ISTANBUL AYDIN UNIVERSITY
FACULTY OF ENGINEERING
SOFTWARE ENGINEERING DEPARTMENT

YUM403:Work Placement III

BestMovieTicket Project

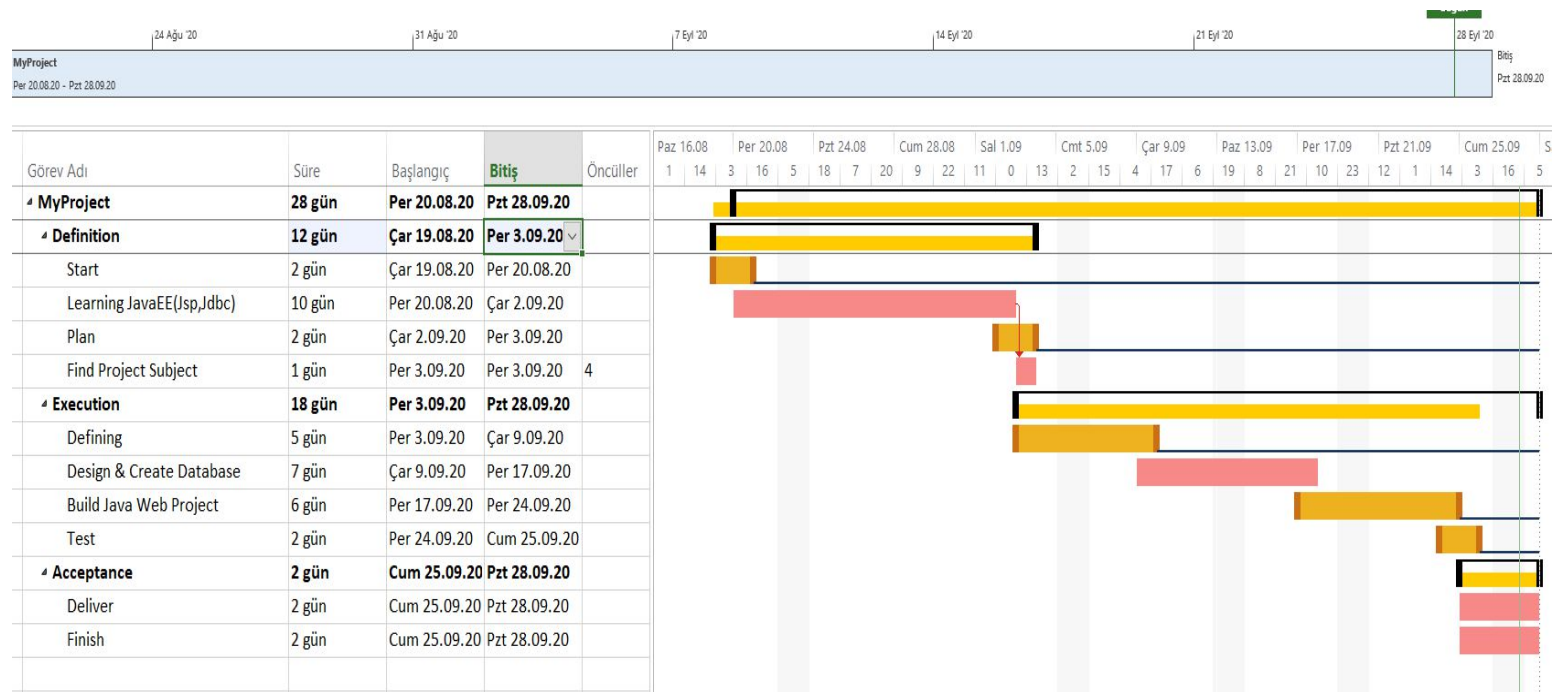**Report**

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1. Overview about the project

The purpose of Online Movie Ticket Booking system project is to provide an automated system of buying movie ticket. Now customer can get to know movie show timing and buy tickets online via internet 24×7. Admin has full control over all modules of this application. Admin can add new movie details and poster. After that he enters movie schedule and booking opening date. Customer can view this schedule and book ticket in his desired show time. Customer should register themselves on the web portal for buying ticket.

