Assignment FAQ

MOBLIMA is an application to computerize the processes of making online booking and purchase of movie tickets, listing of movies and sale reporting. It will be used by the movie-goers and cinema staff.

Console-based application (non-Graphical UI):

- The application acts as a centralized 'location' for making bookings for all the Cineplexes in different locations managed by the vendor.
- Each Cineplex will have 3 or more cinemas.

Each Cineplex

http://www.cathaycineplexes.com.sg/default.aspx

Q: Is it right to say that we are designing the app for 1 company, for example the Shaw? So cinplex is the branches of Shaw, and cinema is theater hall?

A: Yes. Your understanding is correct.

Q: Is there more than one theatre for each cineplex?

A: Yes. Each Cineplex will have 3 or more theatres.

Ticket price

The movie ticket price can be charged according to the following type :

a.   type of movie (3D, Blockbuster, etc.),

b.   class of cinema (e.g. Platinum Movie Suites)

c.   age of movie-goer (e.g. adult, senior citizen, child)

d.   day of the week or public holiday.

01. Current ticket prices

Non-Blockbuster Rates (2D)

TICKET TYPE	Regular & Digital Movies	3D Movies
Senior Citizens* Mon - Fri, before 6pm	$4.00 Free Tea / Coffee	N.A
Students** Mon - Fri, before 6pm	$7.00 Free 12oz Coke	$9.00
Mon - Wed# All sessions	$8.50	$11.00
Thu All sessions	$9.50	$11.00
Fri Sessions before 6pm	$9.50	$15.00
Fri Sessions from 6pm	$11.00	$15.00
Sat & Sun^ All Sessions	$11.00	$15.00
Preferred Credit & Loyalty Cards^^	$7 - $9.50	N.A

**Not valid on PH/eve of PH ^Include PH/eve of PH and weekend sneaks *For patrons 55 years & older. Not valid on PH/eve of PH
^^Refer to cathay.com.sg (under FAQs) for list of preferred cards #Sneak preview at $9.50 between Mon to Wed, excluding PH/eve of PH

Tickets for movies denoted as "Blockbuster" will be charged at $1 more than the prevailing rate.

Q: Regarding the ticket price for the assignment, are we required to follow the structure provided in appendix A, or can we design our own formula to calculate the ticket price?

A: Yes. You can but cannot be too different. And yours should be more comprehensive.

- Movie listings and showtimes can be queried and booking can be made.
- From the movie listings, movie-goer can also view the information about the movie. Information like
  a. Movie title
  b. Showing status [Coming Soon, Preview, Now Showing]
  c. SYNOPSIS – movie abstract
  d. Director
  e. Cast (at least 2)
  f. Overall reviewer rating (1 – 5 [best])
  g. Past reviews and reviewers' ratings

  Movie-goer can also enter his/her review and rating.
  [The overall rating is the *average (to 1 decimal place)* of the all individual ratings for the particular movie. ***Overall reviewer rating will only be displayed if there are more than ONE individual rating, else "NA" is displayed***]

金馬獎四項提名
4 GOLDEN HORSE NOMINATIONS

韓劇人生
沒有遲早
只有剛好

Life, like a Korean drama.

花路阿失媽
AJOOMMA

SNEAKS 21 - 24 OCT · OPENS 27 OCT

陳哲藝 監製 PRODUCED BY ANTHONY CHEN 何書銘 作品 A FILM BY HE SHUMING
HONG HUIFANG 洪慧芳 JUNG DONG-HWAN 鄭東煥 KANG HYUNG-SUK 姜炯錫 SHANE POW 包勛評 SPECIAL APPEARANCE BY YEO JINGOO 여진구

Ajoomma NC16 *

CAST
Hong Huifang, Jung Dong-Hwan, Kang Hyung Suk, Yeo Jingoo

DIRECTOR
He Shuming

SYNOPSIS
Produced by award-winning filmmaker Anthony Chen.

Auntie (Hong Huifang), is a middle-aged Singaporean woman who has dedicated the best years of her life to caring for her family. Now widowed with her grown up son, Sam (Shane Pow) about to fly the roost, Auntie is left to contend with a whole new identity beyond her roles of daughter, wife, and mother.

A solo trip to Korea becomes a wild adventure for Auntie, where she meets Kwon-Woo (Kang Hyung Suk), a young tour guide who can't seem to get his life in order, and Jung Su (Jung Dong-Hwan), an elderly security guard. The trio embark on an unexpected roller coaster ride where hearts flutter and unlikely bonds are formed.

Inspired by the director's mother, AJOOMMA is the story of a woman's journey of self-discovery, where Auntie learns to embrace her new independent life with renewed confidence and panache.

