

< Cinemang | Cinema Management System >

CME 3201 Database Management Systems **Term Project Report**

Phase III
2020-2021 FALL

2016510099	Şeniz AKBULUT	seniz.akbulut@ceng.deu.edu.tr
2016510007	Asude AĞAYA	asude.agaya@ceng.deu.edu.tr
2016510103	Beydoğan Ünsal TURAN	beydogan.turan@ceng.deu.edu.tr

Contents

1. Completion Report.....	4
2. Functional Decomposition.....	5
3. High Level Organization.....	7
4. ClickStreams.....	8
5. Layout.....	10
6. Implementation.....	11
7. Future Work.....	12

Abstract

Cinema has been a part of the entertainment industry for a long time. It creates a massive impact on people all over the world. In other words, it helps them give a break from monotony. It has evolved greatly in recent years too. Cinema is a great escape from real life. As the film industry continues to develop and grow day by day, people's interest in cinema is increasing. This increase in interest affects the proliferation of movie theaters and the increase in the number of cinemas day by day. In our era, access to the movie theater and current movies is much better than in the past. As people of the Internet age, although we have the luxury of watching movies that we are curious about with a single click, many people think that watching the movie in the cinema is much more effective in terms of feeling the emotion of the movie. This increases the importance of cinema. Also, for many people, going to the movies and watching current movies is seen as a means of socializing.

Increasing number of movie theaters day by day brings about problems such as hall management, ticketing, sales etc. In this report, the Cinemang project that we will develop to eliminate these problems will be mentioned.

Cinemang is a web application. There is no mobile application support. User and staff are required to perform transactions through the browser. The system addresses two user groups. These staff and viewers. Cinema staff is responsible for data entry and system management. When a new movie is released, the staff adds it to the system and also removes it from the system in a movie that leaves the in theater. Persenol adds and removes the new hall according to its density. Persenol adds new screenings to movies that are in high demand.

1. Completion Report:

In this cinema management system we developed, MSSQL and ASP.NET Core MVC structure was used to meet the system requirements. As teammates, we tried to develop a software by combining the information we have obtained so far. While designing the project, we constantly researched cinema management to plan them thoroughly and completely, and we started developing on it.

Considering the needs of the project, we started to form the system by sharing ideas as a team. While we were modeling our project, we created a structure from start to finish, but when we needed or thought it was better when it was changed, we went back and changed those parts. The reason for making changes is our desire to complete the project in the best way.

We drew many diagrams to see the project in general and to examine the functioning of small parts. These are entity relationship diagram, relational database schema, UML class diagram.

After preparing the detailed designs, it remains to prepare the database and to realize the last stage of our project with MVC. We could not quite reach the point we planned in our project. The reason for this is the insufficiency of time and the mistakes we encountered during the development phase. For example, using an external model used for user comments while working on the MVC side caused a problem in saving the data to the system, and when the user was going to buy a ticket, there were errors in viewing during the hall selection.

2. Functional Decomposition

In this system, the application is divided into three main parts: the View, which takes the responsibility to present (display) / represent the data to the other party in various forms, the Controller, which takes the responsibility to manage the actions coming from the user interaction, and the Model that is responsible for keeping the information about our application to which we will integrate our data.

There is a connection between the View layer and the Controller layer. When requested by the user, the Controller layer runs first, then the page connected to that Controller runs on the View layer. If I want to pass information from the controller to the View layer, this process is called ViewData. I can do this with the ["VariableName"] element.