Online movies ticket booking reservation provides ticket booking for the film, seat management, ticket cancellation and payment services. The system will be so simple and attractive which will make the audiences/viewers comfortable to use and choose their movie along with desired seat no and seat position. This project using JSP, JAVASCRIPT,HTML/CSS(Boostrap), AJAX, and JDBC.

2. Gant Chartt

Görev Adı	Süre	Başlangıç	Bitiş	Öncüller
◢ MyProject	28 gün	Per 20.08.20	Pzt 28.09.20	
◢ Definition	12 gün	Çar 19.08.20	Per 3.09.20	
Start	2 gün	Çar 19.08.20	Per 20.08.20	
Learning JavaEE(Jsp,Jdbc)	10 gün	Per 20.08.20	Çar 2.09.20	
Plan	2 gün	Çar 2.09.20	Per 3.09.20	
Find Project Subject	1 gün	Per 3.09.20	Per 3.09.20	4
◢ Execution	18 gün	Per 3.09.20	Pzt 28.09.20	
Defining	5 gün	Per 3.09.20	Çar 9.09.20	
Design & Create Database	7 gün	Çar 9.09.20	Per 17.09.20	
Build Java Web Project	6 gün	Per 17.09.20	Per 24.09.20	
Test	2 gün	Per 24.09.20	Cum 25.09.20	
◢ Acceptance	2 gün	Cum 25.09.20	Pzt 28.09.20	
Deliver	2 gün	Cum 25.09.20	Pzt 28.09.20	
Finish	2 gün	Cum 25.09.20	Pzt 28.09.20	

3.1 Introduction

This site is divided into four different modules, Theater, User, Admin and Transaction.

• The User module is meant for the customer wherein he can perform ticket bookings and food ordering.

• The admin module provides the administrative operations for the theater.

• Transaction Module manages all the transactions of the customer with the theater.

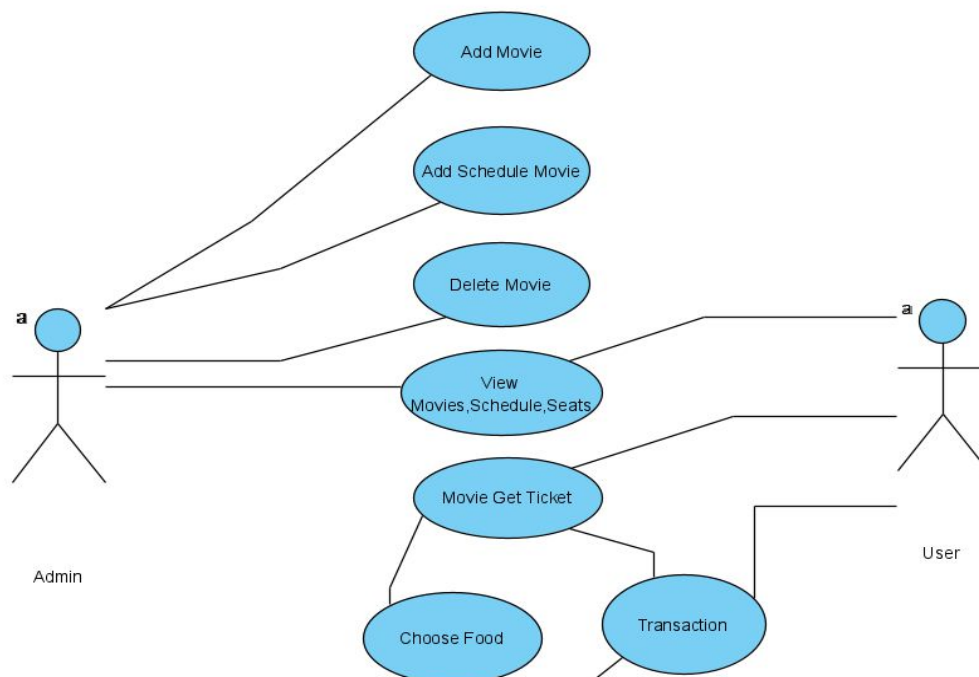• The four modules function parallelly to function as a modern day multiplex.

