

BOOKMYSHOW
MOVIE TICKETING APPLICATION

*Dissertation submitted in fulfilment of the requirements for the Degree of
Bachelor of Technology*

BACHELOR OF TECHNOLOGY
in
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CSE 226
ANDROID APP DEPLOYMENT



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1. Introduction

The BookMyShow application is a movie ticketing platform that allows users to browse, select, and book tickets for movies, sports events, and live shows. The project focuses on creating an intuitive user interface and efficient backend integration to provide a seamless booking experience. Technologies like RecyclerView , SQLite , Room Database , Kotlin Coroutines , API Integration , and more have been utilized to ensure dynamic content updates and real time data retrieval.

Key Objectives :

- Develop a user friendly interface for ticket booking.
- Implement robust backend support for dynamic updates.
- Enhance functionality using Android specific features like Location Services and Broadcast Receivers.

2. Modules or Activity Explanation & Screenshots :

This section breaks down the main modules and activities in the app with explanations and corresponding screenshots.

[i\) Language Selection Activity:](#)

The Language Selection Activity allows users to choose their preferred language before navigating through the app. This ensures the app displays content relevant to their choice.

Key Features :

- Dropdown list or grid view of supported languages.
- Data persistence using shared preferences to store user selection.

[ii\) Movie List Display:](#)

The Movie List Activity fetches and displays movies dynamically based on the selected language. A RecyclerView with a custom adapter is used for this purpose.

Key Features :

- API integration for fetching movie data.
- Filter options by genre, language, or release date.

iii) Movie Details with "Book Tickets" Button

This activity provides detailed information about the selected movie, including:

- Poster image.
- Synopsis and rating.
- A "Book Tickets" button that redirects to a booking confirmation screen.

iv) Category Selection and Dynamic Content

Users can browse events by category, such as Movies, Sports, Comedy Shows, Music Shows, and Standup. Dynamic content updates ensure real time changes in available shows.

Key Features :

- OnClick listeners for categories.
- Dynamic content fetching using APIs.

3. Code - Module wise or Activity Wise :

This section provides detailed explanations and code snippets for major functionalities.

i) Code for RecyclerView and Adapters

The RecyclerView is used to display a dynamic list of movies. A custom adapter handles the binding of data to views.

```
class MovieAdapter(private val movieList: List<Movie>) :  
    RecyclerView.Adapter<MovieAdapter.MovieViewHolder>() {  
  
    override fun onCreateViewHolder(parent: ViewGroup, viewType: Int): MovieViewHolder {  
  
        val view = LayoutInflater.from(parent.context).inflate(R.layout.movie_item, parent, false)  
  
        return MovieViewHolder(view)  
  
    }  
}
```

```
// Bind data to views

override fun onBindViewHolder(holder: MovieViewHolder, position: Int) {

    val movie = movieList[position]

    holder.bind(movie)

} override fun getItemCount() = movieList.size

}
```

[ii\) API Integration for Fetching Movies and Categories](#)

API calls are implemented using Retrofit for network operations. Kotlin Coroutines manage asynchronous tasks.

```
suspend fun fetchMovies(): List<Movie> {

    return apiService.getMovies()

}
```

[iii\) SQLite and Room Database Integration](#)

The Room database is used to cache data for offline access.

```
@Entity(tableName = "movies")

data class Movie(

    @PrimaryKey val id: Int,

    val title: String,

    val genre: String,

    val language: String

)
```

[iv\) Kotlin Coroutines for Asynchronous Tasks](#)