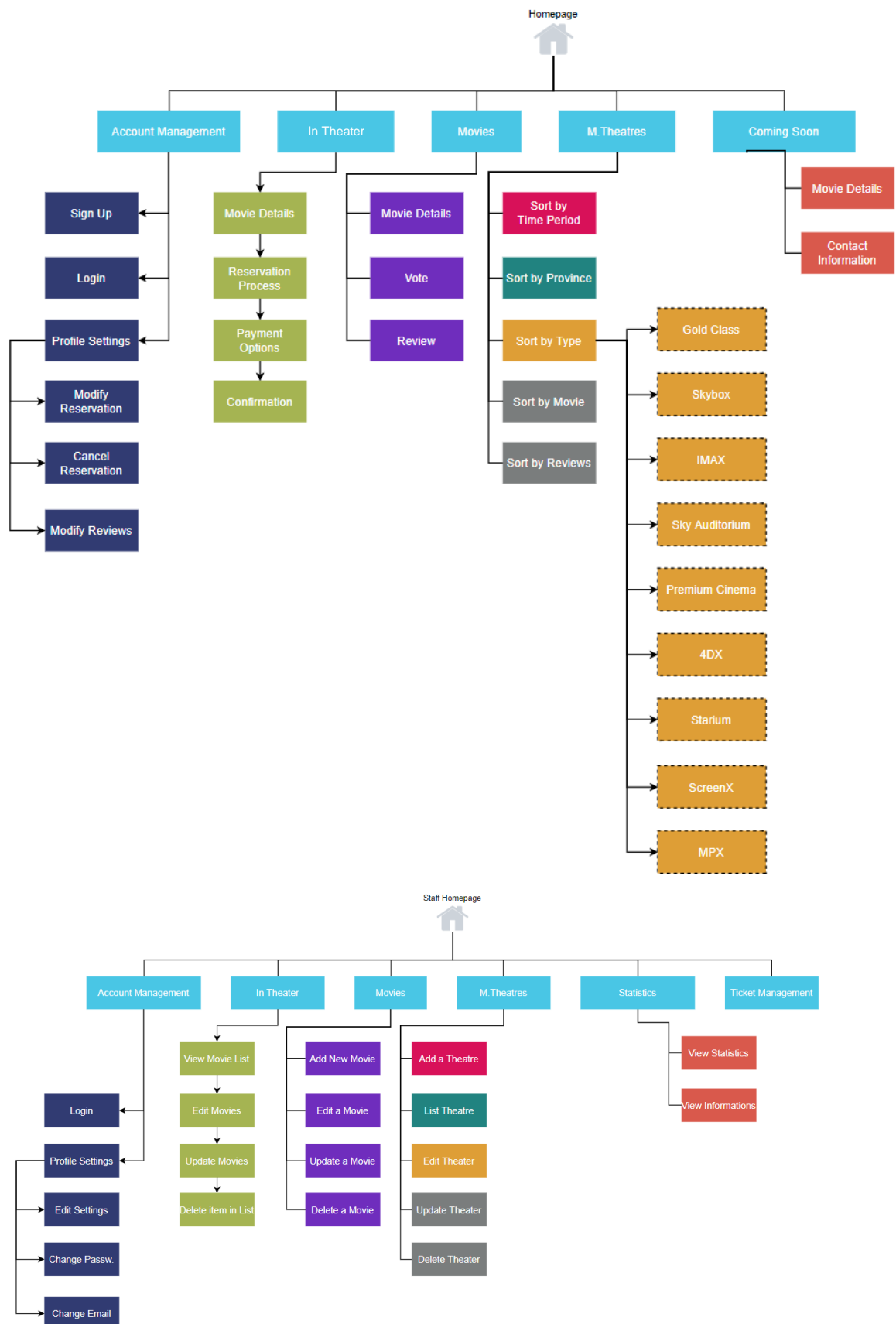
Controller structure works on both Model and View in this system. It is responsible for managing the request to the model structure and updating the view structure when data changes. The view structure translates the information contained in the model to the visual, while the model structure contains the data and can keep the Controller update logic when the data changes.

Model: It is our data layer that will be added to the application as logic. For our database operations, our structure is hosting our tables / classes, Entity Models and Context class if we are following the Code First approach.

View: It is the layer where user controls and components are shown and seen by the user. In general, it is created to fit the table columns on the model layer. Apart from its general structure, it allows us to create rich web applications by hosting the design elements (css, image, javascript codes) that we can do in ASP.NET applications.

There is a connection between the View layer and the Controller layer. When requested by the user, the Controller layer runs first, then the page connected to that Controller runs on the View layer. If I want to pass information from the controller to the View layer, this process is called ViewData. I can do this with the ["VariableName"] element.

3. High Level Organization



4. Clickstreams