SHOWTIMES

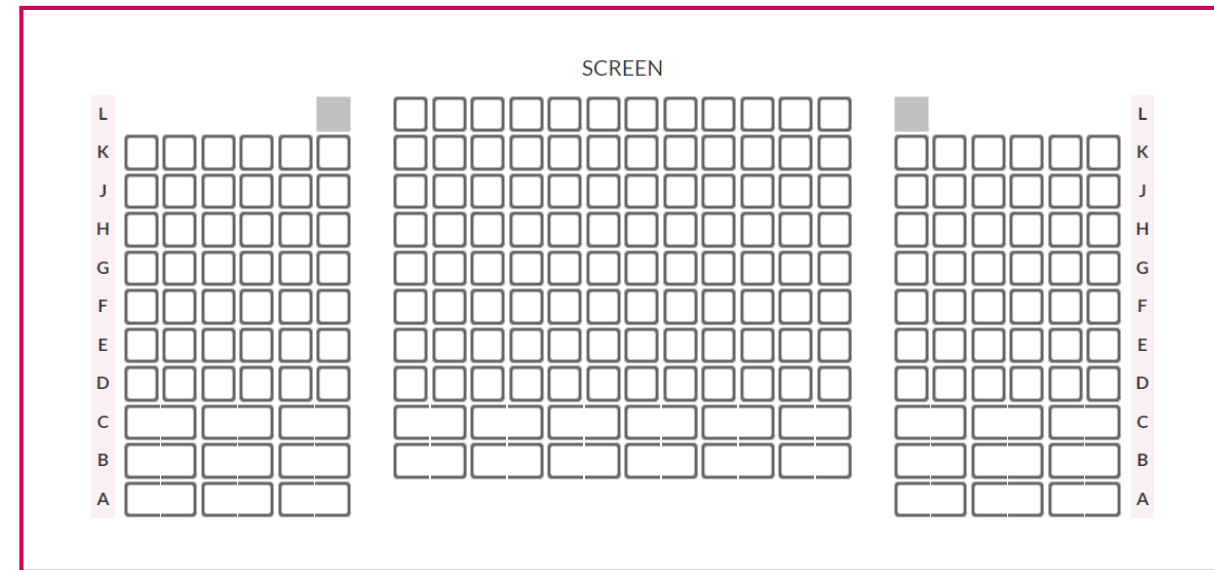| GENRE	LANGUAGE	RATING	RUNTIME	OPENING
Drama	Mandarin, Korean, English	NC16 - Some Mature References	90 mins	27 Oct 2022

- A layout of each cinema will be presented for seat selections upon booking.

  [the layout will contain aisle and main stairway. Refer to Appendix A for reference]

- Upon booking, the application will capture the movie-goer's name, mobile number and email address. Each payment will have a transaction id (TID). The TID is of the format XXXYYYYMMDDhhmm (Y : year, M : month, D : day, h : hour, m : minutes, XXX : cinema code in letters). *[you will decide on the cinema code]*

- Movie-goer can check their history of bookings.

The application is to be developed as a **Console-based application (non-Graphical UI).** Data should be stored in flat file format, either in text or binary. **Refer to your eLearning Topics in NTULearn on FileI/O. Samples are provided for the reading/writing of text or binary (Serializable) file. [Learn from the fundamentals].**

No database application (eg MySQL, MS Access, etc) is to be used. No JSON or XML is to be used.

SELECT SEATS

Your seat   Available   COUPLE   Sold

SCREEN

Q: "No database application (eg MySQL, MS Access, etc) is to be used. No JSON or XML is to be used."
Does that mean that we cannot "save" the input data after the application closes?

A: You can save the input data after the application closes. Data should be stored in flat file format, either in text or binary.

Q: if we implement serializable for reading and storing of data. Do we have to represent this in our class diagram as well?

A: For standard file management, which uses system library, NO need.

- For **<u>cinema staff</u>** only :
  a. Cinema staff needs to login to access its functions
  b. Cinema staff can configure the system settings (e.g., ticket prices, holidays, etc.)
  c. Cinema staff can enter the forthcoming movies, its type (Blockbuster/3D, etc.), movie rating (e.g. PG), show times, the cinema, showing status (Coming Soon, Preview, Now Showing, End Of Showing), etc.
  d. Cinema staff can also update the details of the movies or remove the movie by changing the status to 'End of Showing'.
  e. Cinema staff can list the current top 5 ranking movies by
     i. Ticket sales (display the movie title and total sales)
     ii. Overall reviewers' rating (display the movie title and overall rating)

Functional Requirements (to be demonstrated):

