*System Development Group*

**Admin:**

* can access Film listing, booking and cancellation
* manage screening of films:
* Add listings e.g., add new films, remove film, update show times, attach shows to screen/hall, etc.
* Update listings
* Remove listings
* Listings can include: adding new films, removing a film, updating show times, attaching shows to screen/hall, etc.
* can access Admin GUI/view.
* can also generate admin reports e.g., number of bookings for each listing, total monthly revenue for each cinema, top revenue generating film, monthly list of staff making number of bookings in sorted order, etc.
* Bookings from new cinemas can be handled by admins.
* Only admins can select listings from other HC cinemas and make booking on behalf of customers.
* Admin cannot access Manager view (admin cannot add new cinemas and listings.

***Manager:***

* can access Film listing, booking and cancellation
* Can access Admin GUI/ view.
* Can add new cinemas and listings in existing or new cities.
* Only managers can access Manager view.
* Manager analytics provide views of booking variations across different showings and different days. (Attempt to use AI algorithms to predict booking levels for different days and showings for each film)

***Booking Staff:***

* can access Film listing, booking and cancellation
* Bookings from new cinemas can be handled by booking staff.

***System Requirements:***

-There should be 4 cities, each city should have at least two cinemas at different locations.

-Each cinema has up to 6 screens.

- Each screen runs between one to four daily shows of a selected film.

- Film listings, show times and prices may vary from one cinema to another.

- Seating capacity for each screen varies between 50 to 120.

- For each screen, seat(s) can be reserved in the lower hall or in upper gallery.

-managing screening of films and booking system should be convenient for customers.

-System has three types of users: Booking staff, Admins, and Managers.

- System should have the following functionalities:

* Film Listing: films with description and actors’ details, film genre and age, rating, showtimes, etc... .
* Booking: System should allow to fill a booking form that will provide option to check seats availability and total tickets price for a selected date, showing and type of tickets.
* Booking reference should be unique for each booking
* Booking receipt should include Booking reference, Film name, Film date, Showing time, Screen #, Number of tickets, seat numbers, Total booking cost, and Booking date.
* Cancellation: There should be an option to cancel booking. There is no cancellation or refund for missed shows.

***Ticket wise requirements:***

|  |  |  |  |
| --- | --- | --- | --- |
|  | Morning Show (between 8am – noon) | Afternoon Shows (From noon – 1700) | Evening Shows  (From 1700 – midnight) |
| Birmingham | £5 | £6 | £7 |
| Bristol | £6 | £7 | £8 |
| Cardiff | £5 | £6 | £7 |
| London | £10 | £11 | £12 |

* Lower halls have about 30% of total seats.
* The ticket price for upper gallery is 20% higher than the lower hall.
* Upper gallery also offers up to 10 VIP seats at 20% higher price.
* For example, VIP ticket price would be (normal ticket price\*1.2) \* 1.2
* Tickets can also be booked for up to one week in advance.
* No ticket cancellation allowed on the day of the show
* tickets can be cancelled at least one day prior to the film show at 50% cancellation charges.

***Non-Functional Requirements:***

-You should also consider other suitable non-functional requirements (e.g., security measures) necessary for the HC booking system.

- Security measures

-System performance/efficiency

-System should be user friendly

-System should allow for easy updates or changes, such as modifying the booking algorithm, without impacting the rest of the program.

***Submission Requirements:***

## Submission date: 3 April 2025

## Submission Type: Zip Folder

Overview of assessment (make sure to do every one of these):

-Broadly speaking, the assignment requires you to work as a member of your group and contribute equally with the other members in defining, planning, managing, designing, implementing, testing, and evaluating the outcome of the project and planning and management systems used.

## Objective:

Establish Aims and objectives for the project.

• Produce a validated set of Functional and Non-Functional Requirements. Use your mentor as the source for validation.

• Develop a project plan and a Risk register and continue monitoring and updating these. Consider the skills that you have in your group and identify any gaps based on the CVs prepared and shared within the group.

• Design the system to be implemented. Based on the Requirements and the design, produce a test plan.

• Implement the system and test it, according to the test plan developed in the previous stage.

• Compile the report as per the attached template.

• Individually each student must submit a reflective evaluation of the group work and their individual role in completing the project. Maximum 800 words each.

• The report should not exceed 10000 words for an average group of five students.

• As a group produce a video recorded group demonstration of your software, culminating with a

critical evaluation of the group work and its outcome. The video must not exceed 18 minutes in length.

##TO SUBMIT:

One portfolio submission comprising the group report with individual critical reflection form each student and a link to a system demonstration. One zip folder to be submitted per group. The report file must be word or PDF format only. It is the student’s responsibility to ensure that the file is not corrupted and can be downloaded in its integrity. Also the video must be able to play using the standard software tools available on UWE labs

Check out assessment brief to find out how to get best marks at the end

##REFERENCES:

Please note that the aim of referencing is to demonstrate you have read and understood a range of sources to evidence your key points. You need to list the references consistently and in such a way as to ensure the reader can follow up on the sources for themselves.

***Report Requirements:***

Keys: Key= done. Key= In progress. Key= Not done.

Introduction: 300 words.

Aims and Objectives: 200 words.

Literature Review: 1500 words.

Requirements: 500 words.

Project Planning & Team Roles: 500 words + Gantt Chart.

Design and Test Plan: 500 words + Diagrams.

Implementation and Testing: 1000 words + Screenshots.

Evaluation & Lessons Learned: 1500 words.

References: at least 10.

Appendices: Different versions of Gantt Chart, Screenshots, etc... .

Aims and Objectives:

The aim of this project is to learn how to design, develop, and implement a user-friendly software application. In this scenario, we are aiming to create a functional software that will satisfy the requirements that have been outlined by the client, Horizon Cinema. As per the requirements, the program should be able to streamline business workflow by: the use of a simple and easy to use GUI; enhancing the scheduling of screenings of films; effectively manage bookings; have a defined hierarchy system that have set permissions according to their role within the company; And display information about films that are being shown.

In this scenario, it centers around the cinema business called   
“Horizon Cinemas” where we have to *streamline film screening management and ticket booking processes. The system will enhance customer convenience,* optimize administrative workflows, and provide managers with robust analytics for decision-making. It will also ensure scalability, security, and sustainability to support future business expansion.