3.2 Objectives

Movie Ticket Portal provides all the basic functionality of a modern day Multiplex with multiple screens and all other functionalities like ticket booking, food ordering etc. The functionality is divided into four different modules, Theater, User, Admin and Transaction which performtheir independent functions.

• This is a web application for buying movie tickets online. Customers can buy tickets 24×7.

• This system is developed keeping in view of the current multiplex working pattern. Schedule for many screens can be programmed in this application.

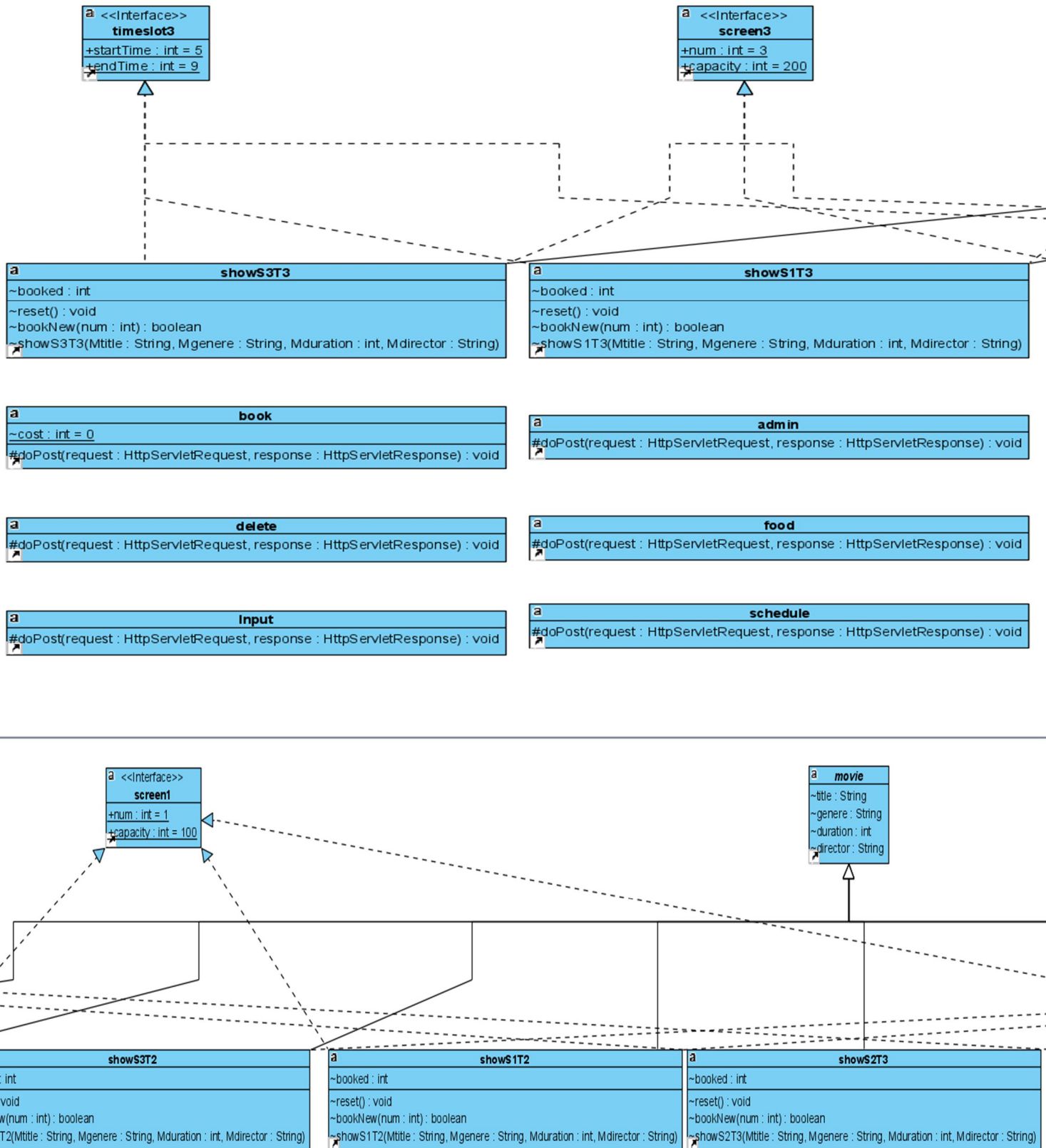• Customer can choose name of multiplex where they want to see movie and get their movie timings.
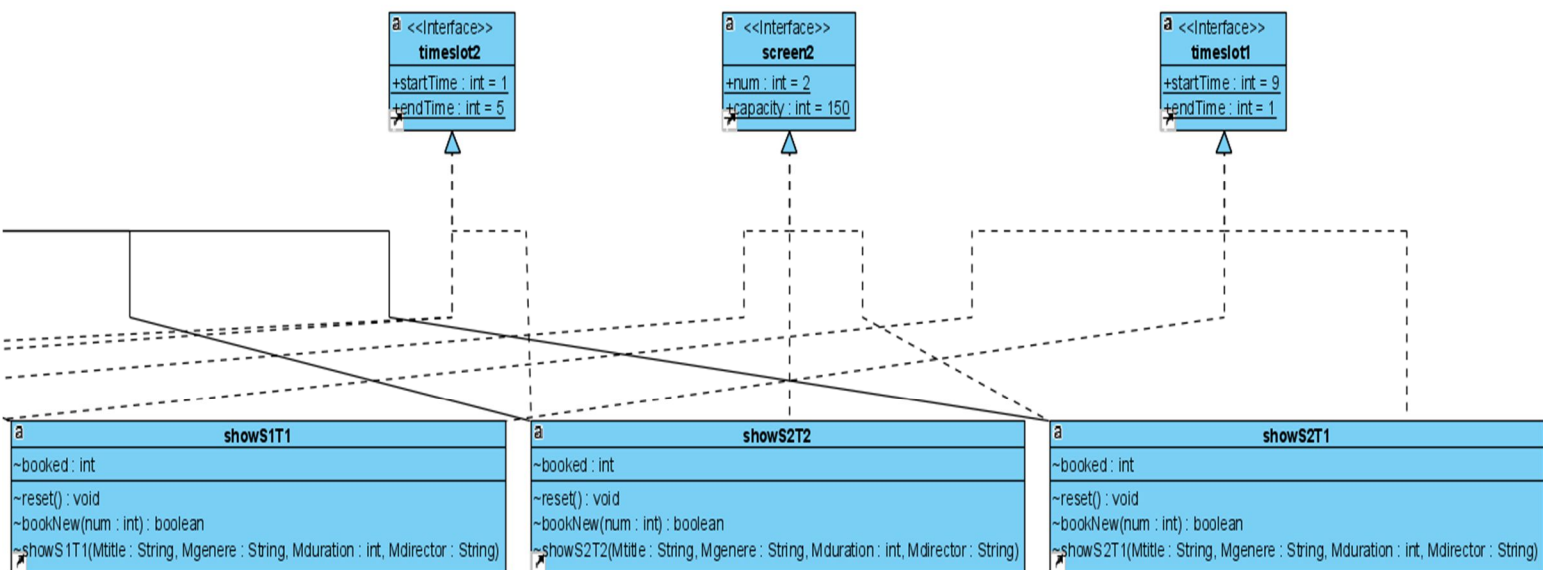
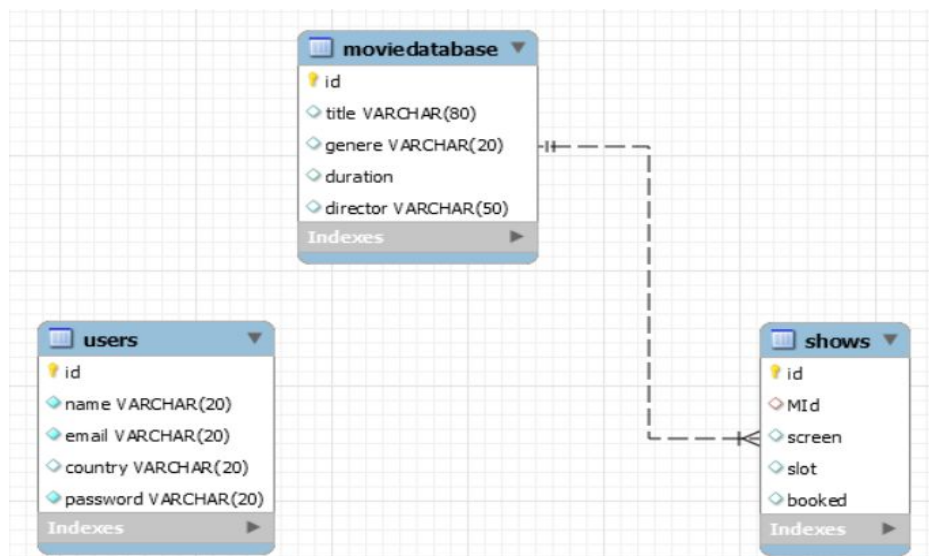## i. Diagrams

