

# *Movie Booking App*

*Book Movie Tickets Online*

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# 1. Overview

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A ticketing company is looking to build an online web based application for its users to book movie tickets online. Most users will be accessing it from mobile and hence the web app must be mobile & tablet friendly as well. The users can book movies tickets in theatres anywhere in India.

## 2. Features (Functional Requirements)

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There will be two main roles added as part of the application. **Admin**, who will configure and manager the application and **Users**, who will use the application to book tickets.

### 2.1 Standard User

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- Ability to see Movies now playing by location (default to current location of the user)
- Ability to filter movies by,
  - Distance (KMs from user's current location)
  - Language
  - Genre
- Ability to select a movie to view more details like Title, cast, crew, synopsis, ratings, comments, trailers, interesting facts....
- Ability to add preferences w.r.to genre, language, theatre / multiplex
- Ability to register through Google or user account (email address / password)
- Ability to login through Google or user account (email address / password)
- Ability to book selected movie (post login) in a particular theatre
- Ability to select payment options before confirming the booking
- Ability to see user's bookings (post login) w.r.to current and past
- Get notifications, reminders on movie start times (booked), booking confirmation

#### 2.1.1 Search

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Search is a critical feature and will be widely used by the users. It should,

- Check user's preferences and with retrieve results accordingly (sorted with preference match first)
- Check previously booked movies and show them towards the end (lower priority)
- Check frequently visited movies and show them at first
- List down movie poster, name, ratings in the results with option to book straight from the results

### 2.2 Admin User

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- Ability to add Event locations (an event could be Movie, Theatre Play, Sports events, Concert)
- Ability to add Theatres within a location and information about the theatre like address, map coordinates, parking facilities, restrictions (food, bags...)
- Ability to add screens, capacity, screen type per theatre

- Ability to add movies (per screen) and related attributes
- Ability to add external share links (Facebook, Instagram, twitter), ratings, social integrations (imdb, rotten-tomatoes) per movie
- Ability to add master data required like locations, genres, languages...

## 3. Non-functional requirements

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### 3.1 Security

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- All users must be authenticated to access user specific tasks
- Use both Google Auth and Custom JWT based authentication (choice to user)
- PII data must be encrypted at store and transport

### 3.2 Performance

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Following performance standard must be met

- Web performance
  - First Contentful Paint -  $\leq 1500\text{ms}$
  - First Meaningful Paint –  $\leq 2000\text{ms}$
  - Time to interactive –  $\leq 3000\text{ms}$
- API performance
  - Any API calls must be responded within 300ms

### 3.3 Accessibility

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Must adhere 100% to W3C AA standards for web accessibility

### 3.4 Extensibility

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Application must be easily extensible to add new features, new components, adding additional integration systems with minimal impact

### 3.5 Monitorability

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Monitoring of the application must be in place to monitor the health of services, access to logs, performance, throughput of I/O operations