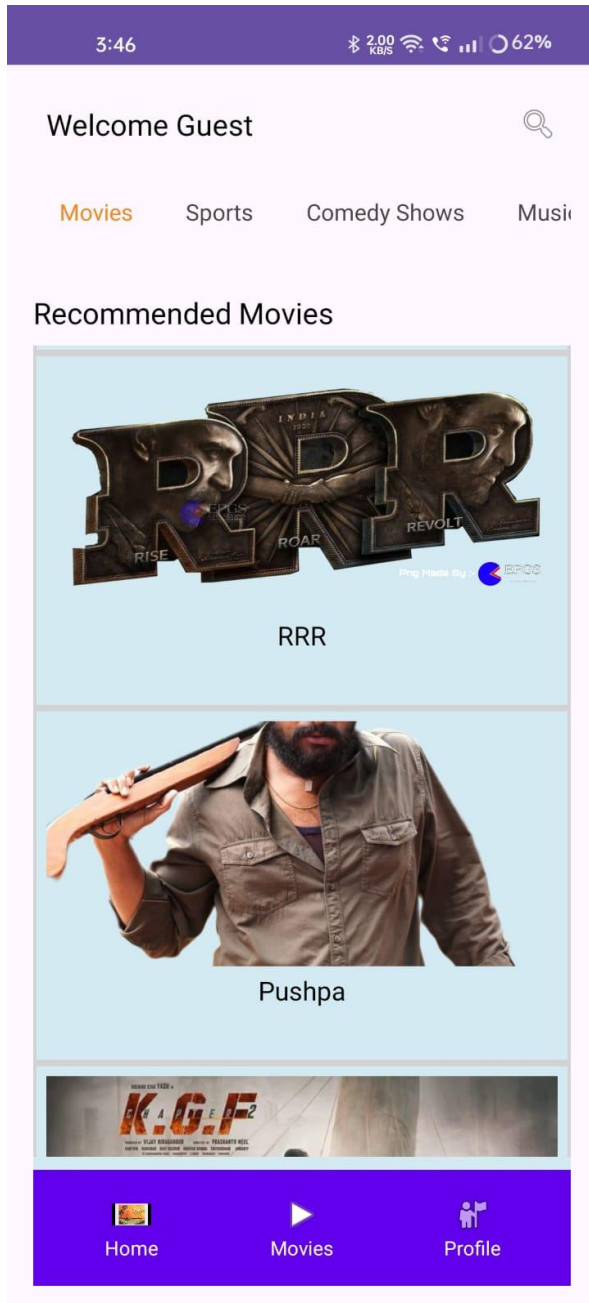
Kotlin Coroutines enhance user experience by handling background tasks efficiently.

```
lifecycleScope.launch {  
    val movies = fetchMovies()  
    adapter.submitList(movies)  
}
```