4.1. Use-case Diagram

4.2. Class Diagram

<<Interface>>
timeslot3
+startTime : int = 5
+endTime : int = 9

<<Interface>>
screen3
+num : int = 3
+capacity : int = 200

showS3T3
~booked : int

~reset() : void
~bookNew(num : int) : boolean
~showS3T3(Mtitle : String, Mgenere : String, Mduration : int, Mdirector : String)

showS1T3
~booked : int

~reset() : void
~bookNew(num : int) : boolean
~showS1T3(Mtitle : String, Mgenere : String, Mduration : int, Mdirector : String)

book
~cost : int = 0
#doPost(request : HttpServletRequest, response : HttpServletResponse) : void

admin
#doPost(request : HttpServletRequest, response : HttpServletResponse) : void

delete
#doPost(request : HttpServletRequest, response : HttpServletResponse) : void

food
#doPost(request : HttpServletRequest, response : HttpServletResponse) : void

Input
#doPost(request : HttpServletRequest, response : HttpServletResponse) : void

schedule
#doPost(request : HttpServletRequest, response : HttpServletResponse) : void

<<Interface>>
screen1
+num : int = 1
+capacity : int = 100

movie
~title : String
~genere : String
~duration : int
~director : String

showS3T2
~booked : int

~reset() : void
~bookNew(num : int) : boolean
~showS3T2(Mtitle : String, Mgenere : String, Mduration : int, Mdirector : String)

showS1T2
~booked : int

~reset() : void
~bookNew(num : int) : boolean
~showS1T2(Mtitle : String, Mgenere : String, Mduration : int, Mdirector : String)

showS2T3
~booked : int

~reset() : void
~bookNew(num : int) : boolean
~showS2T3(Mtitle : String, Mgenere : String, Mduration : int, Mdirector : String)

4.3. Database Diagram

ii.Analysis, Design and Development

MODULES

1. Theater
2. User
3. Admin
4. Transaction

5.1 THEATER MODULE : Theater module manages all the functionalities of the theater. The theater consists of 3 screens and the timings of shows are divided into 3 slots.
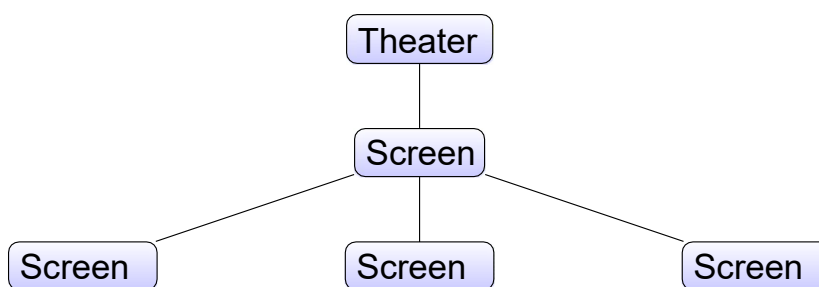
## Classes :