### 3.6 Testability

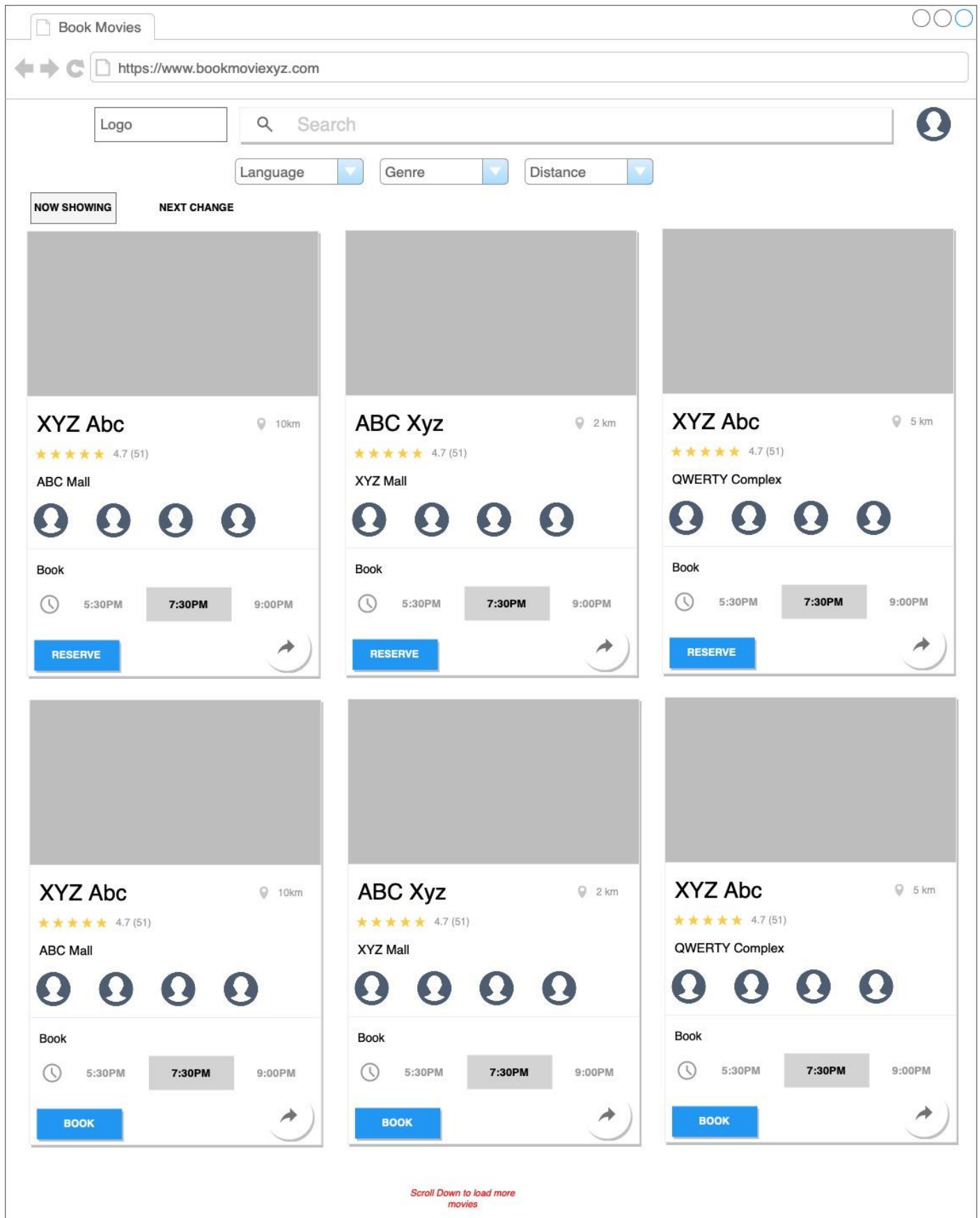
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Application must be unit testable through automated scripts (Web and APIs) and achieve at least 80% code coverage

## 4. Wireframe (Reference)

### 4.1 Home

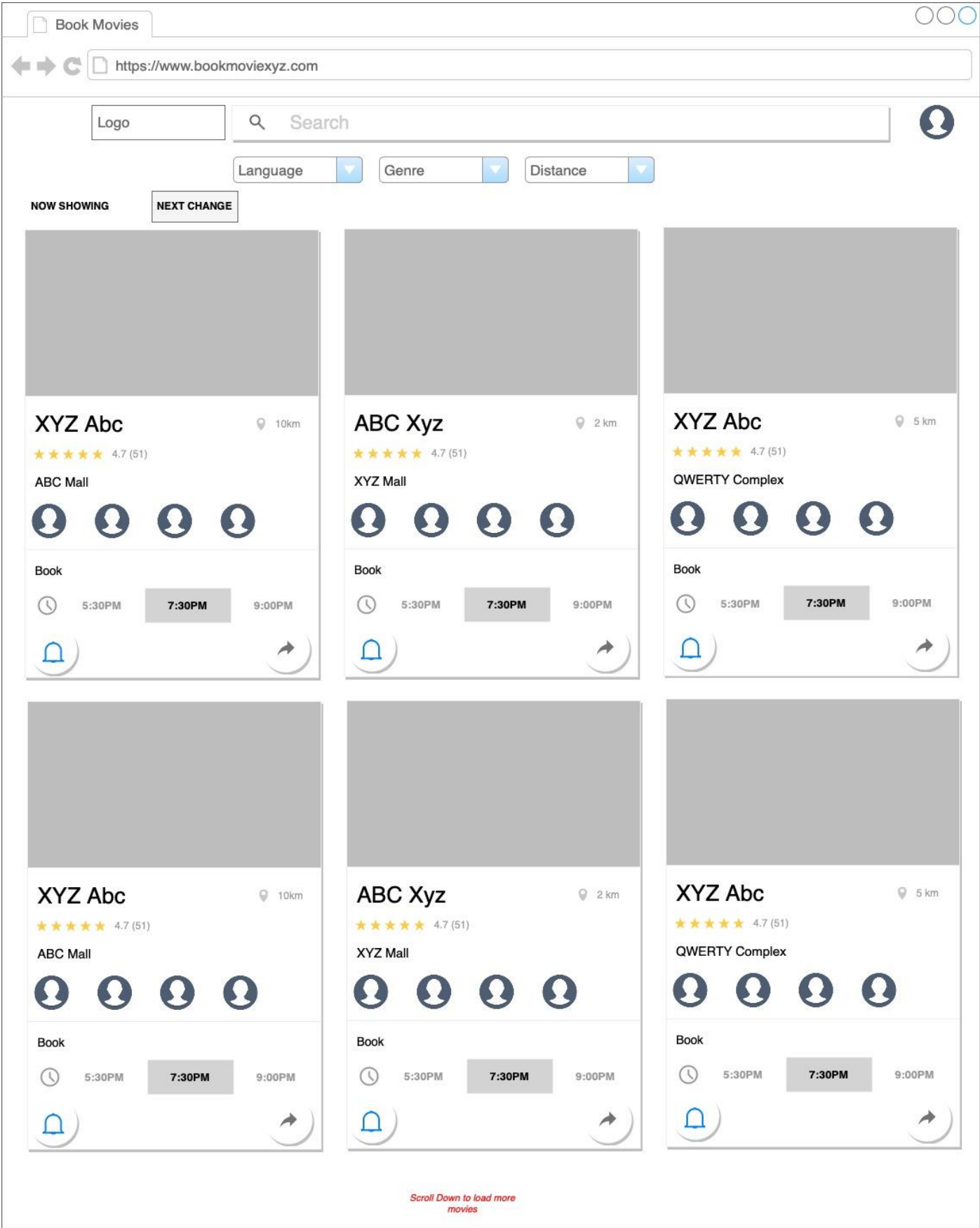
- For movies which are currently running, 'Book' option must be enabled which will navigate to 'Booking' page.



