JAVA MINI PROJECT
VALUE ADDED ASSIGNMENT

DEPT: CMPN

Group J25
Topic: Movie Ticket Booking System_ MARVEL-HQ
Group Members:

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VAA on Application Development

Introduction: The idea here is to develop effective application system to include concepts learnt in skill-based lab and ideate an integrated system with database connectivity. It is meant to act as a solution for maintaining the information records for any management/gamification/web based system

Assignment Highlights: -
1. Develop a Graphical User Interface
2. Design and Implement Integrated System with adequate functionality
3. Database connectivity

Challenge: -
1. Design of user-friendly GUI
2. Automating the system with the information via database connectivity

Technologies used:-
1. Java
2. SQL

External JAR(Java Archive Files) used:
   1.) jcalendar

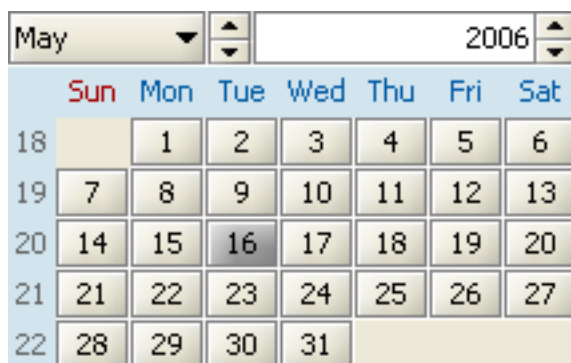JCalendar is a Java date chooser bean for graphically picking a date.
JCalendar is composed of several other Java beans, a JDayChooser, a JMonthChooser and a JYearChooser.
All these beans have a locale property, provide several icons (Color 16×16, Color 32×32, Mono 16×16 and Mono 32×32) and their own locale property editor. So they can easily be used in GUI builders.
Also part of the package is a JDateChooser, a bean composed of an IDateEditor (for direct date editing) and a button for opening a JCalendar for selecting the date.

JDateChooser allows you to pick a date. You could either edit the date directly or click the image to popup a JCalendar to choose the date.
JCalendar allows you to choose a year, a month and a day. Depending on the locale, the month names and the weekday names change. The foreground of "today" is painted red.

May				2006		
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
18		1	2	3	4	5	6
19	7	8	9	10	11	12	13
20	14	15	16	17	18	19	20
21	21	22	23	24	25	26	27
22	28	29	30	31			

We have used **JDateChooser** in our project to make it easier for the user to select a date on which they wish to book a movie ticket.
We have also used a method supported by it called **setMinSelectableDate()** and set the minimum selectable date as the present date.

2.)itextpdf:

iText is a library for creating and manipulating PDF files in Java and .NET.

iText was written by Bruno Lowagie. The source code was initially distributed as open source under the Mozilla Public License or the GNU Library General Public License open-source licenses. However, as of version 5.0.0 (released Dec 7, 2009) it is distributed under the Affero General Public License version 3. A fork of the LGPL/MPL licensed version of iText is currently actively maintained as the OpenPDF library on GitHub. iText is also available through a proprietary license, distributed by iText Software NV.

iText provides support for most advanced PDF features such as PKI-based signatures, 40-bit and 128-bit encryption, color correction, Tagged PDF, PDF forms (AcroForms), PDF/X, color management via ICC profiles and barcodes, and is used by several products and services, including Eclipse BIRT, Jasper Reports, JBoss Seam, Windward Reports, and pdftk.

iText is a Java library originally created by Bruno Lowagie which allows to create PDF, read PDF and manipulate them.