1. Screen
2. Movie
3. Show

Interfaces :

1. Screen1, Screen2, Screen3
2. timeSlot1, timeSlot2, timeSlot3

Inheritance Structure: The screen class consists of the hall capacity which is same for all the 3 screens. Three interfaces for each screen inherit from this screen class.

```
                    Theater
                       |
                    Screen
             /         |         \
      Screen        Screen        Screen
```

There are 3 time slots in the form of interfaces. Movie class contains the infor- mation about movie like movie name, base price, etc. The show class extends the movie class and implements 2 interfaces one from the three screens and one from the three time slots.

```
   ScreenNo        Movie        timeSlotNo
          \          |          /
                    Show
```
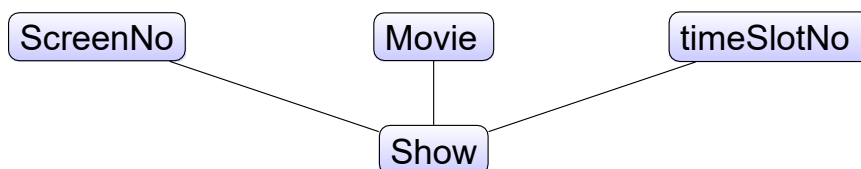
That is, every show of a specific movie has some time slot and Screen no.

5.2 USER MODULE : The User Module consists of class user which contains the user's information, email-id, username etc. It has functions to authenticate the user. After au- thentication, the user can make transactions for booking tickets or ordering food.

Classes :

1. user

Inheritance Structure : The class user inherits from class Person which contains the basic details of a person like name etc.

5.3 ADMIN MODULE : The admin module is for the administrator or the manager who has access to change the informations of movies, screens, time slots etc. after authenti- cation. This module contains the information of admin like username and functions for authentication, changing time slots, changing screen details like capacity, changing ticket prices (mentioned in transaction module)

Inheritance Structure : The class admin inherits from class Person which contains the basic details of a person like name etc.

```
                    Person
                   /      \
              User          Admin
```
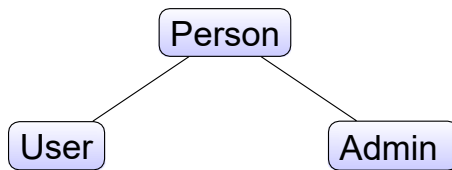
The person class contains the details of the person (user or admin).

5.4 TRANSACTION MODULE: The transaction module is used for managing all the transactions like ticket booking and food ordering.

Classes :

1. Ticket
2. Food

Interfaces :

1. Gold, Silver, Platinum

Inheritance Structure : Transactions are of two types Ticket and food.Gold, silver and platinum are three different types of seats. Every movie ticket extends the **show** class from Theater module and implements one of the three interfaces of types of seat. The ticket price is calculated by adding the base price of the movie and the price for the seat type.

```
     Show            Seat
         \          /
           Ticket
```
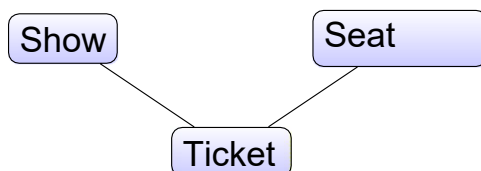
5.4 Non-Functional Requirements

1. Secure access of confidential data (users details). SSL can be used.
2. 24 X 7 availability.
3. Browser testing and support for IE, NN, Mozila, and Firefox.
4. Reports exportable in .XLS, .PDF.
5. Create a detailed UML diagram (Component, Sequence, Class) for the system and its sub-components.

iii. Software Tools Specification

Tool To Be Used

1. Use any IDE to develop the project in Eclipse(Jdk 14.0)
2. Oracle 10g for the database.
3. Server: Apache Tomcat 9.0.

Front End & Back End

1. **Front End:** JSP, JDBC, Javascript, AJAX , HTML/CSS (Boostrap)
2. **Back End:** Oracle10g

JAVA & JAVA EE : An application software platform from Oracle based on the Java programming language. Originally developed by Sun, which Oracle acquired in 2010, Java EE services are performed in the middle tier between the user's machine and the enterprise's databases and legacy information systems. Java EE comprises a specification, reference implementation and set of testing suites. Its core component is Enterprise JavaBeans (EJBs), followed by JavaServer Pages (JSPs) and Java servlets and a variety of interfaces for linking to the information resources in the enterprise.