## 4.2 Next Change

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- For movies which are in future release, 'Notify' option must be enabled which will notify user upon release.



### 4.3 Search (Dialog – Full Page)

Book Movies

https://www.bookmoviexyz.com

← Search ×

Language Genre Distance

ENGLISH

Title here  
Subtitle here  
BOOK

Title here  
Subtitle here  
BOOK

Title here  
Subtitle here  
BOOK

Title here  
Subtitle here  
BOOK

Title here  
Subtitle here  
BOOK

Title here  
Subtitle here  
BOOK

HINDI

Title here  
Subtitle here  
NOTIFY

Title here  
Subtitle here  
NOTIFY

Title here  
Subtitle here  
NOTIFY

Title here  
Subtitle here  
NOTIFY

Title here  
Subtitle here  
NOTIFY

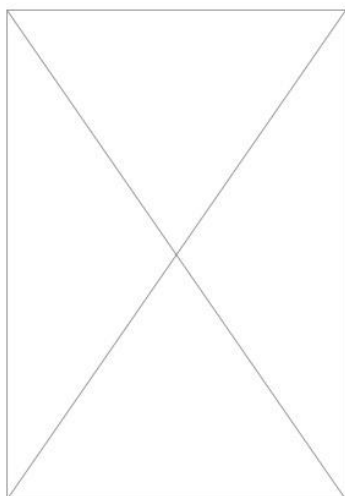
Title here  
Subtitle here  
NOTIFY

Scroll Down to load more  
movies by language



#### 4.4 Movie Details

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## Poster

## Overview

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

## Social



## List group item heading

Donec id elit non mi porta gravida at eget metus.  
Maecenas sed diam eget risus varius blandit.

List group item heading

Donec id elit non mi porta gravida at eget metus.  
Maecenas sed diam eget risus varius blandit.



### Location Map



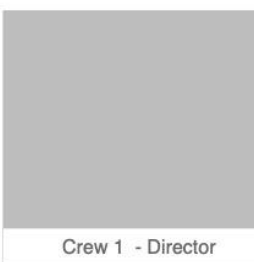
## Featured Cast & Crew



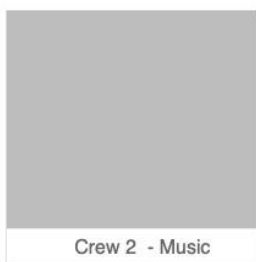
Cast 1 as xyzzy



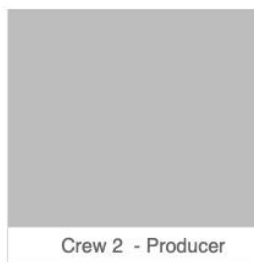
Cast 2 as xyzzy



Crew 1 - Director



Crew 2 - Music



Crew 2 - Producer

## Cast

*Name & Role displayed at the bottom of each cover*

## Crew

*Name & Role displayed at the bottom of each cover*

## 4.5 Booking

Book Movies

https://www.bookmoviexyz.com

Title - XYZ Abc

No. of seats xx

Cinema ABC Xyz Hall

Change no. seats

1

2

3

4

5

6

7

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SCREEN

CANCEL

BOOK