

# UML Github Documentation

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## 1. System Description

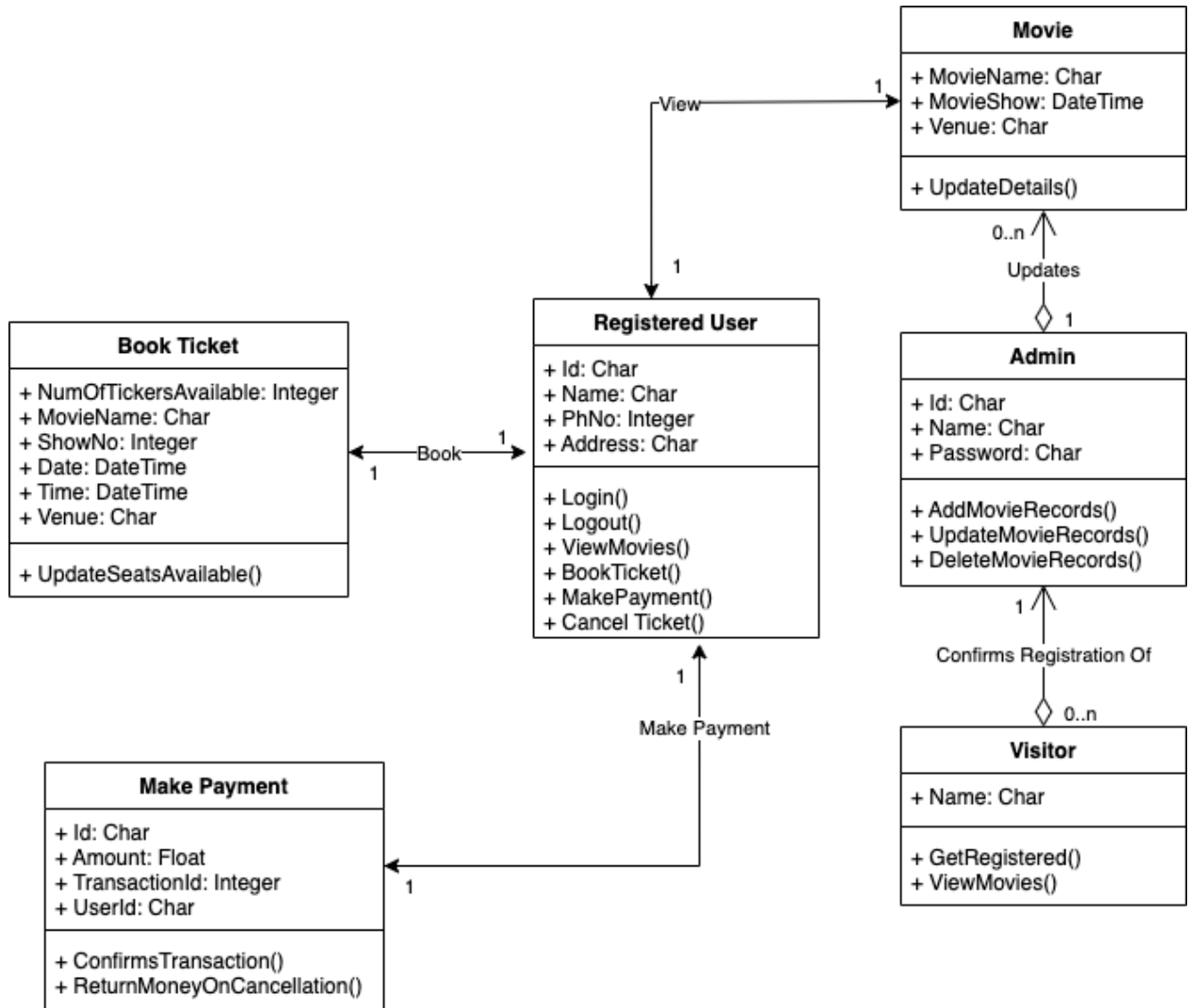
### - **Brief overview of system**

The theater ticketing system allows users to search and buy for movie tickets, movies, select showtimes and seats, and make payments online. This is supported by three languages: English, Spanish, and Swedish. This software system could handle up to 10 million concurrent users. It proved all payment methods including credit cards, PayPal, bitcoin, and every single transaction are limited to 20 tickets. Also, this software permits the users to register loyalty accounts that stored personal information, payment information, purchase history, and loyalty points.

## 2. Software Architecture Overview

### - Architectural diagram of all major components

## - UML Class Diagram



The UML Class diagram is used to set up and visualize object-oriented systems. A class diagram in (UML) is a type of static structure diagram that describes the structure of a system by showing the system's: classes, attributes, operations (or methods), and the relationships among objects.

## - Description of classes

A class is a template for creating behaviors and objects in a system. It's also a set of object(s) that have something in common, such as, features, meanings, and constraints;

this is because each of them has an attribute that allows it to get grouped up with others with that same attribute.

