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REVISION HISTORY

Date	Version	Description	Author
10.11.2019	1.0	Assignment of work to members.	Kerem Güre
10.11.2019	1.1	Some of the Package Diagrams and Activity Diagrams Added	Cenker Karaörs
10.11.2019	1.2	Added Package Diagrams and Class Diagrams.	Kerem Güre
11.11.2019	1.3	Deployment Diagram added.	Barış Özbaş
11.11.2019	1.4	Added Component interface details.	Kerem Güre, Burak Deniz
11.11.2019	1.5	Added Software Requirements	Denizcan Özpınar
11.11.2019	1.6	Added two diagrams.	Emre Ay, Burak Deniz
11.11.2019	1.7	Added Activity Diagrams.	Cenker Karaörs, Burak Deniz
12.11.2019	1.8	Fixed some diagrams.	Kerem Güre
12.11.2019	1.9	Cots Identifications added	Barış Özbaş, Denizcan Özpınar
12.11.2019	1.10	Filled the Table Of Contents	Kerem Güre
12.11.2019	1.11	Did minor fixes and overall check before submission.	Kerem Güre, Burak Deniz

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1 Introduction

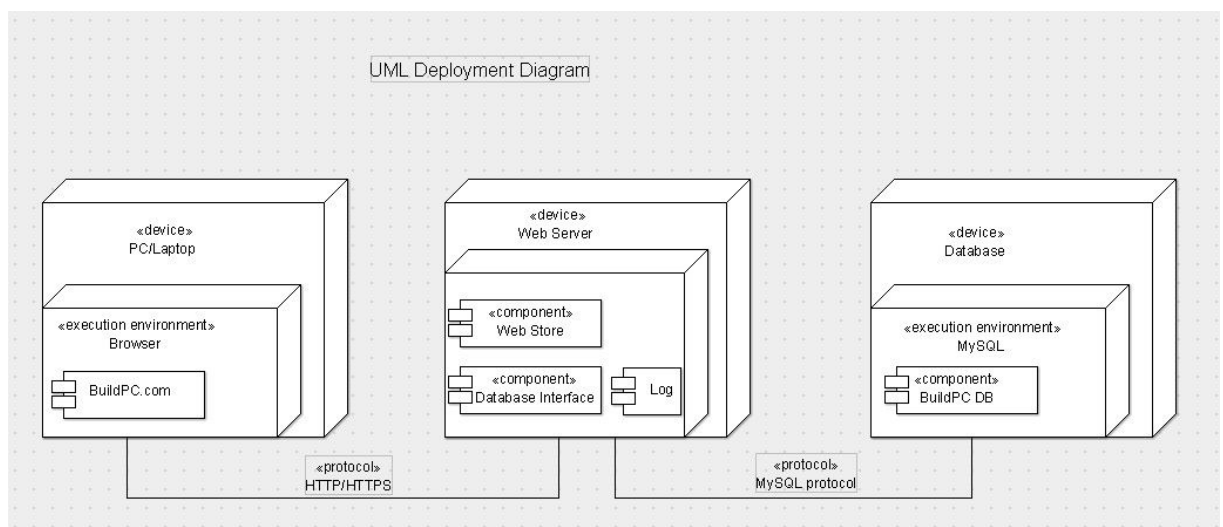
This document describes the design of the BPP software system.