The method we expect this user mode to use is designed as follows. First of all, the viewer can log in to the system if he/she wants or they can create an account if they do not have an account. He/she can then filter the movies using the sorting criteria and view the movies he/she wants with ease. Apart from doing these, the viewer can choose the movie that attracts his/her attention from the movies listed on the page and get information about it, access his/her comments or if he/she has watched that movie before, he/she can log in to the system and comment on the movie. After choosing the movie that attracts his/she attention, he/she can proceed to the stage of buying tickets. At this stage, firstly, the city is selected and then the cinema and cinema sessions are selected. After the viewer determines the suitable session for him/her, he / she selects the seats and is directed to the payment page, if there are seats available. After filling the necessary information on the payment page, the ticket purchase process is completed and the ticket number is created for the audience. Thus, the viewer completes the procedures in a short time and can go to watch the movie when the time comes.

Staff logs in the system with a username and password, and displays available halls, movies and tickets. He/she organize existing halls, movies and tickets. He/she can add a new hall, movie, session, city. He/she can delete the current hall, movie, session, city. He/she can also display the statistics he/she needs.

5. Layout

Cinemang is a system designed to serve two user groups. The user groups of the system are staffs and visitors. The functions of the user groups vary according to the groups. Which group can perform which operations on the system are listed below.

