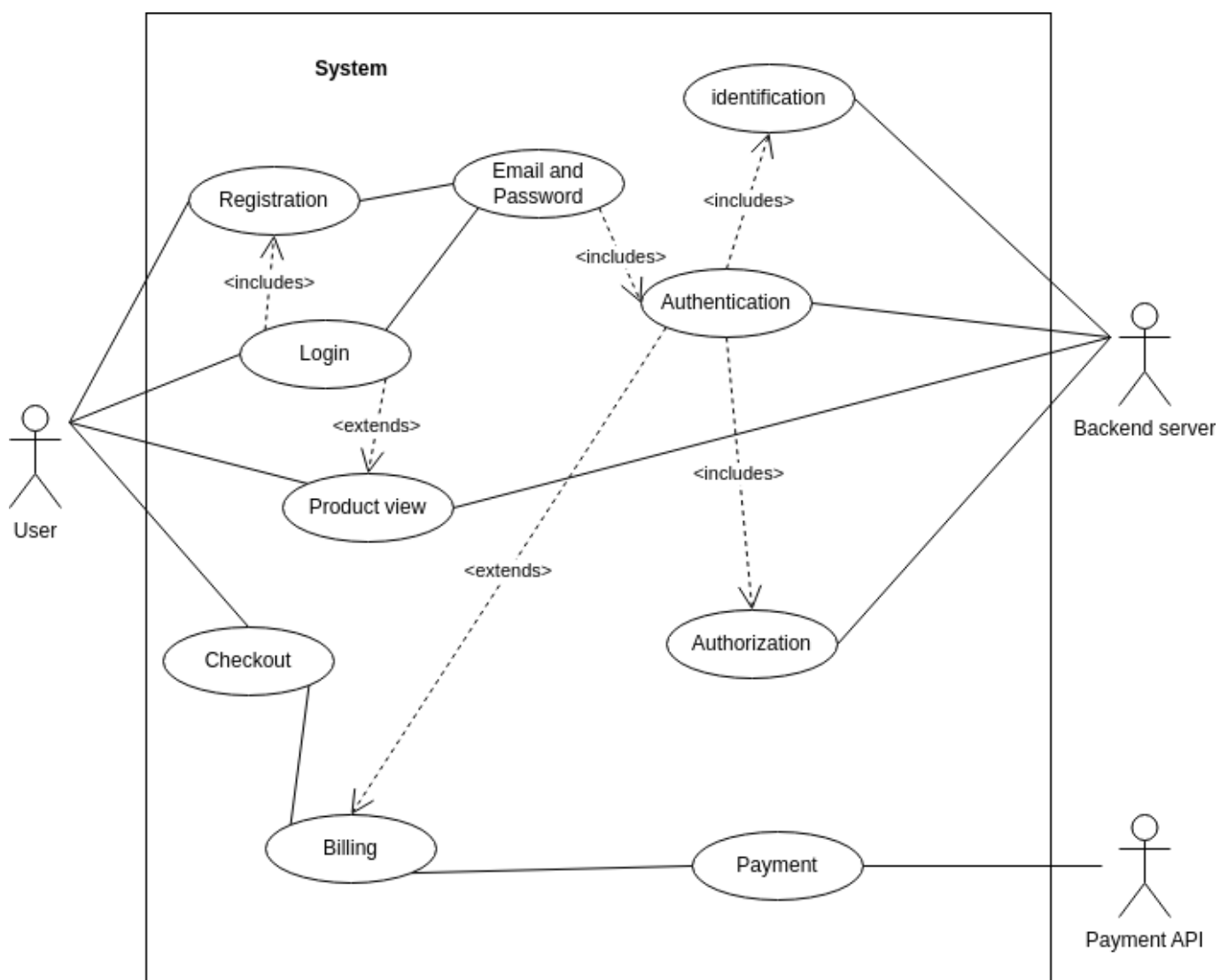


# Assignment 2 2DT902

Emil Ulvagården (eu222dq@student.lnu.se)

## Task 1

The user is connected to four different cases, the cases are registration, login, product view and checkout. Registration is connected to email and password. The login is also connected to email and password but also includes in registration. Email and password includes to authentication which includes identification and authorization and they are connected to the backend server together with product view. Checkout is then connected to billing which is an extension of authentication. Billing is then connected to payment that connects to a payment API.



## Task 2

### QAS 1:

- Source: Unauthorized user
- Stimulus: Attempted login but failed multiple times
- Artifact: Login system

- Environment: Normal operation
- Response: Detects attempted login attempts and logs it
- Response Measure: Detects login attempts and temporarily bans the ip or makes the account in question inactiv.