The Java EE interfaces include JDBC for databases, JNDI for directories, JTA for transactions, JMS for messaging, JavaMail for email systems and JavaIDL for CORBA connectivity. Java Connectors are interfaces to a variety of legacy applications.

HTML : HTML (Hypertext Markup language) is the set of markup symbols or codes inserted in a file intended for display on a World Wide Web browser page. In order to meet the growing demand for more impressive web features, HTML has been coupled with plugins like CSS, Flash, JavaScript etc.

CSS : CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes.CSS removed the style formatting from the HTML page. CSS is independent of HTML and can be used with any XML based markup language. The separation of HTML from CSS makes it easier to maintain sites, share style sheets across pages, and tailor pages to different environment.

Bootstrap: Bootstrap is the most popular HTML, CSS and JavaScript framework for developing responsive, mobile-first web sites. Bootstrap is completely free to download and use. Bootstrap gives you the ability to faster and easier web development.

JavaScript: JavaScript is a cross-platform, object-oriented scripting language. It is a small and lightweight language. Inside a host environment (for example, a web browser), JavaScript can be connected to the objects of its environment to provide programmatic control over them. JavaScript contains a standard library of objects, such as Array, Date, and Math, and a core set of language elements such operators, control structures, and statements. Core JavaScript can be extended for a variety of purposes by supplementing it with additional objects.

MySQL : MySQL is a popular choice of database for use in web applications, and is a central component of the widely used XAMPP open source web application software stack (and other 'AFM' stacks). XAMPP is an acronym for "All Windows, MySQL, Perl/PHP Python". Free-software- open source projects that require a full featured database management system often use MySQL. MySQL can be built and installed manually from source code, but can be tedious so it is more commonly installed from a binary package unless special customization are required. Features:

Web interface.

Support for most MySQL features.

Import data from CVS and SQL.

Export data to various formats: CVS, SQL, XML, PDF, ISO/IEC 263000.

Open document Text and Spreadsheet, Word, Excel, and others.

Administering multiple servers.

Creating graphics of your database layout in various formats.

Creating complex queries using Query-by-example (QBE).

Searching globally in a database or a subset of it.

Transforming stored data into any format using a set predefined function, like displaying BLOB-data as image or downlink.

Live chats to monitor MySQL server activity like connections, processes, CPU/Memory usage, etc.

Chapter 6 Project Description

Database MySql:

moviedatabase | shows | × | users

```
1 ● SELECT * FROM `movie-ticket`.shows;
```

moviedatabase | shows | users | ×

```
1 ● SELECT * FROM `movie-ticket`.users;
```

Result Grid — Filter Rows: — Edit:

id	MId	screen	slot	booked
8	13	3	3	8
9	14	1	2	0
10	15	2	3	8
11	16	4	2	3
12	17	5	3	3
13	18	3	2	4
15	15	2	3	0
16	17	3	3	0
17	21	3	5	2
NULL	NULL	NULL	NULL	NULL

Result Grid — Filter Rows: — Edit:

id	name	email	country	password
2	ilayda	ilayda@gmail.com	turkey	ilayda123
NULL	NULL	NULL	NULL	NULL

moviedatabase | × | shows | users

```
1 ● SELECT * FROM `movie-ticket`.moviedatabase;
```