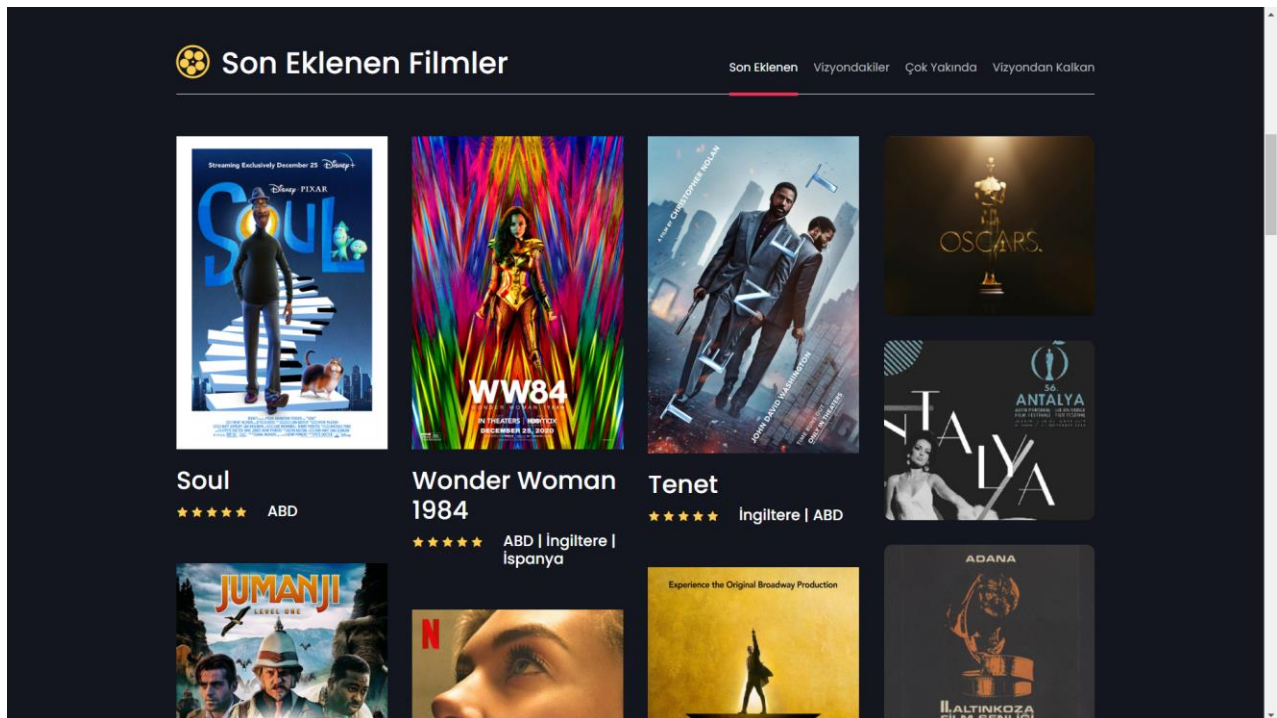
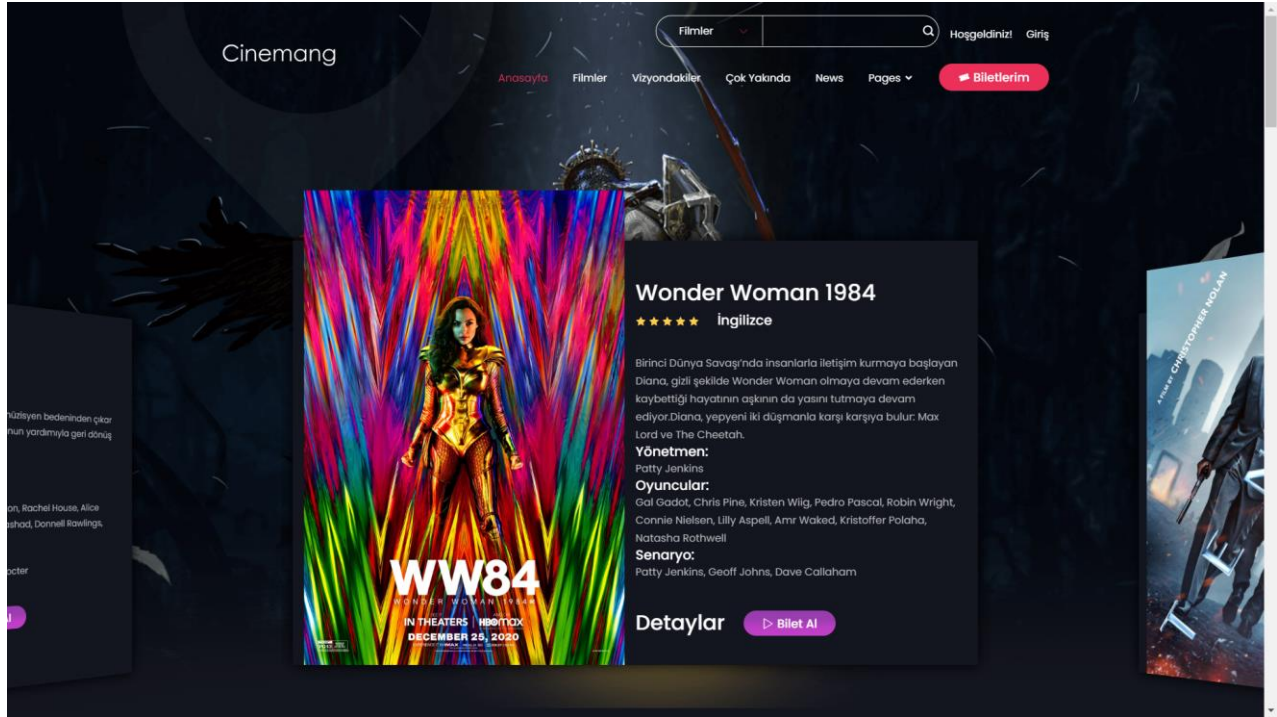
Staff:

