Secure Development: Mobile applications

In this project, I used Android Studio using Java. To be able to use the apps, the user should enter the right Id and Password and if it's not the case we will have a notification that the login has f ailed. We will also be able to get the data of user account by using an API URL.

When we finally log into the apps, we will have a message of welcome and w will be able to see our menu. I also add some interesting features on my apps, so we will be able to add or delete balance with a button to update the account.

FAQ:

To ensure the user the right to start using the app in its full potential we should create a login interface where only the user who has the right name and password can access to his own account.

To securely save user's data on your phone, the apps can be used offline, we should have a database to save user's data. But as we know that SQL is easy to be seen and edited then we will need a database with a password like SqlChiper which can store data with encrypted password.

To hide the API URL, the user's account has to be connected to an API URL. We don't want the URL to be seen by others, because of the user's private information and to secure that, we can use ProGuard to encrypt our code.

Conclusion:

Even if it was not requested by the prof, because I had some issues to complete my project using Android Studio, I also tried to do the same work with python. Even if I didn't used the API URL, we can see that with python we are able to:

- Create a new user by putting username, password, gender, age
- Adding balance and the option that refuse negative balance
- Withdrawing balance