- ## Movie-goer module

1. Search/List movie

2. View movie details – including reviews and ratings

3. Check seat availability and selection of seat/s.

4. Book and purchase ticket (Upon booking, the application will capture the movie-goer's name, mobile number and email address. Each payment will have a transaction id (TID). The TID is of the format XXXYYYYMMDDhhmm (Y : year, M : month, D : day, h : hour, m : minutes, XXX : cinema code in letters). *[you will decide on the cinema code])*

5. View booking history

6. List the Top 5 ranking by ticket sales OR by overall reviewers' ratings (Accessibility is specified by admin)

Q: In the information section, the ability to list the top 5 movies by either ticket sales or overall reviewer rating is for cinema staff only. However, in the functional requirements, it is said to be a part of the Movie-goer module. So do we have to show this option for both staff and movie goers?

A: Listing function is shared by both admin and movie-goer, but has difference . By default, the movie-goer can choose the filter by himself to list either. It means both admin and movie-goer can view the top5. For normal situation, ticket sales and overall rating are calculated automatically. SO the admin and movie-goer can see the same "page".

But the **admin** should be able to choose to opt out one option for movie-goer.

Q: Just to confirm, the user still can see the movie if the status is "END_OF_SHOW" right? Just that booking is not allowed

A: remove the movie by changing the status to 'End of Showing'. So cannot see.

Q: Does configuring "End of Showing" date means that we are expected to set a ending date for the movie, and after that particular date the movie showing status will be automatically switch to End of Showing? Or we are only required to let the admin to set the movie showing status to become "END_OF_SHOW" manually?

A: Either way will do. Automatic after the pre-set date is preferred, or else, just set the movie showing status to become "END_OF_SHOW" manually.

Functional Requirements (to be demonstrated):

- ## *Admin module*

1. Login

2. Create/Update/Remove movie listing

3. Create/Update/Remove cinema showtimes and the movies to be shown

4. Configure system settings

Q: Can we create 2 separate logins for the admin & user modules?

A: Can. But a bit not so professional.

Q: For the login, is it compulsory to do user authentication?

A: Yes. Verification and authentication is compulsory. As stated in Assumption:" A simple login for cinema staff is sufficed."

Test cases

- *You will create your own test cases and data to test your application thoroughly. However, you should also create test cases to test for cases of

- configuring a holiday date and the ticket price is shown correctly when booking is done on that date

- booking on a different day of the week or holiday and type of cinema (eg suite to demonstrate the differences in prices

- configuring "End of Showing" date and the movie should not be listed for booking

- booking only allowed for "Preview" and "Now Showing" status.

  -

- ***The test cases above need to be demonstrated.**

Coming Soon, Preview, Now Showing, End Of Showing

DEMONSTRATION

- Your group is to produce a **video and audio recording** to demonstrate the working of the application – presenting ALL the required functionalities of the application and the suggested test cases in Appendix A.

Q: In the assignment guidelines you mention that we should include test cases in Appendix A, however we can't find any suggested test cases at there as there are only images/examples.

A: Presenting ALL the required functionalities of the application **and** the suggested test cases in Appendix A.
- ***Functional Requirements (to be demonstrated)***
- Test cases
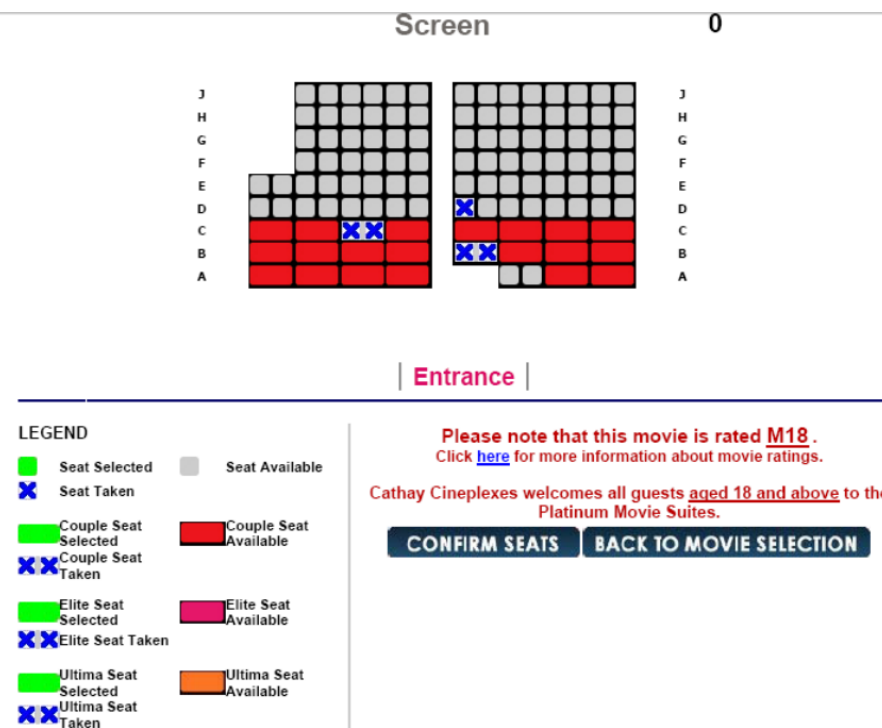- Appendix A