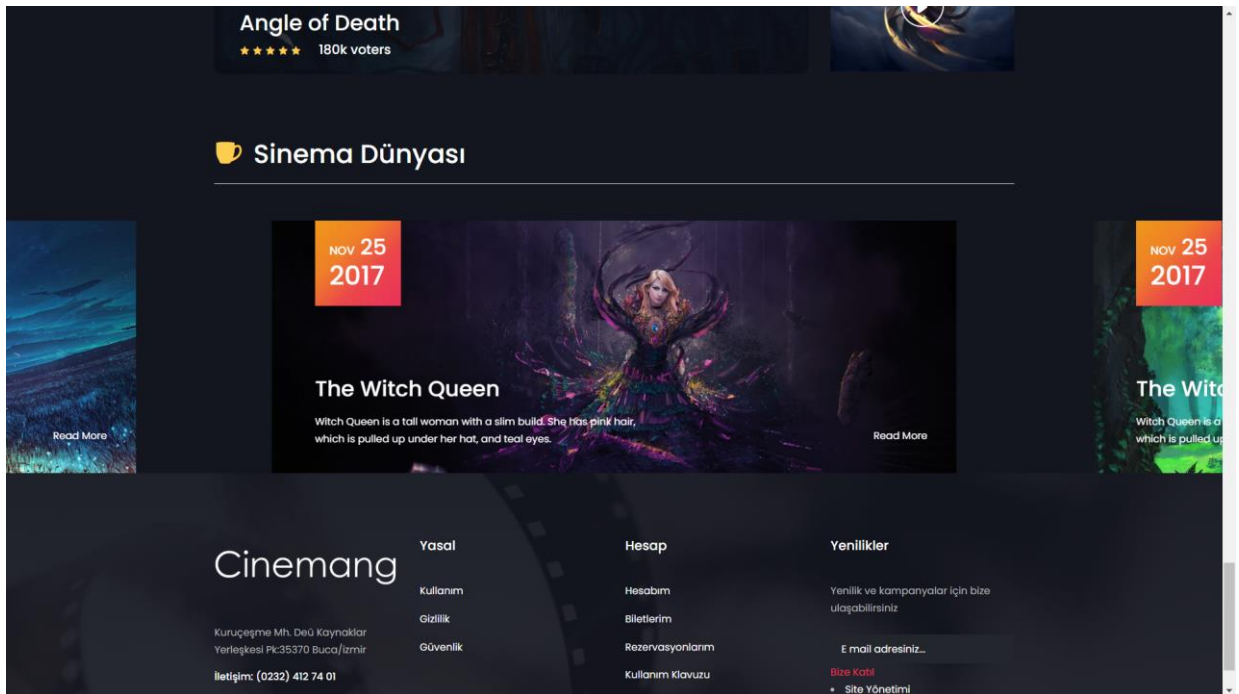
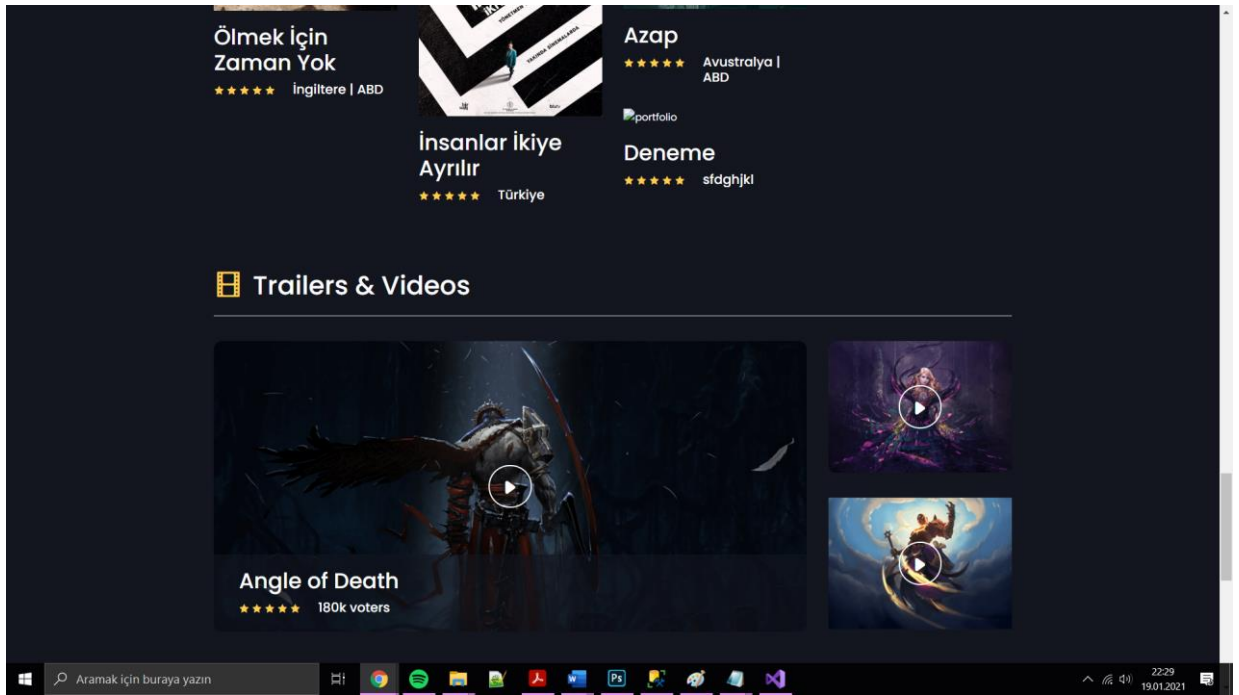
- Logs into the system with a username and password
- Displays existing halls, movies and tickets
- Organizes existing halls, movies and tickets
- Can add a new salon
- Can add new movie
- Can add new session
- Can add new cinema
- Can delete the existing hall
- Can delete the existing movie
- Can delete existing session
- Can delete the existing cinema
- Can view the statistics its need