iText has a hierarchical structure. The smallest text unit is a "Chunk" which is a String with a pre-defined font. A "Phrase" combines several Chunks and allows to define line spacing. "Paragraph" is a subclass of "Phrase" and allows to define more layout attributes, e.g. margins. The class "Anchor" is a subclass of "Paragraph" and serves as the basis for hyperlinks in the generated PDF.
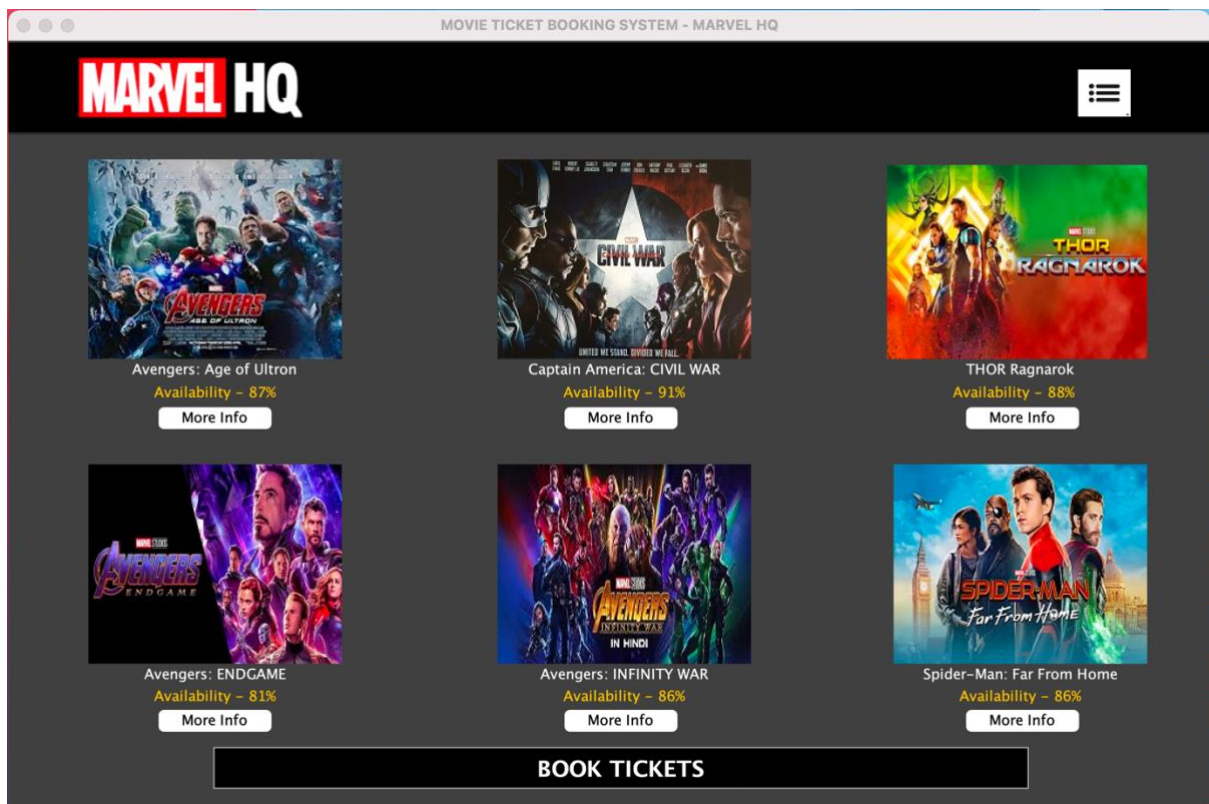
OUTPUT:

LOGIN PAGE:

SIGN UP PAGE:
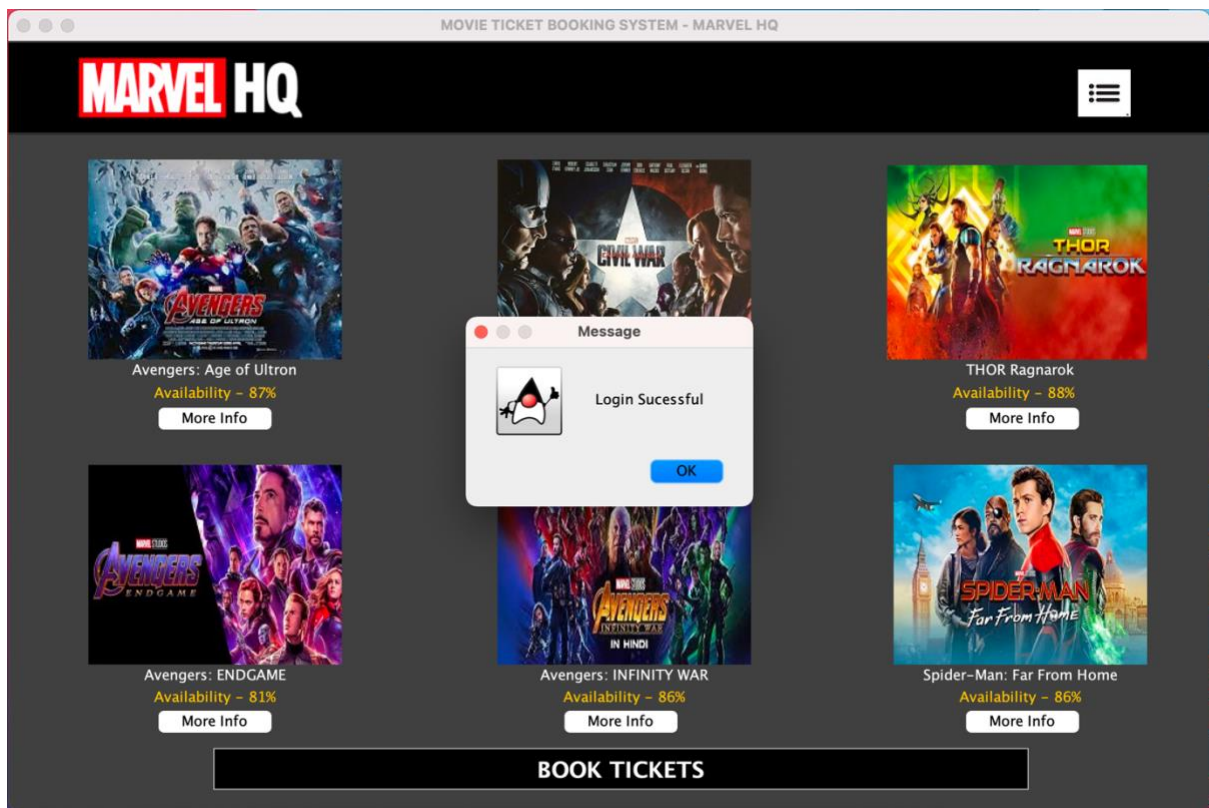
After Successful Login:

HOME PAGE:

INDIVIDUAL MOVIE PAGES CONTAINING MOVIE INFORMATION:

HOME PAGE

MARVEL HQ

Avengers: Age of Ultron

2h 23m • Action , Adventure , Fantasy • UA • 24 Apr, 2015

About the Movie

Marvel Studios presents `Avengers: Age of Ultron`, the epic follow-up to the biggest Super Hero movie of all time. When Tony Stark tries to jumpstart a dormant peacekeeping program, things go awry and Earth`s Mightiest Heroes, including Iron Man, Captain America, Thor, The Incredible Hulk, Black Widow and Hawkeye, are put to the ultimate test as the fate of the planet hangs in the balance. As the villainous Ultron emerges, it is up to the Avengers to stop him from enacting his terrible plans, and soon uneasy alliances and unexpected action pave the way for an epic and unique global adventure.

Marvel`s `Avengers: Age of Ultron` stars Robert Downey Jr., who returns as Iron Man, along with Chris Evans as Captain America, Chris Hemsworth as Thor and Mark Ruffalo as The Hulk. Together with Scarlett Johansson as Black Widow and Jeremy Renner as Hawkeye, and with the additional support of Samuel L. Jackson as Nick Fury and Cobie Smulders as Agent Maria Hill, the team must reassemble to defeat James Spader as Ultron, a terrifying technological villain hell-bent on human extinction. Along the way, they confront two mysterious and powerful newcomers, Wanda Maximoff, played by Elizabeth Olsen, and Pietro Maximoff, played by Aaron Taylor-Johnson, and meet an old friend in a new form when Paul Bettany becomes Vision.