Result Grid — Filter Rows: — Edit: — Export/Imp

id	title	genere	duration	director
13	Deadpool (A)	action, comedy	110	Mark Stevenson
14	Avengers	action	115	marvel
15	Faith,Hope & Love	drama	120	Robert Krantz
16	The Man From U.N.C.L.E	action,comedy	130	Guy Ritchie
17	What Dreams May Come	drama,fantastic	150	Vincent Ward
18	Steve Jobs	biopic	190	Dayln Boyle
20	Love	Drama,Comedy	110	Dayln Boyle
21	Friends	Comedy	110	Elizabeth Boyle
NULL	NULL		NULL	NULL

6.1 User Page

Select	Movie	Show Slot	Duration	Screen No.	Available
○	Deadpool (A)	5 to 9	110 minutes	3	192

Select	Movie	Show Slot	Duration	Screen No.	Available
○	Deadpool (A)	5 to 9	110 minutes	3	192
○	Avengers	1 to 5	115 minutes	1	100
○	Faith,Hope & Love	5 to 9	120 minutes	2	142
○	The Man From U.N.C.L.E	1 to 5	130 minutes	4	3
○	What Dreams May Come	5 to 9	150 minutes	5	3
○	Steve Jobs	1 to 5	190 minutes	3	196
○	Faith,Hope & Love	5 to 9	120 minutes	2	150
○	What Dreams May Come	5 to 9	150 minutes	3	200

Book Movie

No. Of Seats

Silver - Rs.100

BOOK NOW

6.2 Ticket Movie Page

Select	Movie	Show Slot	Duration	Screen No.	Available
○	Deadpool (A)	5 to 9	110 minutes	3	192
○	Avengers	1 to 5	115 minutes	1	100
○	Faith,Hope & Love	5 to 9	120 minutes	2	142
◉	The Man From U.N.C.L.E	1 to 5	130 minutes	4	3
○	What Dreams May Come	5 to 9	150 minutes	5	3
○	Steve Jobs	1 to 5	190 minutes	3	196
○	Faith,Hope & Love	5 to 9	120 minutes	2	150
○	What Dreams May Come	5 to 9	150 minutes	3	200

Book Movie

2

Gold - Rs.150 ▾

BOOK NOW

http://localhost:8080/MovieTicket/book

Wrong Input

Order Meal

Back

6.3 Order Meal (Food) Page

6.4 Transaction Page

6.5 Admin Page

6.6 Add Movies ,Schedule Movie(Publis the movie) , Delete Movie Page

6.7 Added Page

Select	Movie	Show Slot	Duration	Screen No.	Available
○	Deadpool (A)	5 to 9	110 minutes	3	192
○	Avengers	1 to 5	115 minutes	1	100
○	Faith,Hope & Love	5 to 9	120 minutes	2	142
○	The Man From U.N.C.L.E	1 to 5	130 minutes	4	3
○	What Dreams May Come	5 to 9	150 minutes	5	3
○	Steve Jobs	1 to 5	190 minutes	3	196
○	Faith,Hope & Love	5 to 9	120 minutes	2	150
○	What Dreams May Come	5 to 9	150 minutes	3	200
○	Friends	0 to 0	110 minutes	3	198

Book Movie

No. Of Seats

Silver - Rs.100

BOOK NOW

7. Tools & Searching Documents

https://www.oracle.com/tr/java/technologies/javase-downloads.html

https://www.eclipse.org/downloads/

http://www.java2s.com/Code/Jar/j/Downloadjavaxservlet30jar.htm

https://www.edureka.co/blog/servlet-and-jsp-tutorial/

https://www.javatpoint.com/servlet-tutorial

http://tomcat.apache.org/

https://docs.oracle.com/cd/E19226-01/820-7627/giqii/index.html

https://www.tutorialspoint.com/jdbc/index.htm

https://www.javaguides.net/2019/01/jsp-jdbc-mysql-example.html

https://www.oracle.com/tr/database/technologies/appdev/jdbc.html

https://docs.microsoft.com/en-us/sql/connect/jdbc/download-microsoft-jdbc-driver-for-sql-server?view=sql-server-ver15

8. Youtube URL Presentation : https://www.youtube.com/watch?v=f_P2KEUIvKg&feature=youtu.be