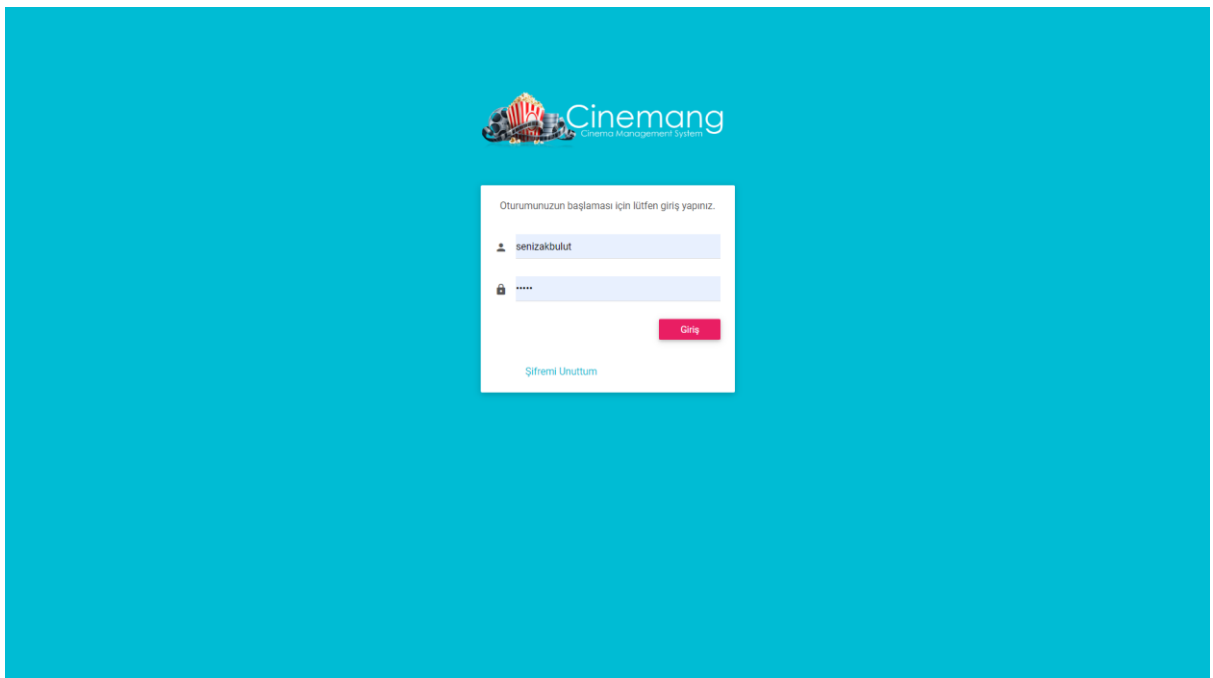
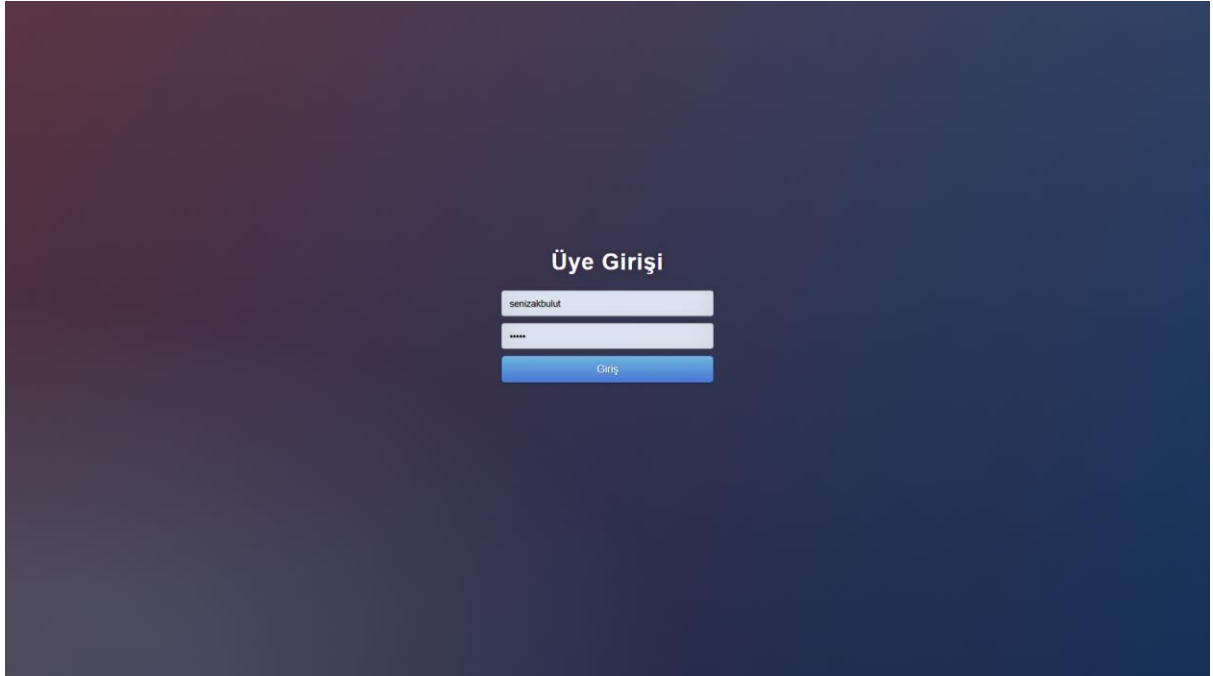
Viewer / Visitor:

