

# Development

# Winter Assignment

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## Contents

Overview .....	1
CineQuest (Web Application) .....	1
ClassicChakkar (Mobile Application) .....	4
BollywoodRelay (Game) .....	6
Frequently Asked Questions .....	8
Follow Us .....	9

## Information Management Group

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## Overview

Welcome to the "Golden Reels Rewind," where we invite you to dive into the world of software development with a touch of Bollywood flair. This assignment provides an opportunity to solve real-world problems through creative and innovative software solutions.

The digital world is buzzing with excitement, and we're calling upon you, the tech maestros, to create software solutions that resonate with the vibrant spirit of Bollywood. Choose one out of three captivating problem statements, and let your creativity run wild. 🚀

**LAST DATE OF SUBMISSION:** Jan 10, 2024

## CineQuest (Web Application)

In the ever-evolving world of entertainment, the demand for personalized and streamlined access to movie information is higher than ever. Aspiring developers, gear up for an exciting journey where your coding skills will bring to life a platform that revolutionizes the way users discover, filter, and subscribe to their favorite films.

Your mission is to scrape data from a renowned movie review website, extract valuable insights, and use that data to build "CineInsight" — a cutting-edge platform that integrates movie reviews, streaming availability information, and advanced filtering options.

## Objectives

Please don't feel overwhelmed; we have tried to simplify the problem statement for you in order to avoid any confusion.

**Essential Features** - Your web application **MUST** contain these features:

## 1. Authentication

- a. Users can sign-up/log in using the following method:
  - i. A unique username and password login.

During sign-up, users may upload a profile picture, or opt for a default picture.

## 2. Dashboard

- a. List the movies
  - i. Break the list of movies into smaller sections (20-30 movies per section)
  - ii. Add navigation between different section you should be loading only one section at a time
  - iii. On clicking on movie card the user should be redirected to the **movie page**

*Hint: Learn about pagination and lazy loading*

- b. User should be able to search movie by name
- c. Implement filters based on
  - i. Language
  - ii. Genre
  - iii. Imdb ratings
  - iv. Platforms availability

*PS: You are free to add any more filters you may find appropriate*

## 3. Movie page

The movie page should contain all information about the movie including

- a. Movie name and poster
- b. Link to movie trailer
- c. Movie description
- d. Rating, runtime and language

- e. Platform availability

#### 4. Profile

- a. Basic information about the user
- b. User's favorite movies

*Hint: Learn about web scraping to generate your movie database*

## Brownie Points

Your application may or may not contain these features, but implementing them will help your project stand out!

1. **Authentication** - Instead of using plain vanilla username and password, you can implement the authentication in these alternative ways:
  - a. Channeli OAuth.
  - b. Email/phone-number and password authentication, where email/phone is verified through OTP.
  - c. Google OAuth
2. Rather than showing movies in sections, implement infinite scrolling with lazy loading
3. Also show reviews (showing 10-15 reviews would be fine) and enable user to add his/her own reviews
4. Hosting the application on a server, allowing public access through a URL.

# ClassicChakkar (Mobile Application)

Step into a world where Bollywood charm meets the simplicity of real-life connections with our new app – "ClassicChakkar" It's not about grand theatrics; it's about effortless, heartwarming rendezvous inspired by the spirit of friendship and Bollywood's subtle magic.

In the magical world of "ClassicChakkar" friendship takes center stage, just like in our beloved Bollywood movies. Picture this: you and your gang, exploring the city, and "ClassicChakkar" suggesting the most happening spots based on everyone's locations which is easily approachable by all.

## Objectives

Please don't feel overwhelmed; we have tried to simplify the problem statement for you in order to avoid any confusion.

**Essential Features** - Your mobile application **MUST** contain these features:

### 1. Authentication

- a. Users can sign-up/log in using the following method:
  - i. A unique username and password login.
- b. During sign-up, users may upload a profile picture, or opt for a default picture.

### 2. Landing page

- a. User will be shown a map with their friends location marked on the map
- b. The map should also contain location of nearby meeting places (restaurants, canteens, etc)

### 3. Suggestion bottom drawer

- a. User should be able to drag up the suggestion drawer from the bottom of the screen (similar to google maps)
- b. The drawer should contain suggestions for the top 3 meeting places based on distance

### 4. Group screen

- a. Contains all the groups the user is part of
- b. Includes create/delete group options
- c. While creating a new group user should be able to search his/her friends from the database (based over some unique field like email)
- d.