1.1 References

1.1.1 Project References

#	Document Identifier	Document Title
1	BPP-SRS	BPP Software Requirements Specifications

2 Software Architecture Overview



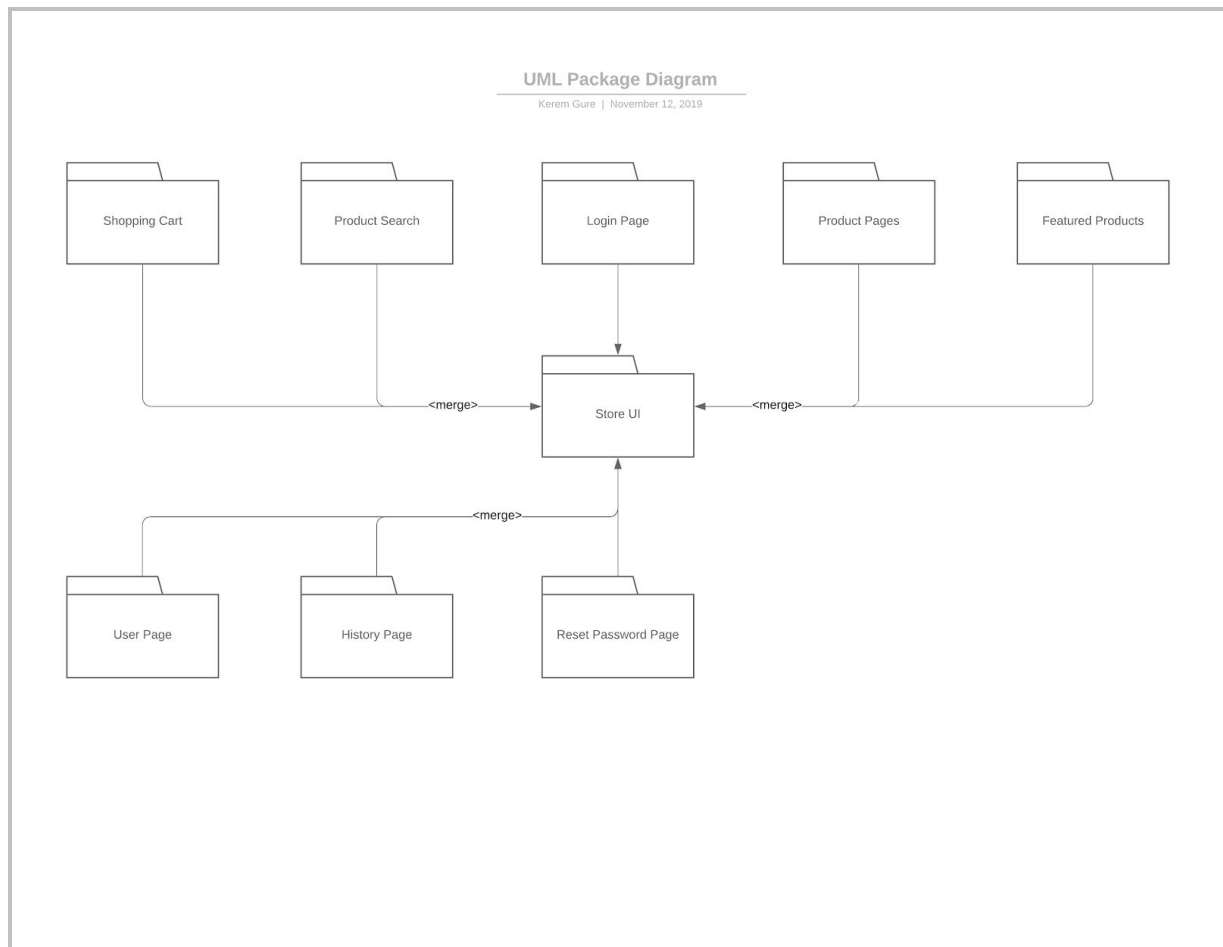
3 Software design description

3.1 Client Component

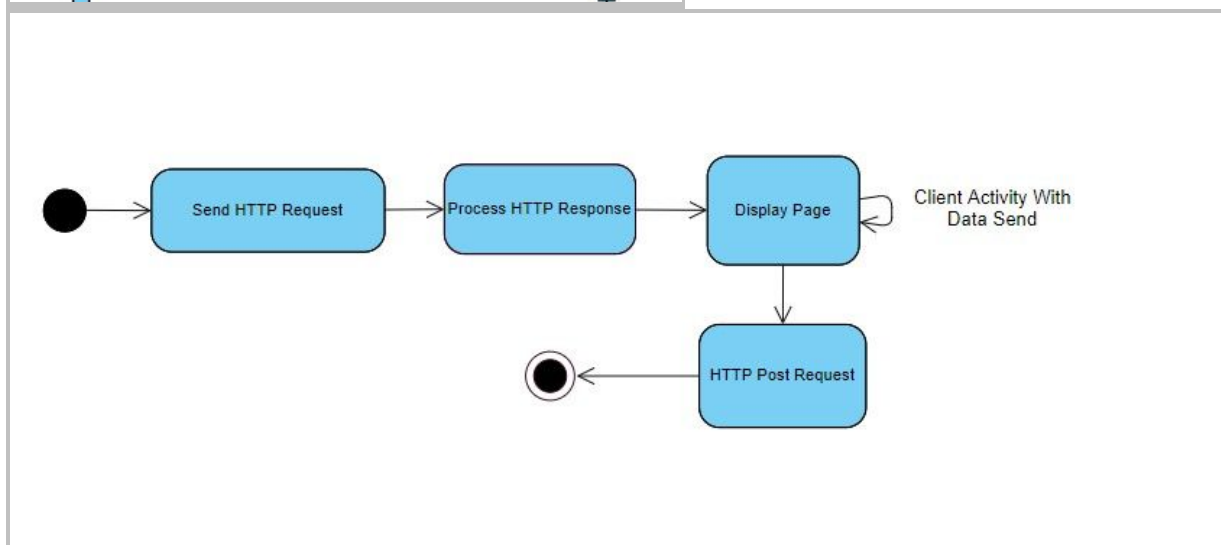
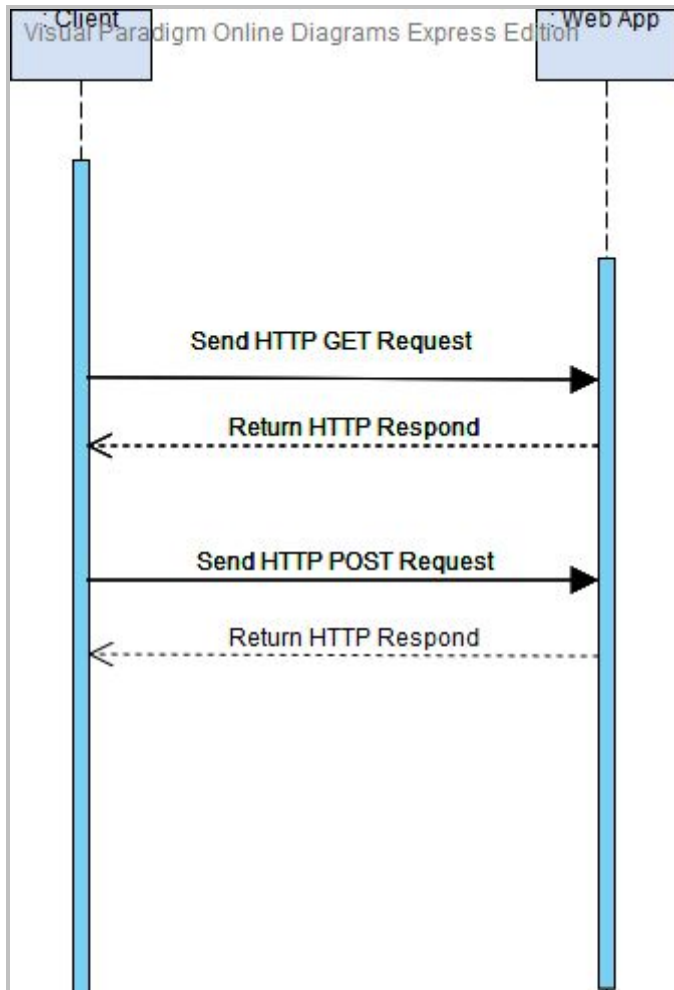
3.1.1 Component interfaces