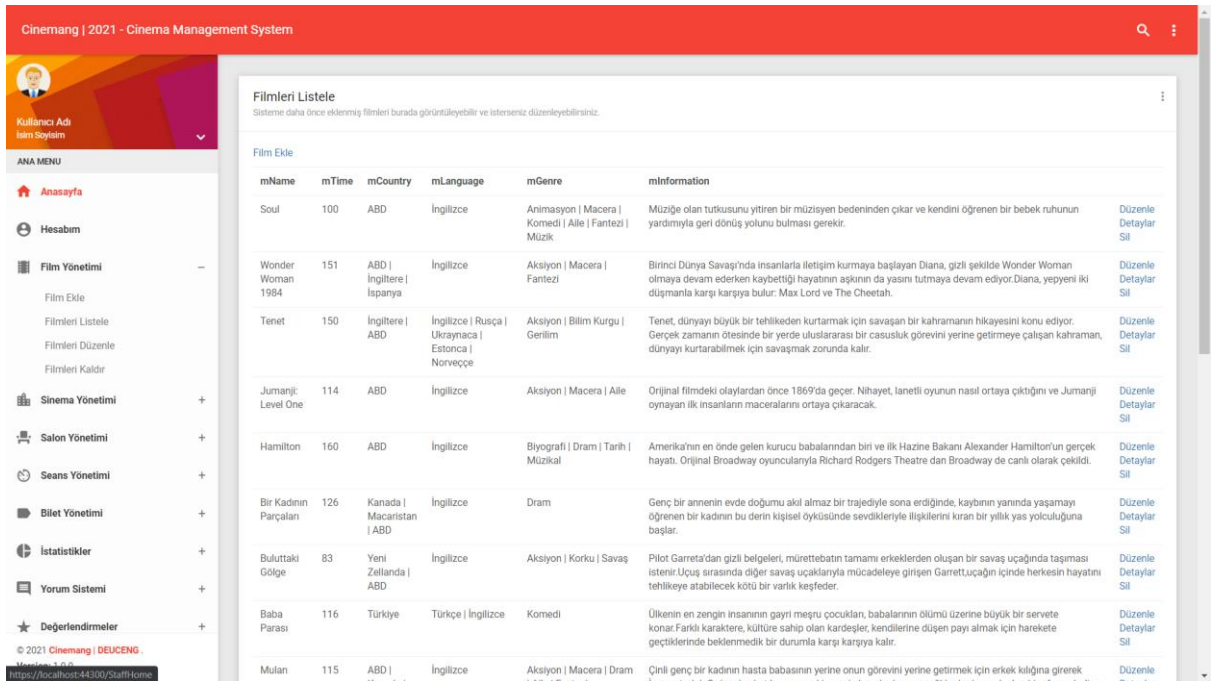
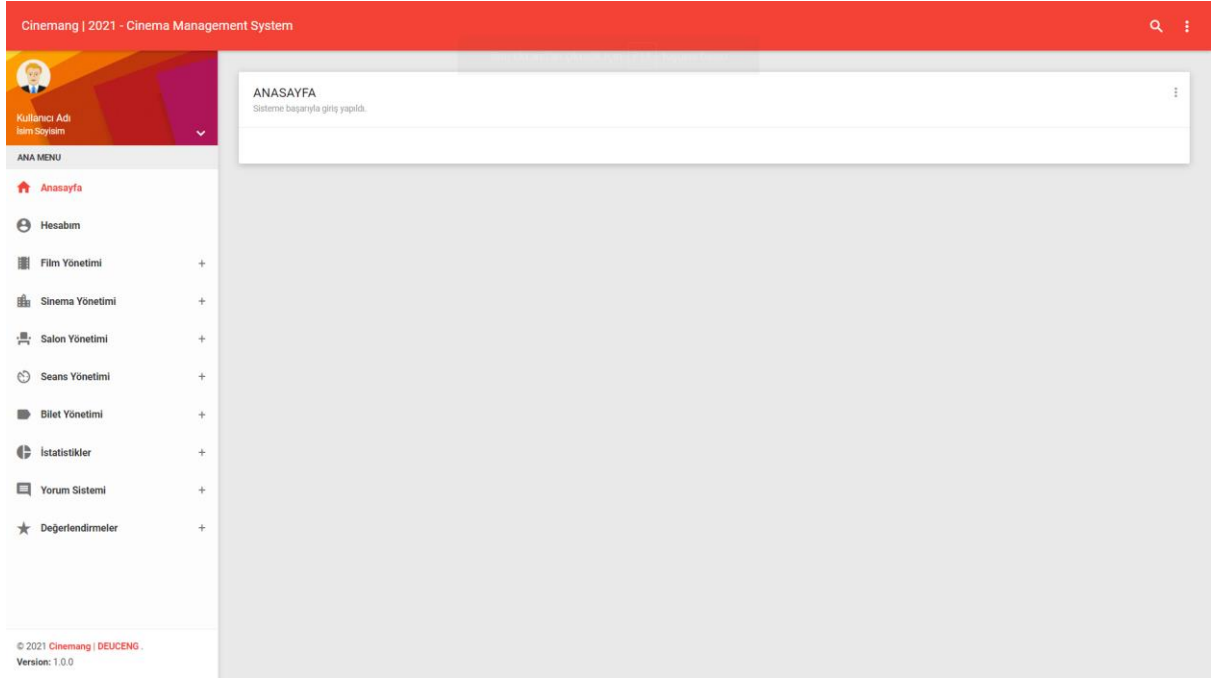
- Logs into the system with a username and password
- Can view existing movies
- Can filter and select the movie he wants
- Can choose the theater where the movie of his choice will play
- Can choose from vacant seats in the movie theater
- Can pay for the movie ticket
- Can reserve seats for a specified period
- Can view online ticket after payment
- Can add a mention about movie after watching movie