Written and directed by Joss Whedon and produced by Kevin Feige, Marvel`s `Avengers: Age of Ultron` is based on the ever-popular Marvel comic book series `The Avengers`, first published in 1963.

BOOK TICKETS

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MARVEL HQ

Captain America: Civil War

2h 27m • Action , Sci-Fi , Thriller • UA • 6 May, 2016

About the Movie

Marvel`s Captain America: Civil War finds Steve Rogers leading the newly formed team of Avengers in their continued efforts to safeguard humanity. But after another incident involving the Avengers results in collateral damage, political pressure mounts to install a system of accountability, headed by a governing body to oversee and direct the team.

The new status quo fractures the Avengers, resulting in two camps – one led by Steve Rogers and his desire for the Avengers to remain free to defend humanity without government interference, and the other following Tony Stark`s surprising decision to support government oversight and accountability. Get ready to pick a side and join the nonstop action playing out on two fronts on Marvel`s new release Captain America: Civil War. In Captain America: Civil War, disagreement over international oversight of the Avengers fractures the team into two opposing factions—one led by Steve Rogers and the other by Tony Stark (Downey).

The film was directed by Anthony and Joe Russo from a screenplay by the writing team of Christopher Markus and Stephen McFeely, and stars Chris Evans as Steve Rogers / Captain America alongside an ensemble cast including Robert Downey Jr., Scarlett Johansson, Sebastian Stan, Anthony Mackie, Don Cheadle, Jeremy Renner, Chadwick Boseman, Paul Bettany, Elizabeth Olsen, Paul Rudd, Emily VanCamp, Tom Holland, Frank Grillo, William Hurt, and Daniel Brühl.

BOOK TICKETS

MARVEL HQ

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Thor Ragnarok

2h 10m • Action , Adventure , Fantasy • UA • 3 Nov, 2017

About the Movie

In Thor: Ragnarok, Thor must escape the alien planet Sakaar in time to save Asgard from Hela (Blanchett) and the impending Ragnarok. Upon finding himself in a gladiatorial match against the Hulk, his former ally, Thor must fight for survival and to save his people from the ruthless Hela from destroying Asgard.

Imprisoned on the planet Sakaar, Thor must race against time to return to Asgard and stop Ragnarok, the destruction of his world, at the hands of the powerful and ruthless villain Hela. It is the sequel to Thor (2011) and Thor: The Dark World (2013), and the 17th film in the Marvel Cinematic Universe (MCU).

The film was directed by Taika Waititi from a screenplay by Eric Pearson and the writing team of Craig Kyle and Christopher Yost, and stars Chris Hemsworth as Thor alongside Tom Hiddleston, Cate Blanchett, Idris Elba, Jeff Goldblum, Tessa Thompson, Karl Urban, Mark Ruffalo, and Anthony Hopkins.

BOOK TICKETS

MARVEL HQ

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Avengers: Endgame

3h 2m • Action , Adventure , Fantasy • UA • 26 Apr, 2019

About the Movie

After the devastating events of Avengers: Infinity War (2018), the universe is in ruins. With the help of remaining allies, the Avengers assemble once more in order to reverse Thanos' actions and restore balance to the universe pave the way for an epic and unique global adventure.

The grave course of events set in motion by Thanos that wiped out half the universe and fractured the Avengers ranks compels the remaining Avengers to take one final stand in Marvel Studios` grand conclusion to twenty–two films, "Avengers: Endgame."The film serves as a conclusion to the story of the MCU up to that point, ending the story arcs for several main characters.

Directed by Anthony and Joe Russo and written by Christopher Markus and Stephen McFeely, the film features an ensemble cast including Robert Downey Jr., Chris Evans, Mark Ruffalo, Chris Hemsworth, Scarlett Johansson, Jeremy Renner, Don Cheadle, Paul Rudd, Brie Larson, Karen Gillan, Danai Gurira, Benedict Wong, Jon Favreau, Bradley Cooper, Gwyneth Paltrow, and Josh Brolin. In the film, the surviving members of the Avengers and their allies attempt to reverse the destruction caused by Thanos in Infinity War.