- ❖ Interfaces
 - HTTP, HTTPS for client-server communication.
- ❖ Inputs
 - HTTP responses
 - User inputs
- ❖ Outputs
 - HTTP GET,POST requests

3.1.2 Component design description



3.1.3 Workflows and algorithms



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3.1.4 Software requirements mapping

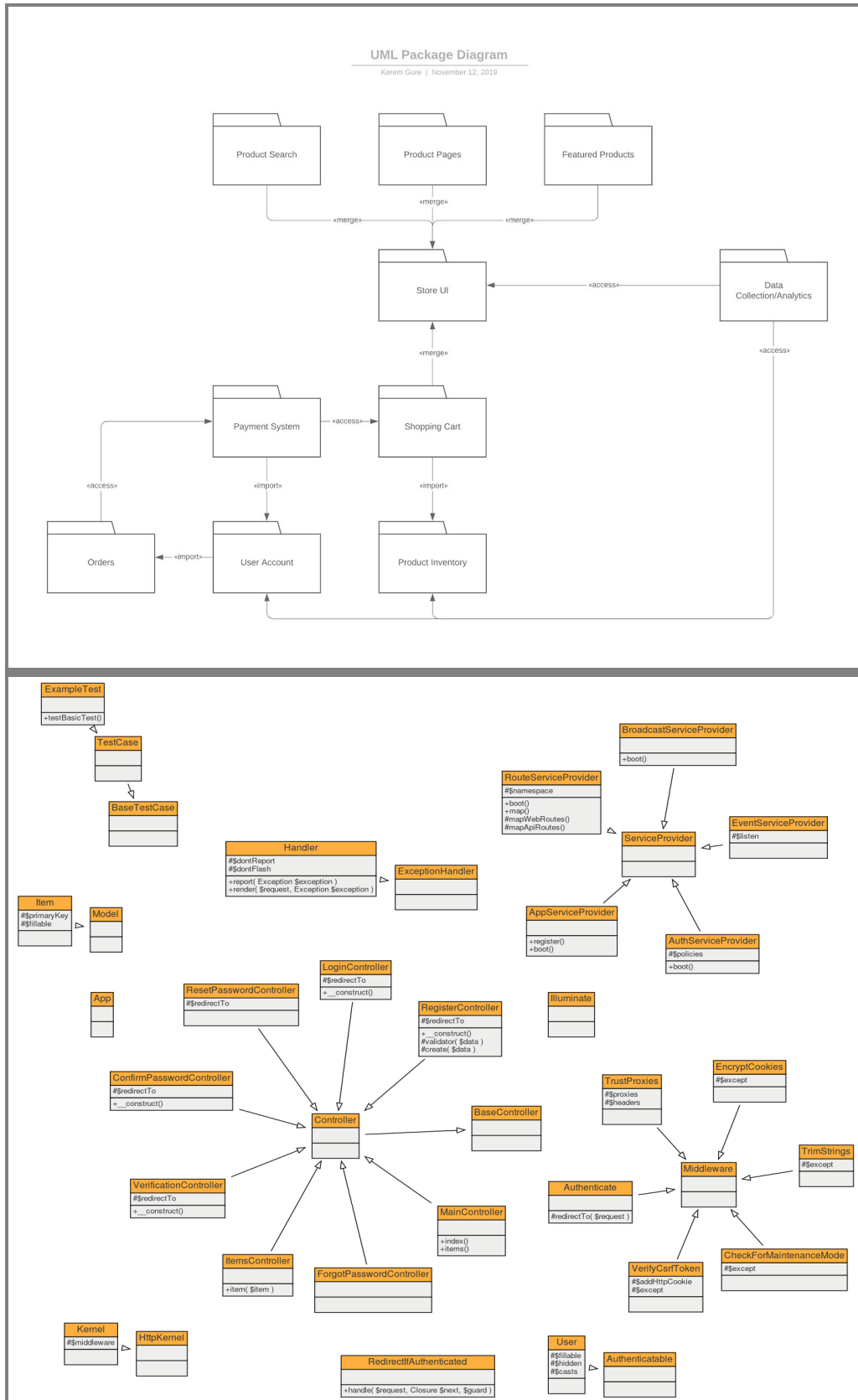
1. SRS-BPP-001
2. SRS-BPP-001.2
3. SRS-BPP-002
4. SRS-BPP-003
5. SRS-BPP-004
6. SRS-BPP-005
7. SRS-BPP-007

