BTH UNIVERSITET **January 7, 2022**

PA1469

Mobile Application Development

Individual Report
assignment 4

Authors	**Swedish ID**	**E-mail**
Bejjagam Lokesh	20001111-T176	loba21@student.bth.se

Course responsible & Teacher
Dr. Usman Nasir

Teacher
Andreas Bauer

Contents

1 Introduction

My PMDb was the name of the application that we developed as group 14 for my first Project of Movie Database. The main aim of this App is to provide more information about the movies and also provide a lot new movies to the User.Furthermore, this app can be used by a large number of users who are unaware of a new movie and can use it because it is so quick and easy to use by any user. And, in order to use this app, you must first open our mobile application, and the user must create an account with an email address and a password.

And once you have the username and password, you can log in to MyPmdb and use the app's features.. In addition to searching for a movie, the user can save the results in a watchlist or, if the user has already seen it, in a seenlist. The user's watchlist can be shared with friends because it can be imported and exported between users. This app will also provide you with Mypmdb features such as a movie poster and some release dates for new movies, as well as the genre and title of the movies.

The users of this application have a simple goal in mind, and it can be used by anyone who enjoys watching movies but is having difficulty finding a good one to watch. Also, because the app provides movie information and each movie is rated for a different age group, there may be some complications if the app is updated. Because of the limited time available to create this app, it does not include any movie trailers.And also when an user uses this app he/she should be connected to an internet if not he/she cant use this app.

2 Mobile application

Many mobile applications have simple and useful features that allow users to access their services and functions from almost anywhere. On the other hand, mobile devices come with a variety of sensors that provide useful data for app development. Because mobile apps are smaller, they have less clutter than desktop apps, which have more information on the screen and are easier to understand. Mobile applications are extremely useful and can be felt using sensors such as a gyroscope, vibrators, location and graphics, many of which are based on cutting-edge technology.

A touchscreen on today's mobile devices allows users to interact. Instead of clicking a button or browsing with a mouse, users can simply tap their screen to interact with various interface elements. A mobile application's user can scroll down by tapping their finger on the screen, whereas a desktop application's user must scroll down. Close, resize, and minimize are user interactions in desktop applications, but mobile applications have mobile gestures to use those functions and get better use of the customer interaction. Because the data required for this feature takes a long time on the device, a desktop

version of the app is possible. A user's interaction with a mobile application may differ from that of a similar app designed for a desktop computer.

3 Development process

1. We had a lot of trouble using and applying some of the features in a React Native application, to the project these packages were our first attempt at development. In some cases, the packages were deprecated or didn't match. While developing the mobile app, we faced numerous challenges, but using React Native as a framework forced us to experiment with various external packages in order to implement some features and functionalities.

   It's difficult to get started with the Android environment setup because react-native doesn't come with an emulator like Android Studio or many others.

2. We developed the application according to the teachers guided us and everything was done remotely. The tools we used throughout the design, implementation, and testing were followed by the guidelines. The user creditionals were previously saved on the device, but with Firebase, they can now be saved on a private server; we did not save the data locally.

3. The wireframes were created in Figma with the most precise and accurate design for the users, which had a significant impact on the final outcome of the application. During the design phase, we created wireframes to demonstrate the application's user cases, but due to lack of time available, we were unable to complete the trailer part.

4. The development platform we chose made it easy for us to work,We also collaborated through the Discord platform, which made it easy for us to talk and share our screens with our friends. We all worked together to finish this app, which was a little difficult due to time constraints, but we succeeded.

5. Working with React Native was appealing for me because it is simple to learn for someone who is already familiar with some programming languages, especially JavaScript. The react-native packages are easy to use and implement,for example, the useState and setState functions are very similar to java-script.Also, I discovered that flutter was a little bit easier to learn than react-native, so I'll try to do flutter.

4 Security Risks Concerns

1. When compared to the import and export features, the latter lacks security because it can automatically grant access to many users who are having the username, allowing them to easily import and export many movies to any user.we attempted to make the emails and login page as secure as possible. As a result, we didnt attempt to implement them due to a lack of time.

2. The watchlist, seenlist, and profile contain all of the user's data and personal information. Before accessing any data, this application requires a user login. The login process is handled by Firebase, which encrypts the information.The username itself contains information for accessing import and export, which could pose a security risk to user data. In the future, we will definitely solve this issue in further development.

3. The app displays an error message in red alert at the top of the screen if the user does not have access to the internet or turns off their internet connection, indicating that the app requires an internet connection to function. The application requires a constant internet connection because the authentication and database are hosted on a remote server. As a result, network permission is required.

5 Ethical Concerns

1. Our top priority is the safety of our users.We used Firebase to encrypt the login credentials and protect the application.It is an ethical point of view ,that as an developer we should not use this database for other purposes and uses.We don't collect a lot of data from our users, and we take data security seriously.

2. These (Levers for Privacy Discourse in Mobile Application Development) taught me ethical guidelines and also helped me with my app ethical guidelines while I was developing it.However, when we were discussing them for my choice, and teachers taught me some ethical guidelines, it helped me a lot in complying to these ethical rules.

6 References

1. L. Ma, L. Gu, and J. Wang, "Research and development of mobile application for android platform," International journal of multimedia and ubiquitous engineering, vol. 9, no. 4, pp. 187–198, 2014.

2. K. Shilton and D. Greene, "Linking platforms, practices, and developer ethics: Levers for privacy discourse in mobile application development," Journal of Business Ethics, vol. 155, no. 1, pp. 131–146, 2019.