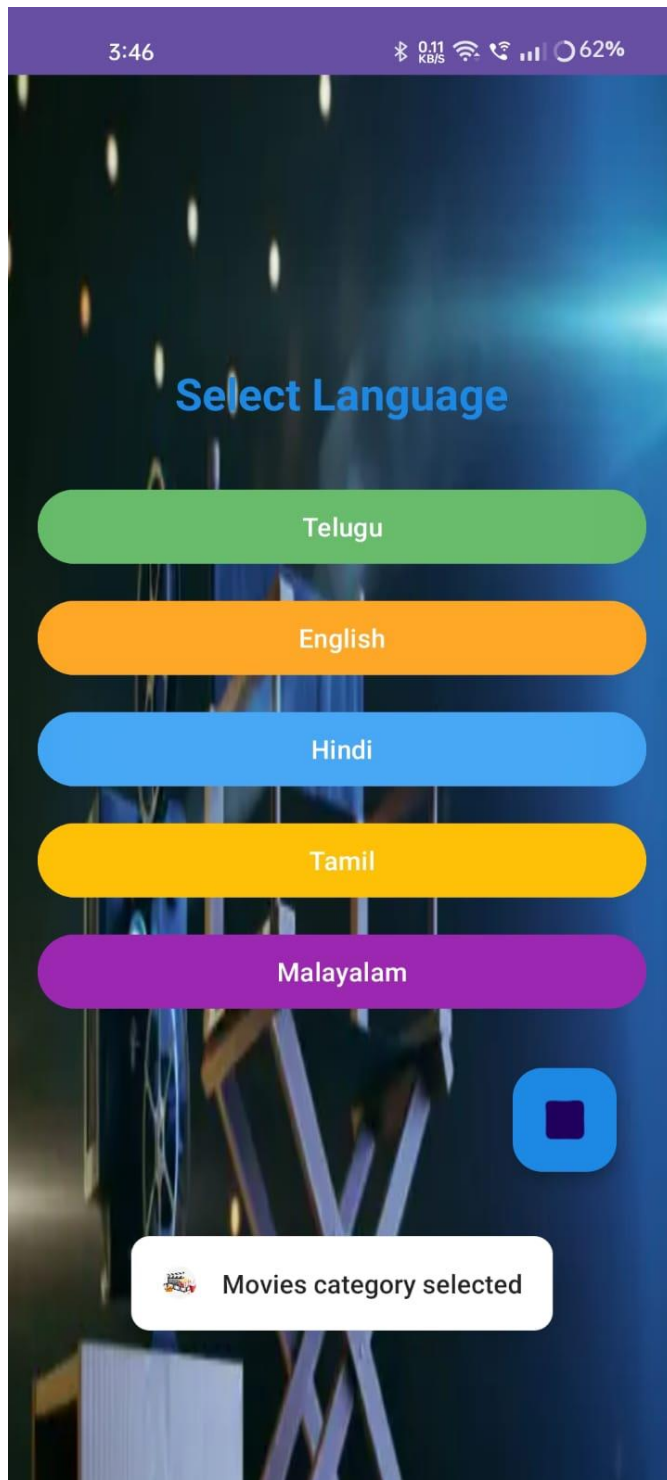
4. Emulator Screenshots

Screenshots from the emulator provide a visual representation of the app's functionality:

Home Screen:



Language Selection Screen : Dropdown or grid of languages.



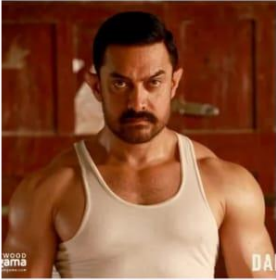
Movie List Screen : List of movies with posters and titles.

3:47

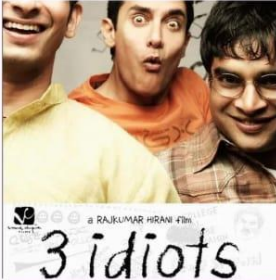
0.31 KB/s

62%


Hindi Movies:



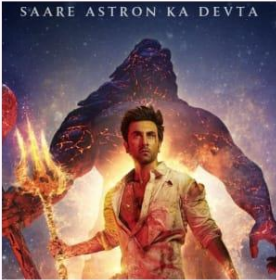
Dangal




3 Idiots



Jawaan



Brahmastra



Shershaah


Movie Details Screen : Poster, title, synopsis, and "Book Tickets" button.

3:47

0.14 KB/S

62%

Dangal



Dangal is a biographical sports drama film based on the life of Mahavir Singh Phogat, a former wrestler who trained his daughters Geeta and Babita to become India's first world-class female wrestlers.

Book Tickets

Theater Selection Screen : Categories with icons.



Seat Selection :

3:51

0.20 KB/S

62%

Vikram

GRD Cinemas

9:00 PM

Platinum (₹250)

1	2	3	4
6	7	8	9
11	12	13	14
16	17	18	19
21	22	23	24

Gold (₹170)

26	27	28	29
31	32	33	34
36	37	38	39
41	42	43	44
			49
51	52	53	54
56	57	58	59

 You can select up to 5 seats only

3:47

5.00 Kbps 62%

Dangal

Jalandhar Friends

10:00 AM

Platinum (₹250)

1	2	3	4
6	7	8	9
11	12	13	14
16	17	18	19
21	22	23	24

Gold (₹170)

26	27	28	29
31	32	33	34
36	37	38	39
41	42	43	44
46	47	48	49
51	52	53	54
56	57	58	59
61	62	63	64
66	67	68	69
71	72	73	74

Silver (₹140)

76	77	78	79
81	82	83	84
86	87	88	89
91	92	93	94
96	97	98	99

Pay and Confirm




Booking Status:


3:48


0.01 KB/s


62%


Booking Confirmation




 Movie: Dangal


 Theater: Jalandhar Friends


 Date & Time: 10:00 AM

 Seats: 6, 37, 48, 51

 Total Price: ₹760

Confirm Booking



 Booking Confirmed!

5. Conclusion & Future Scope:

The BookMyShow project successfully demonstrates the integration of Android features to create a dynamic and user friendly app.

Key Achievements :

- Seamless integration of APIs for dynamic content.
- Enhanced user experience with Kotlin Coroutines and Room Database.
- Implementation of modern Android components like RecyclerView and ViewModel.

Future Enhancements :

- Implement user authentication for personalized experiences.
- Add payment gateway integration for seamless ticket booking.
- Expand to include more event categories like workshops and webinars.

6. Project GitHub Link :

- The complete source code of the project is available on GitHub:
- Link : <https://github.com/rohith232/BookMyShow.git>

[This repository includes:](#)

- Source code for all activities and modules.
- API documentation.
- Emulator screenshots and testing details.