3.2 *WebServer Component*

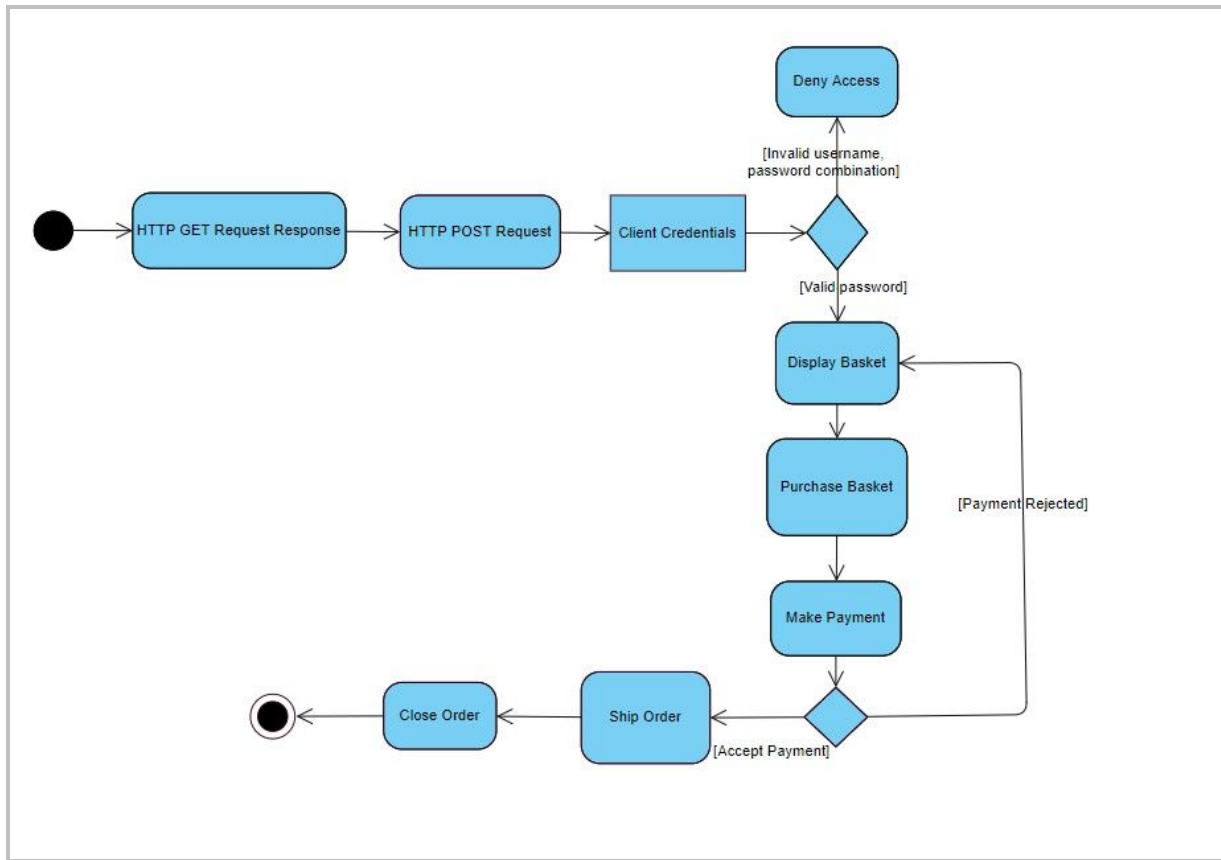
3.2.1 Component interfaces

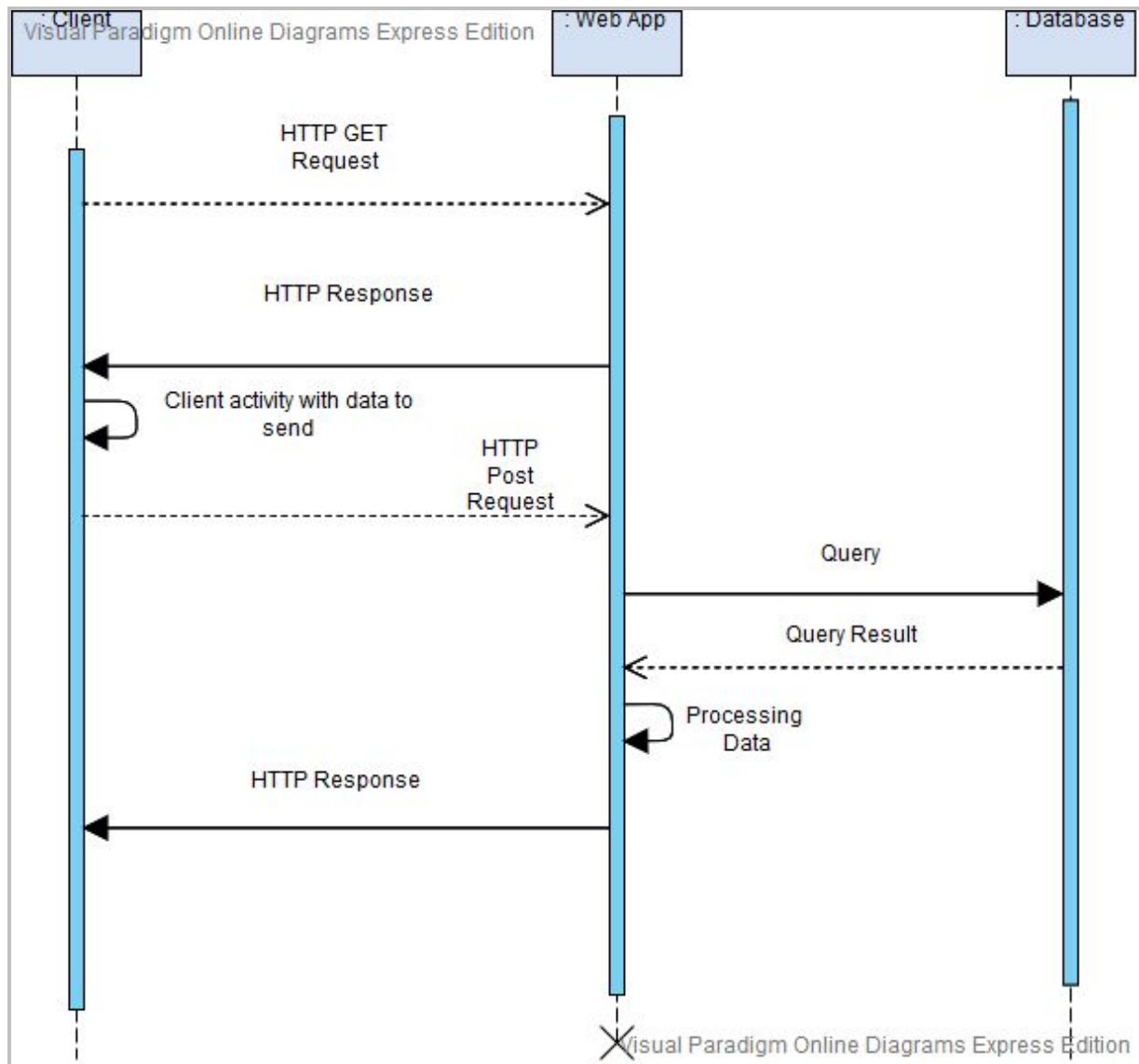
- ❖ Interfaces
 - HTTP, HTTPS for server-client communication.
 - MySQL Protocol for server-DB communication.
- ❖ Inputs
 - HTTP GET, POST requests from Client.
 - Query responses from DB.
- ❖ Outputs
 - HTTP responses to Client.
 - Queries to DB.