#### QAS 2:

- Source: Identified user
- Stimulus: User inactiv for longer period of time
- Artifact: Authentication
- Environment: User is logged in
- Response: The user automatically logs out after the given time of inactivity
- Response Measure: The user is automatically logged out after the time period and must log in again to resume the session

#### QAS 3:

- Source: Unknown user
- Stimulus: Tries to create multiple acconts in a short time
- Artifact: Registration
- Environment: Normal operation
- Response: Logs the created accounts together with the ip address for further investigation
- Response Measure: The system logs the created accounts and flags them together with the IP-address and temporarily blocks the IP to prevent further accounts from being created

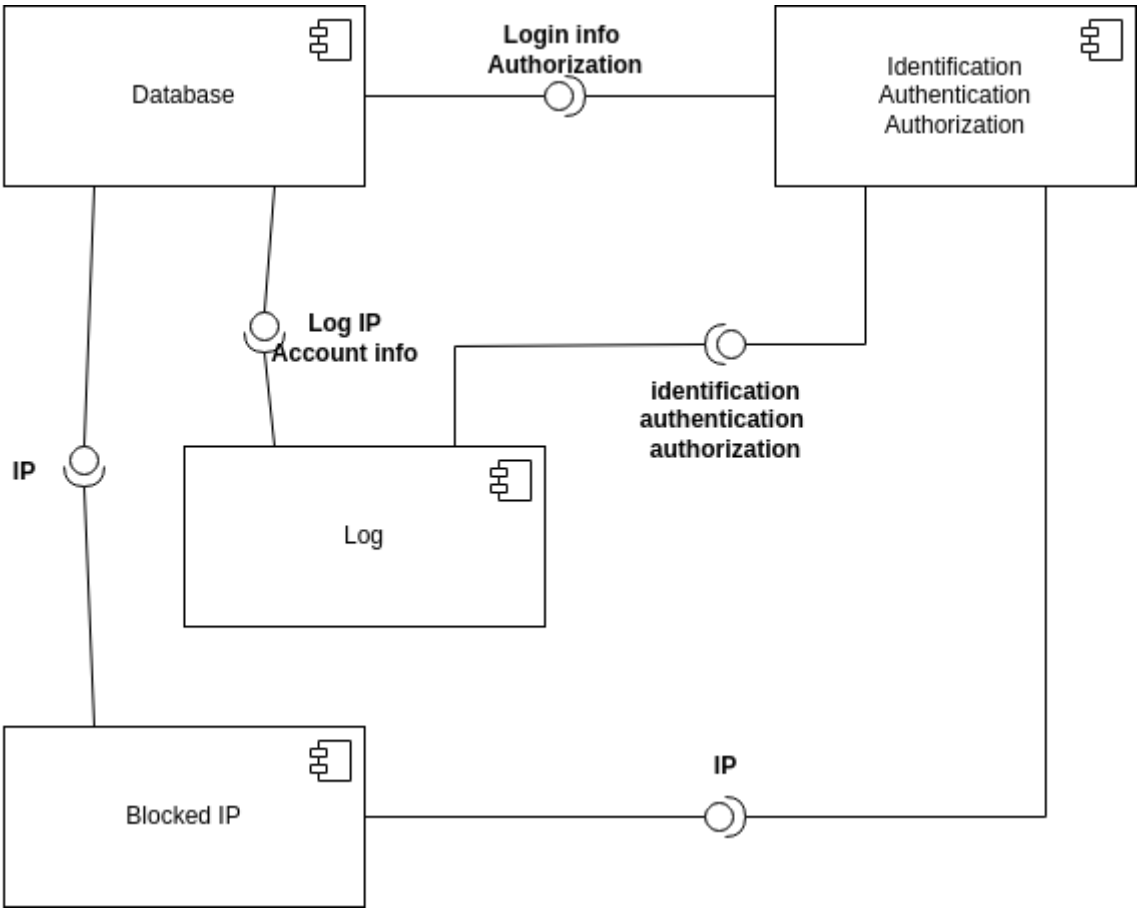
### Task 3

The database provieds login info and authorization to identification, authentication, authorization component. It also provides log IP and account info to log and it provides IP to Blocked IP.

Blocked IP provides the IP to identification, authentication, authorization and requiers IP from Database.

Identification, Authentication, Authorization requiers IP from Blocked IP and login info and autorization from the database and provides the log with identification, authentication, authorization.

Log requiers Log IP and account info from Database and requiers identification, authentication, authorization from Identification, Authentication, Authorization.



Task 4

Adaptation from task 3 are that the database is exanged for the data storage. There are also some extra relations between added to the Employee, User and Data Storage components.