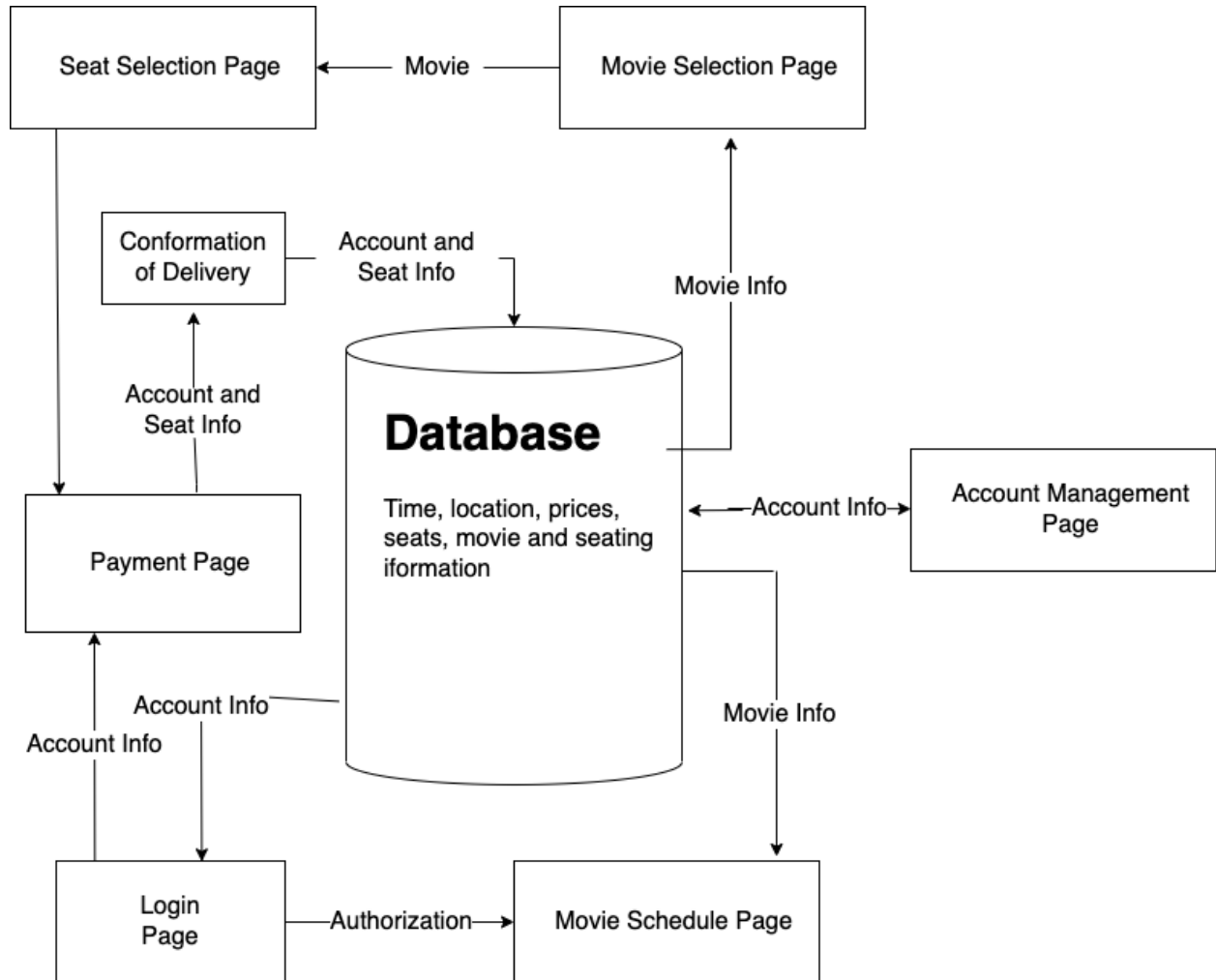
- **Description of attributes**

In UML models, attributes represent the information, data, or properties that belong to instances of a classifier. An attribute represents a data definition for an instance of a classifier. An attribute describes a range of values for that data definition. A classifier can have any number of attributes or none at all. Attributes describe the structure and value of an instance of a class.

- **Description of operations**

In domain modeling class diagrams, an operation requests a service that a classifier or an instance of a class is called to perform. Operations are contained by classes and interfaces. A classifier can have any number of operations or none at all. Operations are implementations of functions or queries that an object might be called to perform. A well-defined operation does only one thing.

### -SWA Diagram



- Software architecture diagrams are important documentation that helps plan for and implement changes in networks, visualize strategic initiatives, and stay ahead of organization needs. The diagram should quickly convey the software system's essential composition and behaviors to both technical and non-technical audiences.

### 3. Development Plan Timeline

#### - **List of tasks/Timeline**

- All team members will be responsible for implementing a movie theater ticketing system that allows users to search, buy and order movie tickets (2 weeks).
- Team Members are responsible for communicating their delegated tasks progress (bi-weekly for 5 weeks).
- Team Members will be responsible to create a way for an admin to access and edit movie information (1 week).
- Team member(s) will be responsible to make it difficult for a hacker to access an admin account (consistent maintenance).
- Team members will be responsible to make sure to cap how many people can walk a movie at a specific showing time and make sure more than 1 person can order the same seat (2 weeks).

#### - **Team member responsibilities**

Nathan shorez will be responsible for creating a way for an admin to access and edit movie schedules and details. This should take approximately 3 weeks.

Kaia Mouser will be responsible for creating a user friendly way to search and buy movie tickets. This should take approximately 2 weeks.

Nathan Morris will be responsible for setting up a way for users to what time to see the movie and in what seating arrangements. This should take approximately 3 weeks.

Farhan Talukder will be responsible for creating a way for users to register loyalty accounts that store all their personal information. This should take approximately 5 weeks.

Amir Nejad will be responsible for creating a way for users to enter their payment information through (Visa, loyalty points, etc) in exchange for movie tickets and/or concessions. This should take approximately 3 weeks.