3.2.2 Component design description



3.2.3 Workflows and algorithms





3.2.4 Software requirements mapping

1. SRS-BPP-003
2. SRS-BPP-003.1
3. SRS-BPP-004.1
4. SRS-BPP-004.2
5. SRS-BPP-006

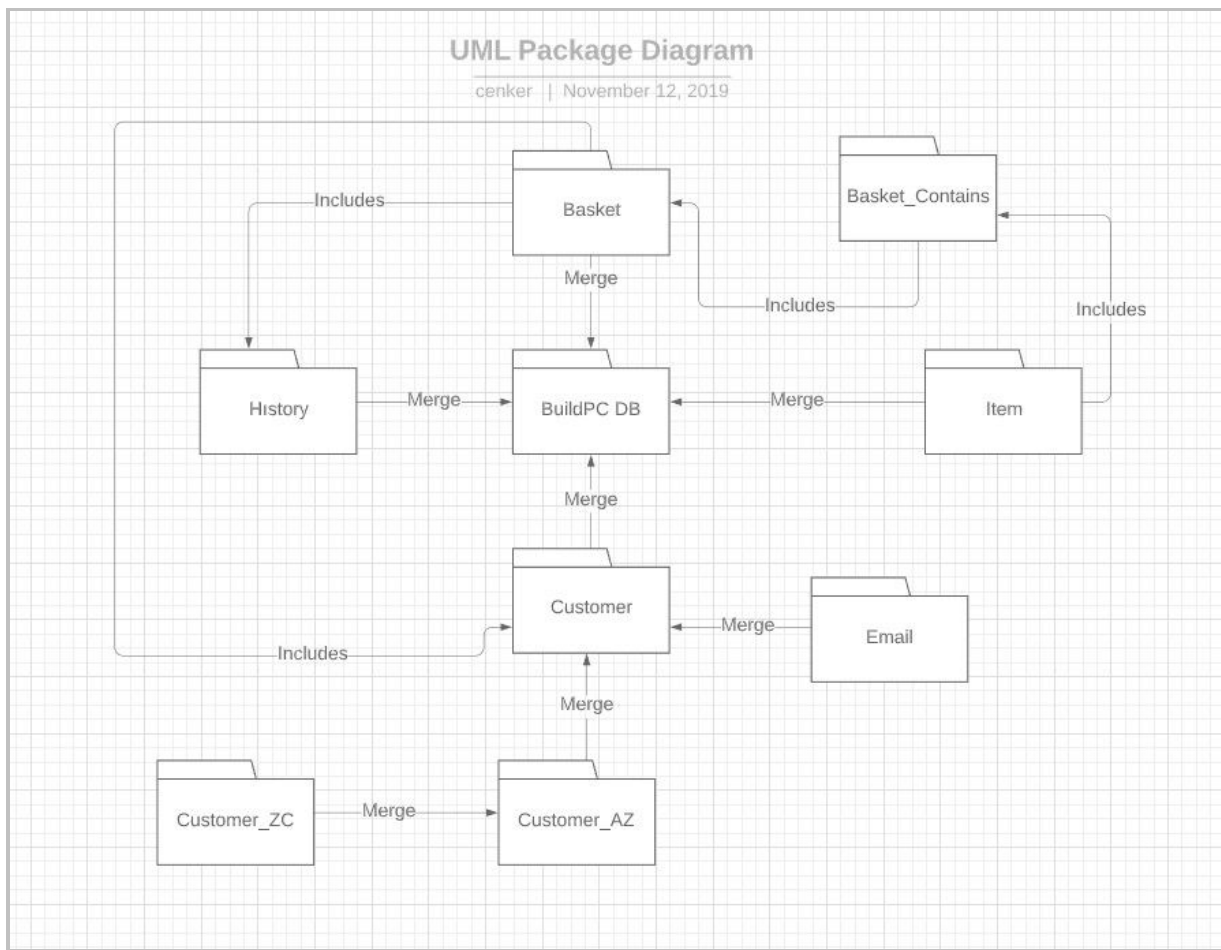
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3.3 DB Component

