

Functional Requirements

1. The system must allow users to enter the system by displaying a login page upon starting the application.
 - 1.1. Users must be able to click the login button in UI and enter their email address and password.
 - 1.2. The system must be able to validate user credentials through Firebase Authentication
 - 1.2.1. If authentication via Firebase is successful, the system must direct user to ProfileUI
 - 1.2.2. If authentication via Firebase is not successful, the system must display "Failed" message and direct user back to LoginUI
2. The system must allow users to query the system for getting movie information.
 - 2.1. Users must be able to query the system for 'Now showing' movies.
 - 2.1.1. The system must allow users to view Now Showing movies by clicking the Now Showing Movie button at bottom navigation bar
 - 2.1.2. The system must be able to direct user to NowShowingUI and display movie information consisting of:
 - 2.1.2.1. Now Showing movies posters
 - 2.1.2.2. Now Showing movies titles
 - 2.1.3. User must be able to click on any of the movie posters or titles to get detailed information of the particular movie
 - 2.1.3.1. The system must be able to direct user to selected movie page containing detailed information:
 - 2.1.3.1.1. Movie title
 - 2.1.3.1.2. Movie poster
 - 2.1.3.1.3. Movie rating
 - 2.1.3.1.4. Language
 - 2.1.3.1.5. Synopsis
 - 2.1.3.1.6. Directors and casts
 - 2.1.3.1.7. Duration
 - 2.1.3.1.8. The system should display NA if no information is available online
 - 2.1.3.2. The system must allow user to view showtimes across different cinemas for the selected movie

2.1.3.2.1. The system must be able to display showtimes for today and next 4 days whenever the data is available.

2.1.3.2.2. The showtime details must include cinema name and movie format whenever the data is available.

2.2. Users must be able to query the system for upcoming movies.

2.2.1. The system must allow users to view Upcoming movies by clicking the Upcoming Movie button at bottom navigation bar

2.2.2. The system must be able to direct user to UpcomingUI and display movie information consisting of:

2.2.2.1. Upcoming movies posters

2.2.2.2. Upcoming movies titles

2.2.3. User must be able to click on any of the movie posters or titles to get detailed information of the particular movie

2.2.4. The system must be able to direct user to selected movie page containing detailed information:

2.2.4.1. Movie title

2.2.4.2. Movie poster

2.2.4.3. Movie rating

2.2.4.4. Language

2.2.4.5. Synopsis

2.2.4.6. Directors and casts

2.2.4.7. Duration

2.2.4.8. The system should display NA if no information is available online

3. The system must allow users to book movie tickets

3.1. The system must allow users to select a particular showtime to proceed with tickets bookings from the official website

3.2. The system must be able to direct users to the official cinema website

3.2.1. If the cinema is GV, the system must direct users to <https://www.gv.com.sg/GVBuyTickets#/>

3.2.2. If the cinema is Cathay, the system must direct users to <https://www.cathaycineplexes.com.sg/showtimes.aspx>

3.2.3. If the cinema is Shaw, the system must direct users to <https://shaw.sg/Showtimes/>

3.2.4. If the cinema is Filmgarde, the system must direct users
<https://fgcineplex.com.sg/buyticket>

4. The system must allow users to do direct search for movie information
 - 4.1. The system must allow user to initiate search options by clicking the Search button at bottom navigation bar
 - 4.2. The system must be able to direct users to SearchUI and displays a dropdown list of available movie titles
 - 4.3. The user must be able to choose any movie from the dropdown list
 - 4.4. The system must be able to display a dropdown list of dates from today to next 4 days
 - 4.5. The user must be able to choose any date from the dropdown list
 - 4.6. The system must be able to direct user to the selected movie details page or movie showtime page depending on users' input:
 - 4.6.1. If the user inputs movie title only, the system must direct user to the movie details page for the selected movie.
 - 4.6.2. If the user inputs both movie title and date, the system must direct user to the movie showtimes page for the selected movie and date,
 - 4.6.3. If the user inputs date only, the system should not direct user to any page.
5. The system must allow users to view ongoing promotions
 - 5.1. The users must be able to view promotions by clicking the Promotions button at bottom navigation bar
 - 5.2. The system must be able to direct users to PromotionsUI which displays ongoing promotions' poster and names
 - 5.3. The user must be able to click on any of the promotions posters or names to view detailed information of that promotion
 - 5.4. The system must directs user to the selected promotion interface and display detailed information about that promotion consisting of:
 - 5.4.1. Promotion name
 - 5.4.2. Promotion description
 - 5.4.3. Promotion poster
6. The system must allow users to view his/her profile details based on the gmail account used for login
 - 6.1. The user must be able to view his/her profile by clicking the Profile button at bottom navigation bar

- 6.2. The system must be able to direct users to ProfileUI and display profile details consisting of:
 - 6.2.1. First name
 - 6.2.2. Last name
 - 6.2.3. Profile picture
 - 6.2.4. Email address
7. The system must allow users to view support/help regarding how to use the application
 - 7.1. The user must be able to view support by clicking View Support button from ProfileUI
 - 7.2. The system must be able to direct user to SupportUI and displays list of questions
 - 7.2.1. The user must be able to click on any of the questions inside the list
 - 7.2.2. The system must be able to expand the list and display answer to the selected question
 - 7.3. The system must be able to direct user back to ProfileUI anytime by clicking Back to Profile button
8. The system must allow users to give ratings for the application.
 - 8.1. The system must allow user to give rating by clicking a scale from 1-5
 - 8.2. The system must be able to display the rating that the user has just inputted
 - 8.3. The system must allow user to submit his/her rating by clicking a submit button
 - 8.3.1. The system must be able to show confirmation message upon rating submission
 - 8.3.2. The system must be able to direct user back to ProfileUI upon rating submission
 - 8.3.3. The system must be able to store ratings given by user in Firebase Realtime Database
9. The system must allow users to exit/log out of the system by clicking Sign Out button

Non-Functional Requirements

1. The application must be able to completely load each of its internal UI within 5 seconds or less.
2. The application shall be able to return user input/query within 5 second or less.
3. The system must be able to redirect to respective cinema's payment page within 5 seconds
4. The user must be able to get to a page within 5 clicks from any page.
5. Every text of this program (including error text messages) shall be written in simple English language.
6. The application must permit easy reversal actions between pages
7. The application shall indicate to user where they are at in the process
8. The layout of the application must be consistent throughout
9. The features of the application shall be self-explanatory and intuitive
10. The user should not have to remember more than 5 information
11. User's account details displayed in ProfileUI must match with actual details in user's gmail account
12. The movie information and promotions data must reflect daily changes