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# INDEX

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1	Introduction.....	2
1.1	Aim of the document.....	2
1.2	Overview of the defined system.....	2
1.3	Operational settings.....	2
1.4	Related systems .....	3
1.4.1	POSitive® Cinema.....	3
1.4.2	SAP® ERP & Microsoft Dynamics .....	3
2	User Stories.....	4
2.1	Fabio Buracchi .....	4
2.2	Massimo Mazzetti .....	4
2.3	Palmieri Ivan .....	4
3	Functional Requirements .....	5
3.1	Fabio Buracchi .....	5
3.2	Massimo Mazzetti .....	5
3.3	Ivan Palmieri .....	5
4	Use Case: Overview Diagram .....	6
5	Glossary .....	7
5.1	Credit card .....	7
5.2	Report .....	7
5.3	Ticket options .....	7
5.4	Movie rating .....	7

# 1 INTRODUCTION

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## 1.1 Aim of the document

In the following document we will introduce the CineHub project, developed for the Software Engineering and Web Design course of the academic year 2020-21.

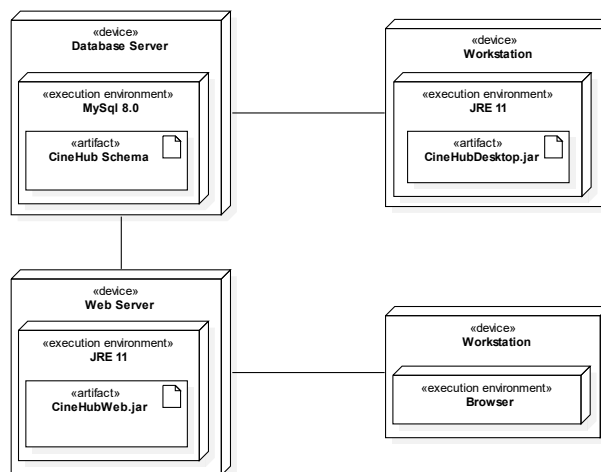
## 1.2 Overview of the defined system

CineHub is an ERP system aimed to the cinema industry which offers the automation and assisted management of movie theater chains through several ERP modules.

The e-commerce and human resource modules have been designed and developed for the current version.

## 1.3 Operational settings

The system provides as artifacts a desktop and a web application executable.



To deploy the system is needed a node where MySQL 8.0 version or greater is installed to host the CineHub schema.

The desktop artifact requires to be deployed in a node where the JRE/JDK 11 version or greater is installed.

The web-app artifact requires to be deployed in a node where the JRE/JDK 11 version or greater is installed.

To interact with the web-app is required a node where it is installed a latest, stable release of any major browser and platform. On and Android Browser & WebView is required Android version 6.0 or greater. Internet Explorer and Safari are not supported.

## 1.4 Related systems

### 1.4.1 POSitive® Cinema

CineHub's main competitor is [POSitive Cinema](#), a more mature ERP solution aimed for the cinema industry.

The pro of choosing CineHub instead of this product are:

- The built-in ticket options\* feature.
- The shift exchange and swap request feature.

The cons of choosing CineHub instead of this product are:

- The lack of several modules.
- The absence of dedicated hardware solutions.

### 1.4.2 SAP® ERP & Microsoft Dynamics

[Sap ERP](#) and [Microsoft Dynamics](#) are the world market leaders ERP solutions.

The pros of choosing CineHub instead of these products are:

- CineHub is a solution specialized for cinema management.
- Having fewer customers means total dedication to their business and to the customization of their solutions.
- A cheaper economic solution.

The cons of choosing CineHub instead of these products are:

- The lack of several modules.
- CineHub is a younger, less experienced solution in the industry.

## 2 USER STORIES

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### 2.1 Fabio Buracchi

- As a customer, I want to pay for my order with my credit card\*, so that I can pay via my bank account.
- As an employee, I want to see my shift details, so that I can know about my duties.
- As an administrator, I want to view the reports\*, so that I can perform business analysis.

### 2.2 Massimo Mazzetti

- As an administrator, I want to define work shifts, so that I can manage the employees.
- As a customer, I want to see the movie ratings\*, so that I can know the critics judgment.
- As a customer, I want to cancel my booking, so that I can be refunded.

### 2.3 Palmieri Ivan

- As a customer, I want to buy a ticket online, so that I can skip the line to buy it.
- As a customer, I want to see the list of films screened on a certain date, so that I can plan when to go to the cinema.
- As a customer, I want to choose which seat to book, so that I can sit where I prefer.

## **3 FUNCTIONAL REQUIREMENTS**

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### **3.1 Fabio Buracchi**

- The system shall provide the refund of a ticket within 30 minutes of the start of the film.
- The system shall provide a list of films screened on a selected date.
- The system shall provide thumbnails of movie posters.