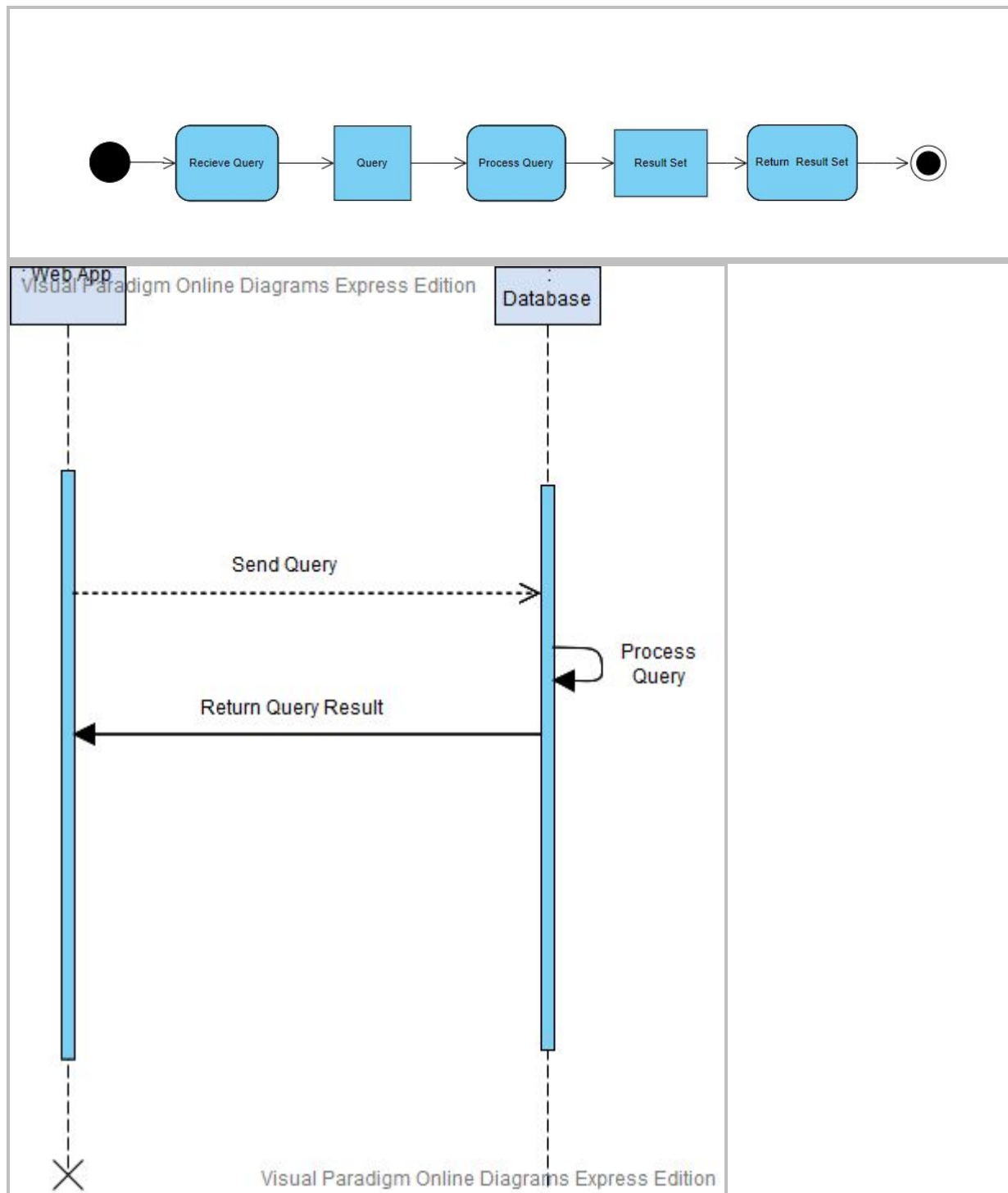
3.3.1 Component interfaces

- ❖ Interfaces
 - MySQL Protocol for DB-server communication.
- ❖ Inputs
 - Queries to DB.
- ❖ Outputs
 - Query responses to WebServer.

3.3.2 Component design description



3.3.3 Workflows and algorithms



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3.3.4 Software requirements mapping

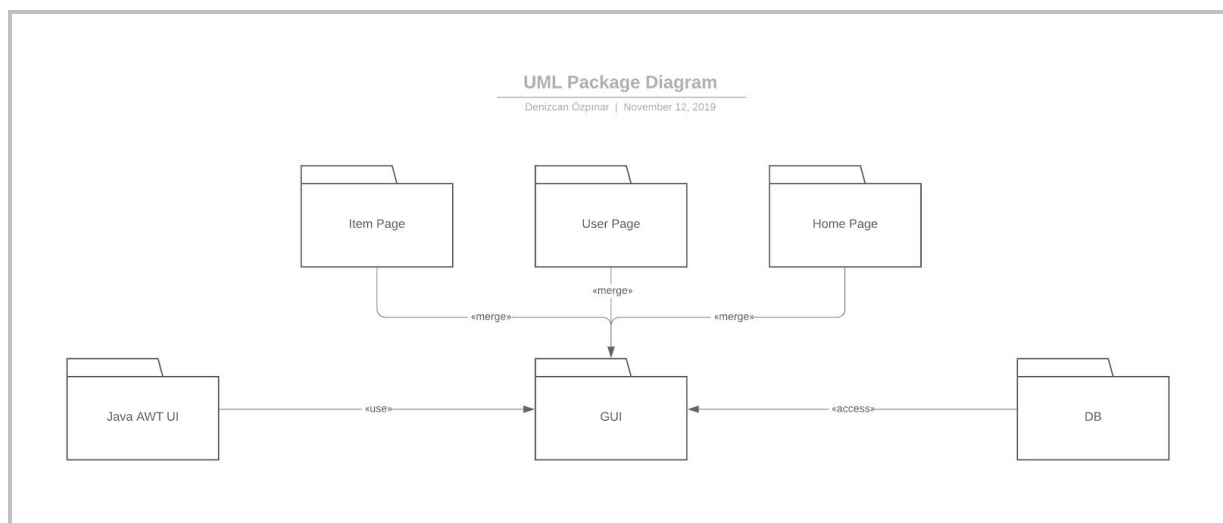
1. SRS-BPP-001.1
2. SRS-BPP-004
3. SRS-BPP-005
4. SRS-BPP-005.1
5. SRS-BPP-007