*Hint: You can use **OpenStreetMap api** for maps*

## Brownie Points

Your application may or may not contain these features, but implementing them will help your project stand out!

1. **Authentication** - Instead of using plain vanilla username and password, you can implement the authentication in these alternative ways:
  - a. Channeli OAuth.
  - b. Email/phone-number and password authentication, where email/phone is verified through OTP.
  - c. Google OAuth
2. Implement a notification feature where a user can send a notification to all members of group to meet
3. Add profile page for the user
4. Add some criteria other than distance for meeting place
5. Hosting the application on a server, allowing public access through a URL.

# BollywoodRelay (Game)

In the enchanting land of code and creativity, a blockbuster story unfolds. Picture this: A virtual universe where our beloved Bollywood heroes and heroines gather for the ultimate game extravaganza - "BollywoodRelay" It's not just a game; it's an epic saga, and you are the director of this digital masterpiece!

In the heart of Bollywoodwoodistan, a legendary gaming competition is announced. The stakes are high, and the challenge is to create a game universe akin to the colossal Google Olympics. Our protagonists, the students, are tasked with crafting a virtual wonderland that encompasses various sub-games, each more thrilling than the last.

## Objectives

Please don't feel overwhelmed; we have tried to simplify the problem statement for you in order to avoid any confusion.

**Essential Features** - Your game **MUST** contain at least 4 sub games. You can either choose from the following games or can come up with your own ideas.

### 1. **MMM: MatchMyMoves**

The actor should be well versed in dancing to survive in bollywood and for that he just joined a dance class, help him learn the moves of the instructor. The actor should mimic the moves of the instructor using the arrow keys.

### 2. **DaringDudes**

Stunt doubles in the competition are arguing which one of them is most daring. They decide to do a competition on a highway where they avoid incoming cars and the nearer they escape, the more points they get.

### 3. **StealthySaga**

Our actor got a role in a robbery scene and to test his agility the director has devised a task where the our actor has to snatch the diamond maneuvering through some lasers in a given time. These lasers can either be still or blinking (You can also introduce moving lasers if you want).

### 4. **CatchTheVillian**

A thief also entered the competition and in the room he stole our protagonist's wallet, now starts the chase!. Imagine a rectangular room with the thief and the protagonist, our protagonist will be trying to catch the evading thief (make the thief run in random trajectory programmatically).

### 5. **Dishkiyaoon!!**

Actor's from Hollywood also entered the competition and were bragging about their gun games. Our protagonist, as boastful as he is, says that he can beat them at their game. The actor accepted the challenge and now the game begins!. You have to implement the classic cowboy action shooting challenge where one of the cowboy's will be the computer.

### 6. **BusyLightsman**

After playing so many games our actor is in a groovy mood and is trying to mess with the lightsman. The lightsman has to spot our actor who's trying to hide. (See it as a bollywood extension of whack-a-mole).

*Hint: You can use take inspiration from google olympics*

## Brownie Points

The more, the merrier!!, Let your imagination go wild. You can add as many games as you like and also increase the complexity of games to your will.





## Frequently Asked Questions

### 1. Is this an individual or group project?

This is an individual project, and submission is limited to one per person :)

### 2. Is hosting necessary?

Brownie points for hosting, but be sure to include your app setup instructions in the README file of your GitHub repository!

### 3. What tech stack can I use?

You are free to use anything and everything to build your software application


### 4. Can I follow online tutorials?

Yes, of course! However, we do not encourage direct copies. We expect you to understand and take inspiration from tutorials, but the core effort should be your own.

## Still, have a Question? Ask Us!

We at IMG are here to help throughout your development from a learner to a web developer. Just ping us at any point if you are stuck; we surely like to stick to the motto, “Help will always be provided to those who ask for it.”

**Remark:** Please post your queries on the [discord server](#). We would be delighted to see your progress. Even if you don't reach the end, what's most important is that you learned something new. That's all that matters to us. We're always looking for talented developers and designers who have a constant desire to learn and grow. So, please submit your code to us via a GitHub link for a public repository. If



your hard work is reflected in your code, you may even get a chance to directly appear for recruitment interviews.

## Follow Us

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## All the best!

Stay tuned, as we will soon release the submission form on our recruitment site and social media pages. Keep following us for updates.