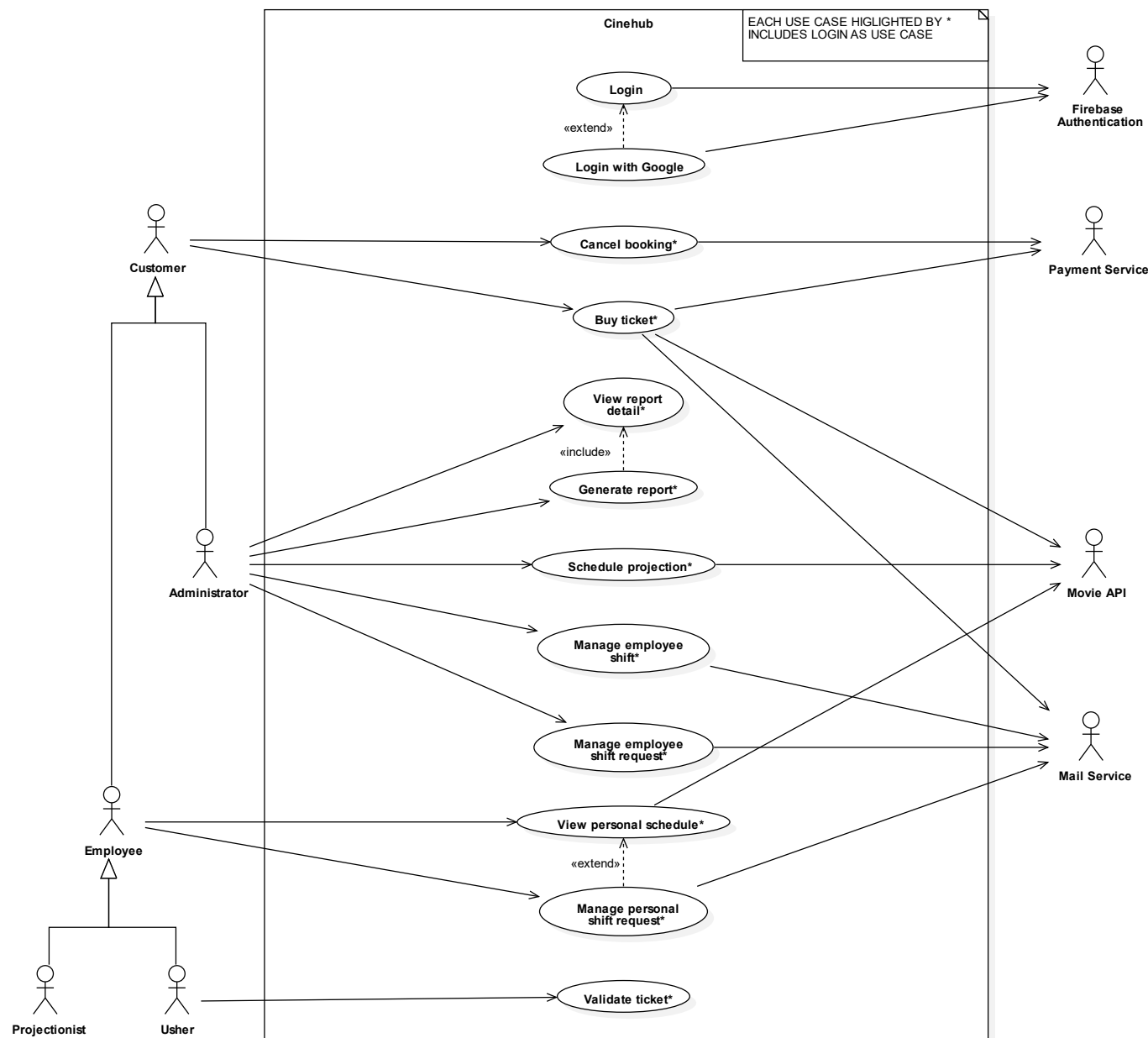
### **3.2 Massimo Mazzetti**

- The system shall generate a report\* the 15th of each month.
- The system shall provide to modify a shift within 1 day of the start of the shift.
- The system shall provide to delete a shift within 1 day of the start of the shift.

### **3.3 Ivan Palmieri**

- The system shall provide the receipt for a sale.
- The system shall provide the possibility to purchase a ticket.
- The system shall provide a map showing the location of the cinema.

# 4 USE CASE: OVERVIEW DIAGRAM



## 5 GLOSSARY

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### 5.1 Credit card

A MasterCard or Visa credit card.

### 5.2 Report

A report containing the current month's:

- Number of canceled reservations.
- Number of confirmed reservations.
- Number of not validated confirmed reservations.
- Total revenue for each film.
- Total income.
- List of outgoings for the employee salaries.
- List of outgoings for the film distributions.
- Total outcome.

### 5.3 Ticket options

During the purchase of the ticket, it is possible to select a set of optional services:

- Magic box: this ticket includes a gadget related to the movie you are watching (such as t-shirts, bracelets, hats...)
- Skip line: this ticket allows you to fly over the waiting line at the entrance to the cinema.
- Open bar: this ticket includes a full meal (sweet, savory, soft drinks) at the cinema bar.

### 5.4 Movie rating

A number in the range  $[1,10]$ .