
  - BPMT must be able to list all the users in two seconds.

V1.0

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***SRS-BPMT-Requirement-003***

- ❖ Functional
  - BPMT can list all products that are registered to the BuildPC database.
- ❖ Non-Functional
  - BPMT must be able to list all the users in two seconds.

V1.0