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Screen   **0**

| Entrance |

LEGEND

☐ Seat Selected   ☐ Seat Available
✖ Seat Taken

☐ Couple Seat Selected   ☐ Couple Seat Available
✖✖ Couple Seat Taken

☐ Elite Seat Selected   ☐ Elite Seat Available
✖✖ Elite Seat Taken

☐ Ultima Seat Selected   ☐ Ultima Seat Available
✖✖ Ultima Seat Taken

Please note that this movie is rated M18.
Click here for more information about movie ratings.

Cathay Cineplexes welcomes all guests aged 18 and above to the Platinum Movie Suites.

CONFIRM SEATS   **BACK TO MOVIE SELECTION**

Q: May I know referring to the following diagram, do we have to consider different types of seat (Couple, Elite, etc.) in our assignment as well?

A: Yes. If you want to develop a comprehensive system. It belongs to the suggested test cases in Appendix A.

Assumptions :

(1) This is a single-user application and there is no need to consider concurrent access.

(2) THREE cineplexes will be created for the demonstration.

(3) The currency will be in Singapore Dollar (SGD) and inclusive of Good and Services Tax (GST).

(4) A simple login for cinema staff is sufficed.

(5) Payment will always be successful.

(6) There is no need to interface with external system, e.g. Payment, printer, etc., but you can consider it in your design.

(7) Senior citizen can be purchased online without validation of identity or age. The validation will be done upon entering the cinema.

Q: I believe it is safe to assume that when running the app, we only need to consider one customer doing a single booking at once (i.e. no need to store multiple customer sessions concurrently).

However, I would like to check whether a single-user application means that We assume each time we run the app, it represents a different single customer session (Each time we run the app, we assume a separate user session, only need to store booking history during runtime)
        OR
We assume there is only 1 single user. When we run the app and do a seat booking the first time, the next time we run the app we assume it is still the same customer, and the booking history should be stored.

A: At one time, only one user is using the application. No concurrent programming, No synchronize issue. The detailed design is up to you.
- View as a guest, Upon booking, the application will ask information e.g. mobile number, email etc,
- Login as a member, view, book, after log out, can start another person's session
- Login as an Admin, configure settings. After log out, can start another person's session

Q: it is stated in the assignment that: "A simple login for cinema staff is sufficed."

What does this exactly mean? Does this mean that we only need to implement a simple username/password system without any option to register a new admin user account?

A: Yes. Basic requirement: Implement a simple username/password system without any option to register a new admin user account.
The admin user accounts are stored in a file. The file can be edited directly offline.
If you want to work out a register feature for admin, it is even better. Keep in mind, you need verify the information with pre-stored information to make sure that he/she is a staff while register the admin account.

Report

(b) Screen captures of the testings done (those essential test cases not covered in your demo).

Q: May I ask do we still need to mention those test cases that are to be covered in the presentation video, in our report?

A: Better to mention briefly.

Q: However do we still need to the screenshots of those testings? Or do we just create a table for these, since they are already covered in the video.

A: Create a table will do.

Report

(c) A write-up on your design considerations, principles and the use of OO concepts.

- Propose 2 new features as further enhancements and write a 2-3 lines description how each feature will be used.
- Explain how your current design can cater to these 2 features- using the design principles (reusability, extensibility, SOLID, etc)

Q: May I know we are required to apply the design principles and explain how we follow the principles in our current UML diagram or is it for future improvements from our current UML diagram?

A: It is for future improvements from your current UML diagram.

Q: May I also know the new features is if we add new classes(like new payment method) or is new functions to the classes(instead of displaying one movie, can have a way to display multiple movies)?

A: Either way will do.

Q: For this portion, are we not required to talk about design principles and just explain the feature?

A: As stated," Explain how your current design can cater to these 2 features- using the design principles (reusability, extensibility, SOLID, etc)".

Q:This is a report requirement. Are we supposed to only propose 2 new features and explain the theory on how they could possibly be implemented / integrated into our application, or are we supposed to actually code out the 2 new features we are proposing?

A: No need. Propose only. No coding, No demo.