6. Implementation










Cinemang | 2021 - Cinema Management System



Kullanıcı Adı

İsim Soyisim

ANA MENU

Anasayfa

Hesabım

Film Yönetimi

Sinema Yönetimi

Sinema Ekle

Sinemalar Listele

Sinemalar Düzenle

Sinemalar Kaldır

Salon Yönetimi

Seans Yönetimi

Bilet Yönetimi

İstatistikler

Yorum Sistemi

Değerlendirmeler

© 2021 Cinemang | DEUCENG .

Version: 1.0.0

Filmleri Düzenle

Sistemde bulunan herhangi bir filmi arayarak isterseniz düzenleyebilirsiniz.

Aramak İstedğiniz Filmin Adını Giriniz:

Ara

mName	mTime	mCountry	mLanguage	mGenre	mInformation	
Soul	100	ABD	İngilizce	Animasyon Macera Komedi Aile Fantazi Müzik	Müziğe olan tutkusunu yitiren bir müzisyen bedeninden çıkar ve kendini öğrenen bir bebek ruhunun yardımıyla geri doğu yolunu bulması gerekir.	Filmi Düzenle
Wonder Woman	151	ABD İngiltere İspanya	İngilizce	Aksiyon Macera Fantazi	Birinci Dünya Savaşı'nda insanları birleştirmeye çalışan Diana, gizli şekilde Wonder Woman olmaya devam ederken kaybettikleri hayatın açığını da yasıtma devam ediyor Diana, yepyeni iki düşmanla karşı karşıya bulur: Max Lord ve The Cheetah.	Filmi Düzenle
Tenet	150	İngiltere ABD	İngilizce Rusça Ukraynaca Estonca Norveççe	Aksiyon Bilim Kurgu Gerilim	Tenet, dünyayı büyük bir tehlikeyden kurtarmak için savaşan bir kahramanın hikayesini konu ediyor. Gerçek zamanın ötesinde bir yerde uluslararası bir casusluk görevini yerine getirmeye çalışan kahraman, dünyayı kurtarabilmek için savaşmak zorunda kalır.	Filmi Düzenle
Jumanji: Level One	114	ABD	İngilizce	Aksiyon Macera Aile	Orijinal filmdeki olaylardan önce 1869'da geçer. Nihayet, lanetli oyunun nasıl ortaya çıktığını ve Jumanji oynayan ilk insanların maceralarını ortaya çıkaracak.	Filmi Düzenle
Hamilton	160	ABD	İngilizce	Biyografi Dram Tarih Müzikal	Amerika'nın en önde gelen kurucu babalarından biri ve ilk Hazine Bakanı Alexander Hamilton'un gerçek hayatı. Orijinal Broadway oyuncuları Richard Rodgers Theatre dan Broadway de canlı olarak çekildi.	Filmi Düzenle
Bir Kadının Parçaları	126	Kanada Maviistan ABD	İngilizce	Dram	Genç bir annenin evde doğumu akı almaz bir trajediye sona erdiğinde, kaybının yanında yaşamayı öğrenen bir kadının bu derin kişisel öyküsünde sevdileriyle ilişkileri kran bir yitlik yaş yolculuğuna başlar.	Filmi Düzenle
Bulutları Gölge	83	Yeni Zelanda ABD	İngilizce	Aksiyon Korku Savaş	Pilot Garreta'dan gizli belgeleri, mürettebatın tamamı erkeklerden oluşan bir savaş uçağında taşınması istenir.Uçuş sırasında diğer savaş uçaklarıyla mücadeleyle girişen Garrett,uçağın içinde herkesin hayatını tehlikeye atabilecek kötü bir varlık keşfeder.	Filmi Düzenle
Baba Parası	116	Türkiye	Türkçe İngilizce	Komedi	Ülkenin en zengin insanının gayri meşru çocukları, babalarının ölümü üzerine büyük bir servete konar.Farklı karaktere, kültüre sahip olan kardeşler,kendilerini düşen payı almak için harekete geçtiklerinde beklenmedik bir durumla karşı karşıya kalır.	Filmi Düzenle
Mulan	115	ABD Kanada	İngilizce	Aksiyon Macera Dram Aile Fantazi	Çinli genç bir kadının hasta babasının yerine onun görevini yerine getirmek için erkek kılığında girerek İmparatorluk Ordusu'na katılmasını ve kimseinin hayal edemeyeceği kadar başarılı olup bir efsane haline	Filmi Düzenle

Cinemang | 2021 - Cinema Management System

Kullanıcı Adı
İsim Soyisim

ANA MENU

Anasayfa

Hesabım

Film Yönetimi +

Sinema Yönetimi +

Salon Yönetimi +

Seans Yönetimi +

Bilet Yönetimi +

İstatistikler +

Yorum Sistemi +

Değerlendirmeler +

Film Ekle

Sistemde var olmayan bir filmi sisteme ekleyebilirsiniz.

mName

mReleaseDate

mTime

mDirectors

mWriters

mCast

mCountry

mLanguage

mGenre

mInformation

mImageUrl

Kaydet

Listeye Geri Dön

7. Future Work

If we had more time or were in a less busy period, we would like to develop this application completely and make it available in its final form. What we mean by the missing parts is the removal of the display error for the hall selection during the ticket sales and the users can comment. Thus, in terms of both interface and system management, we can create a high-level system where everyone's needs and desires are met.