3.4 PBMT Component

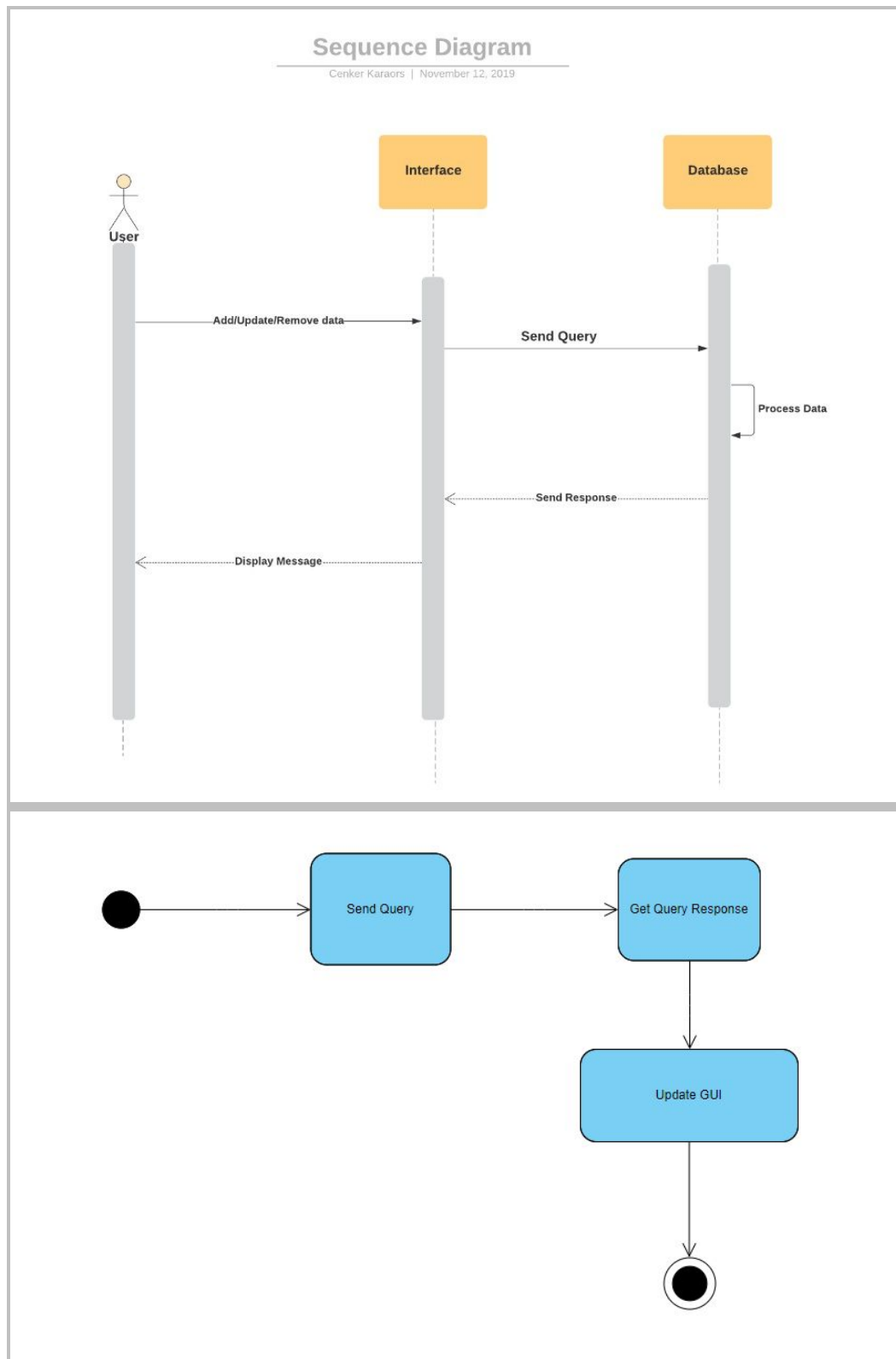
3.4.1 Component Interfaces

- ❖ Interfaces
 - User interface(GUI)
 - MySQL Protocol for pbmt_client to DB connection.
- ❖ Inputs
 - User Inputs
 - Query responses from DB.
- ❖ Outputs
 - Queries sent to DB.
 - User interaction messages.

3.4.2 Component Design Description



3.4.3 Workflows and algorithms



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3.4.4 Software requirements mapping

1. SRS-BPP-BPMT-001
2. SRS-BPP-BPMT-001.1
3. SRS-BPP-BPMT-001.2
4. SRS-BPP-BPMT-001.3
5. SRS-BPP-BPMT-001.4
6. SRS-BPP-BPMT-001.5
7. SRS-BPP-BPMT-002
8. SRS-BPP-BPMT-003

4 COTS Identification

COTS (commercial off the shelf) libraries used in BPP-BPMT are the following:

- mysql-connector-java-8.0.17.jar,
<https://mvnrepository.com/artifact/mysql/mysql-connector-java/8.0.17>, The GNU General Public License, v2 with FOSS exception.
- rs2xml.jar,<https://sourceforge.net/projects/finalangelsanddemons/files/rs2xml.jar/download>, JDOM license.

COTS (commercial off the shelf) libraries used in BPP are the following:

- Laravel framework, <https://laravel.com>, MIT license.
- Twitter bootstrap, <https://getbootstrap.com/>, MIT license.