BOOK TICKETS

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MARVEL HQ

Avengers: Infinity War

2h 29m • Action , Adventure , Fantasy • UA • 27 Apr, 2018

About the Movie

As the Avengers and their allies have continued to protect the world from threats too large for any one hero to handle, a new danger has emerged from the cosmic shadows: Thanos. A despot of intergalactic infamy, his goal is to collect all six Infinity Stones, artifacts of unimaginable power, and use them to inflict his twisted will on all of reality. Everything the Avengers have fought for has led up to this moment – the fate of Earth and existence itself has never been more uncertain.

In the film, the Avengers and the Guardians of the Galaxy attempt to prevent Thanos from collecting the six all-powerful Infinity Stones as part of his quest to kill half of all life in the universe. The Avengers and their allies must be willing to sacrifice all in an attempt to defeat the powerful Thanos before his blitz of devastation and ruin puts an end to the universe.

Directed by Anthony and Joe Russo and written by Christopher Markus and Stephen McFeely, the film features an ensemble cast including Robert Downey Jr., Chris Hemsworth, Mark Ruffalo, Chris Evans, Scarlett Johansson, Benedict Cumberbatch, Don Cheadle, Tom Holland, Chadwick Boseman, Paul Bettany, Elizabeth Olsen, Anthony Mackie, Sebastian Stan, Danai Gurira, Letitia Wright, Dave Bautista, Zoe Saldana, Josh Brolin, and Chris Pratt.

BOOK TICKETS

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MARVEL HQ

Spider-Man: Far From Home

2h 9m • Action , Adventure , Comedy , Fantasy • UA • 4 Jul, 2019

About the Movie

In the latest chapter of MCU`s Spider-Man series, our friendly neighborhood superhero decides to join his best friends Ned, MJ and the rest of the gang on a European vacation. However, Peter`s plans to leave heroics behind for a few weeks are quickly scrapped when he begrudgingly agrees to help Nick Fury uncover the mystery of several elemental creature attacks, creating havoc across the continent!

Following the events of Avengers: Endgame, Peter Parker (Tom Holland) returns in Spider-Man: Far From Home. Our friendly neighborhood Super Hero decides to join his best friends Ned, MJ, and the rest of the gang on a European vacation. However, Peter's plan to leave super heroics behind for a few weeks is quickly scrapped when he begrudgingly agrees to help Nick Fury (Samuel L. Jackson) uncover the mystery of several elemental creature attacks. Spider-Man and Mysterio (Jake Gyllenhaal) join forces to fight the havoc unleashed across the continent but all is not as it seems.

The film was directed by Jon Watts, written by Chris McKenna and Erik Sommers, and stars Tom Holland as Peter Parker / Spider-Man, alongside Samuel L. Jackson, Zendaya, Cobie Smulders, Jon Favreau, J. B. Smoove, Jacob Batalon, Martin Starr, Marisa Tomei, and Jake Gyllenhaal. In the film, Parker is recruited by Nick Fury (Jackson) and Mysterio (Gyllenhaal) to face the Elementals while he is on a school trip to Europe.

BOOK TICKETS

After Clicking on "BOOK TICKETS" button on home page or movie info pages:
(with menu in top right corner)

After Clicking on "About us" button in the menu:

After clicking on "Update User Details" in the menu:

After inputting correct username and password users can see their details and edit any detail except for their username:

(Back to Book Tickets Page)

After Selecting all the given fields users can see the seats. The seats which are already booked in the database are disabled:

After selecting the correct number of seats and clicking on the "Confirm Seats" button: (By clicking on the "Reset Seats" button users can reset the selected seats and choose again)("Reset ALL" button resets all the selected fields)

After clicking on the red button "Confirm Booking and Pay" and again confirming by typing their username, users can see the tickets downloaded in their system download folder:
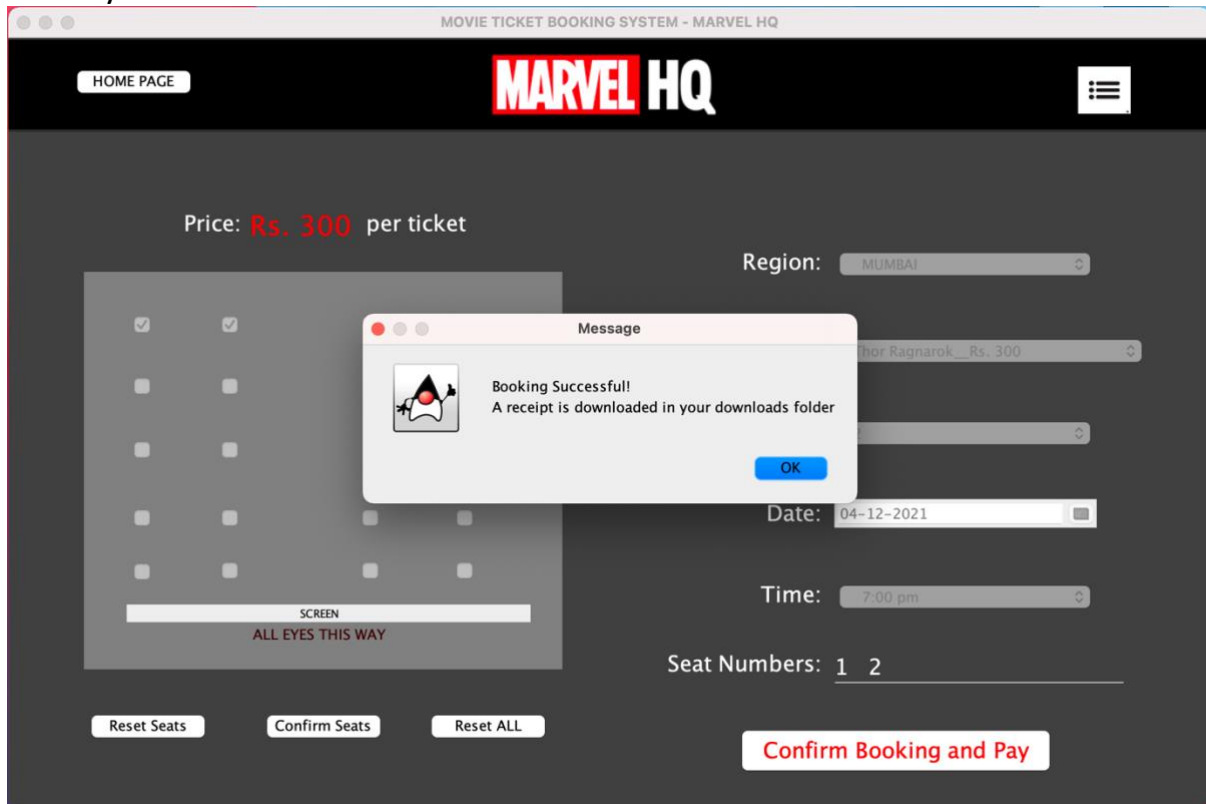
The Following receipt is generated:

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                          MARVEL-HQ
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                          Date & Time : 03-12-2021 05:18:47 pm
Username : yash123
Name : Yash Khot
Email ID : yash.khot@vit.edu.in
Contact Number : 8746352465

Region :   MUMBAI
Movie Name : Thor Ragnarok__Rs. 300
Date : 04-12-2021
Time :   7:00 pm
Ticket Number : 160431

Region :   MUMBAI
Movie Name : Thor Ragnarok__Rs. 300
Date : 04-12-2021
Time :   7:00 pm
Ticket Number : 160432


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                       Thank You!!! See you Soon
                       Contact us at : +022 12345678
                              help@marvelHQ.com
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DATABASE: