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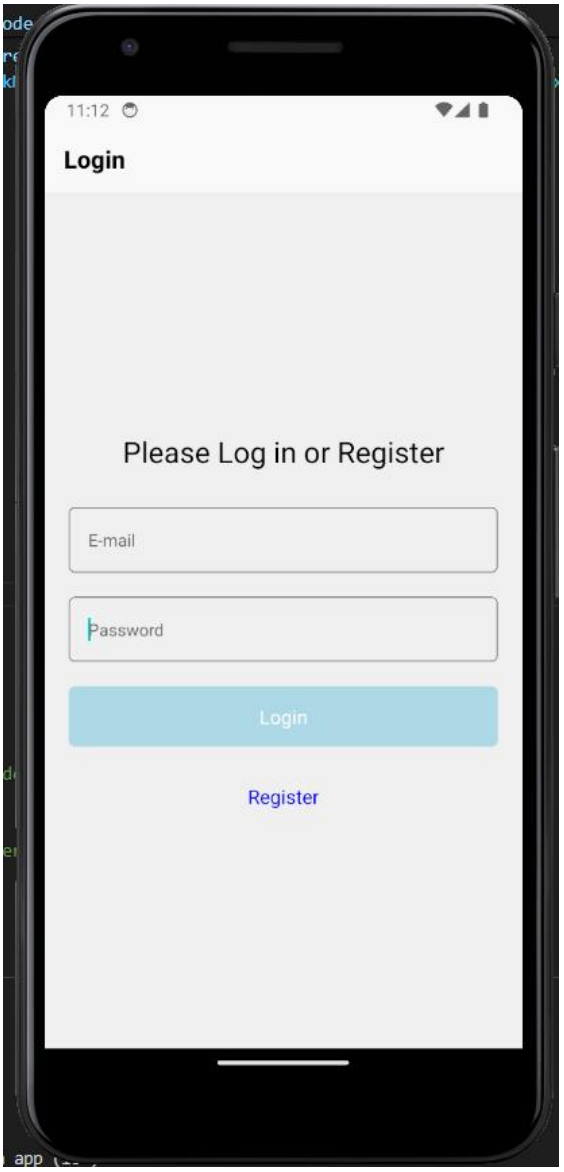
CIS 470

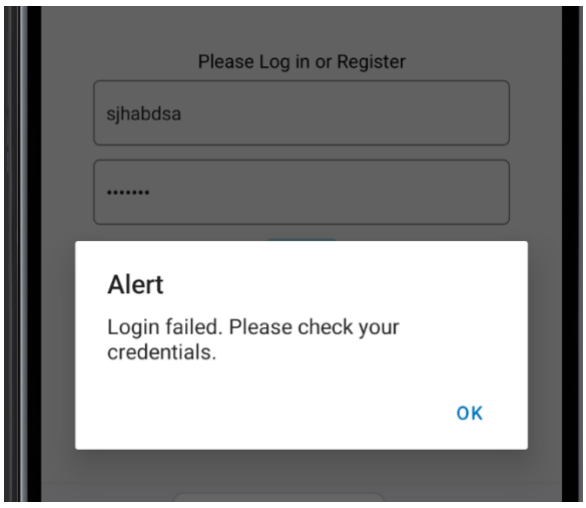
GROUP TERM PROJECT

1. Develop an interesting mobile app with substantial complexity. Minimum features: (1) user management with login and user registration; (2) data persistency with MySQL Lite or cloud storage; (3) at least three activities. If implemented in Java, the lines of code of the Java code (excluding the layout specification) are expected to be 500 or more for a passing grade on the project. Please submit the following items: (1) zipped full source code (i.e., the Android studio project folder); (2) a detailed typed project report documenting the significance of the project, the design and implementation of the project, and the screenshots of example scenarios when using your app.

My partner and I created a Transaction Tracker app. I will show step by step with screenshots. There are 3 "activites", login & registration, transaction tracker, a toggle dark mode, & a toggle light mode.

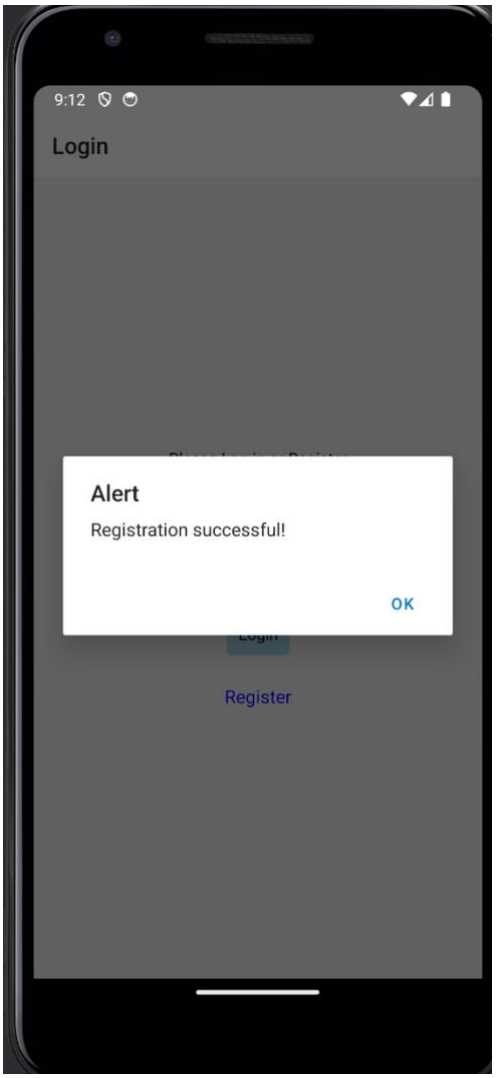


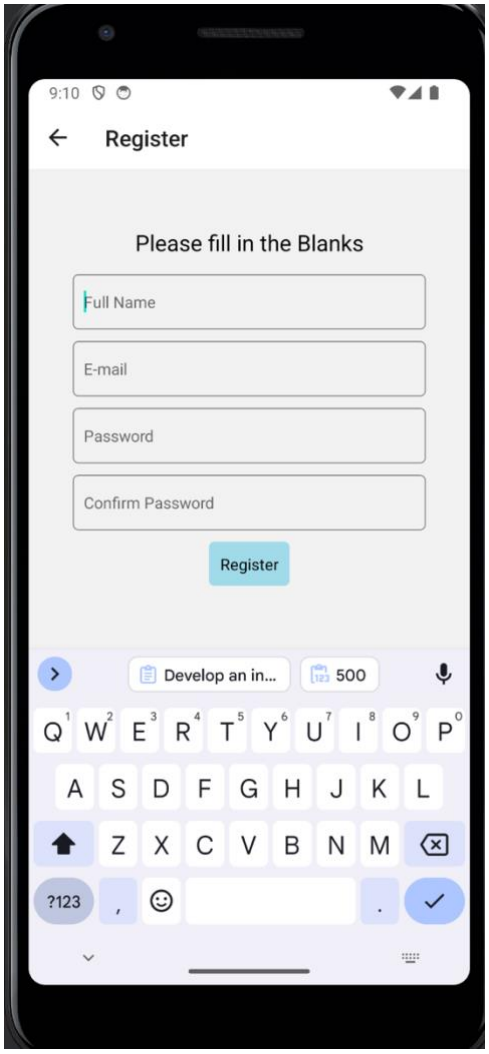
1) Firstly, we had to create a Login Screen. You are prompted to login with an email or password. There are 2 buttons. A Login button and a Register button. If you try to log in with random non-exizsting credentials, you'll get a "Login Failed. Please check your credentials." When you click the Register button, itll take you to a Registration screen.

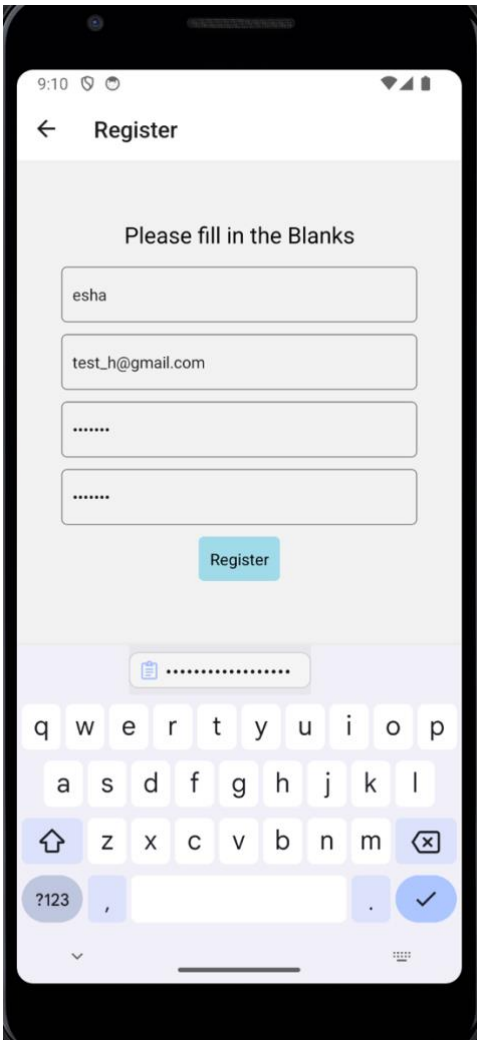


2) The Registration screen prompts you to fill in all of the blanks, including “Full Name”, “Email”, “Password”, and “Confirm Password”. There’s also Register button to click after entering everything. Once you click after entering all credentials, you will get a “Registration successful!” and it will redirect you back to the Login screen. The reason you are able to register with the created credentials and log in is due to the SQLite. This is made inside of the database.js, creating a database for us to store the credentials and log in with them.

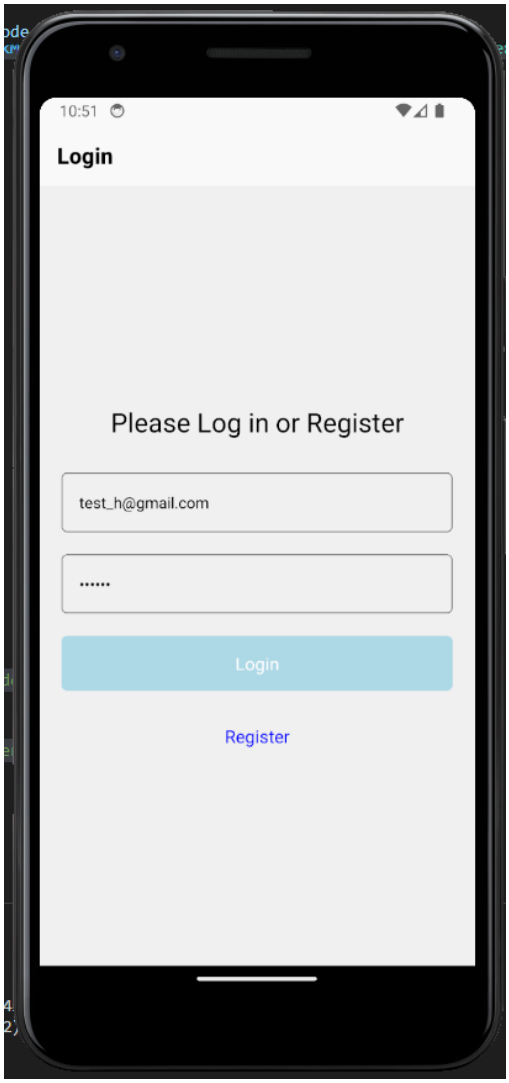
```
register > JS database.js > ...
1   // Database.js
2   import * as SQLite from 'expo-sqlite';
3
4   const db = SQLite.openDatabase('transactions.db');
5
```

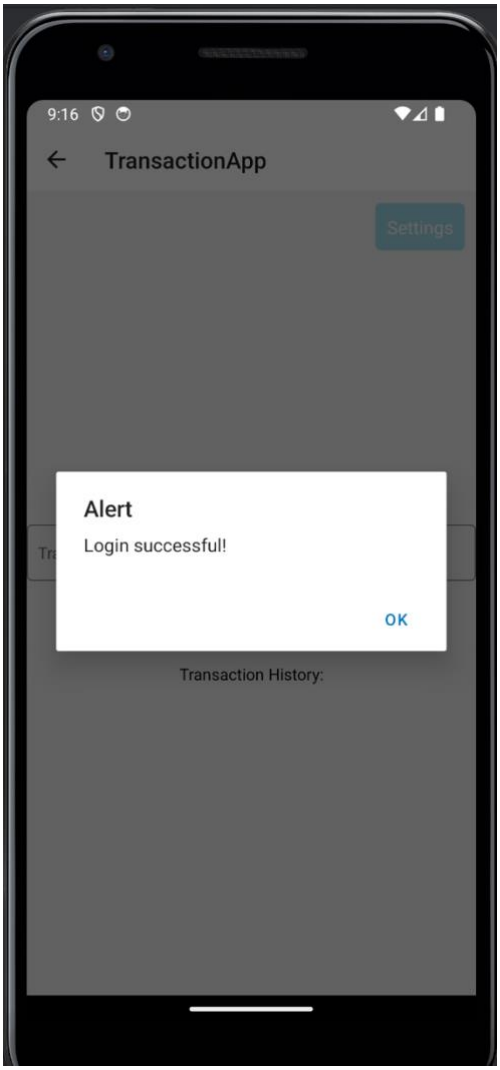


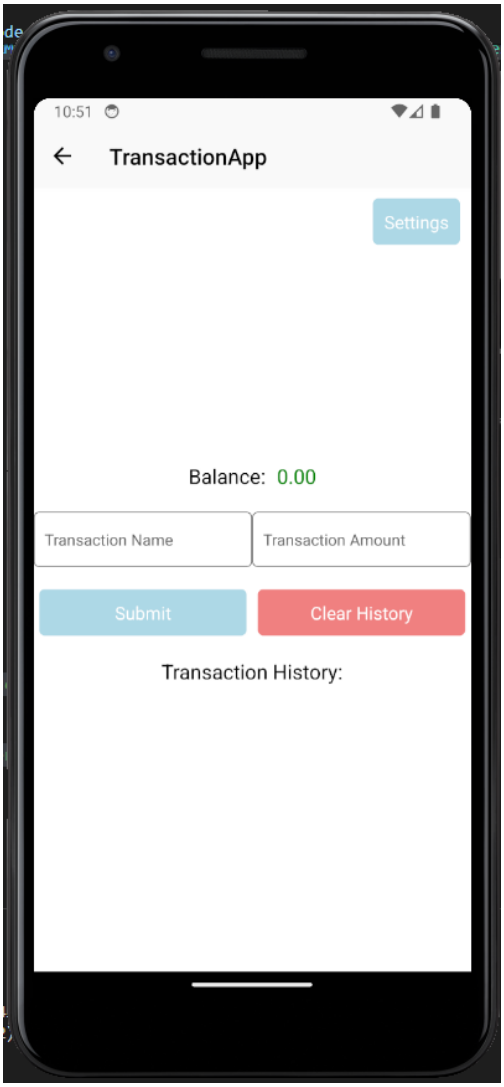




3) Back to the Login screen, you enter the credentials you just created on the Registration screen. This will lead you to the Transaction App screen!

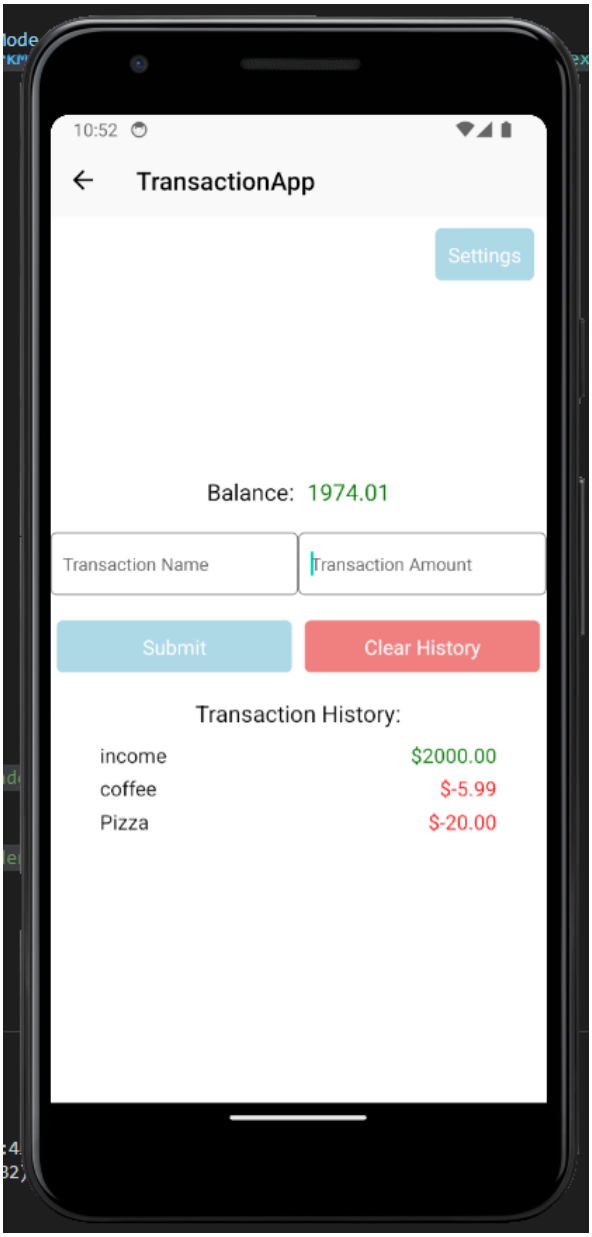




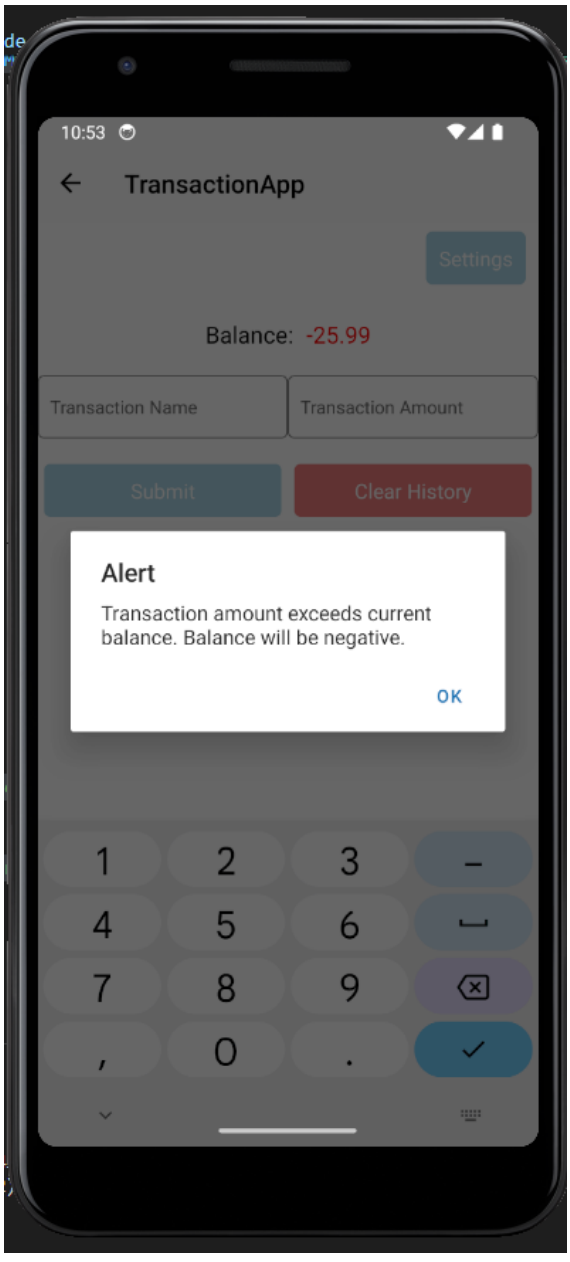


4) In the Transaction App screen, you are prompted to type a “Transaction Name” and “Transaction Amount”, and there are three buttons of “Submit”, “Clear History”, and “Settings”. When you type a transaction name & a transaction amount, then press “Submit”, it’ll add it under “Transaction History”. Putting “-10” for example, will subtract the amount from the total balance. Putting “10” will add to the balance. If you subtract more than what you have, your balance will go into the negatives, and you’ll get an alert. When you click “Clear History”, the transaction history all clears. Clicking the “Settings” button leads to a separate screen which allows you to “Toggle Dark Mode”.

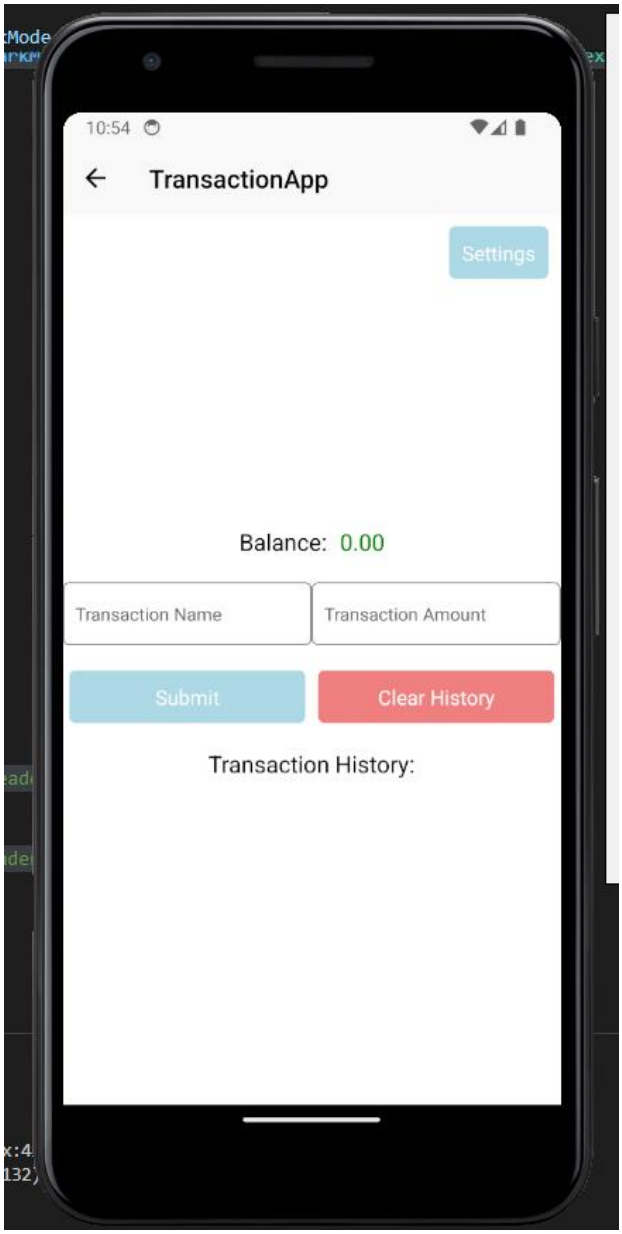
When adding and subtracting transactions normally



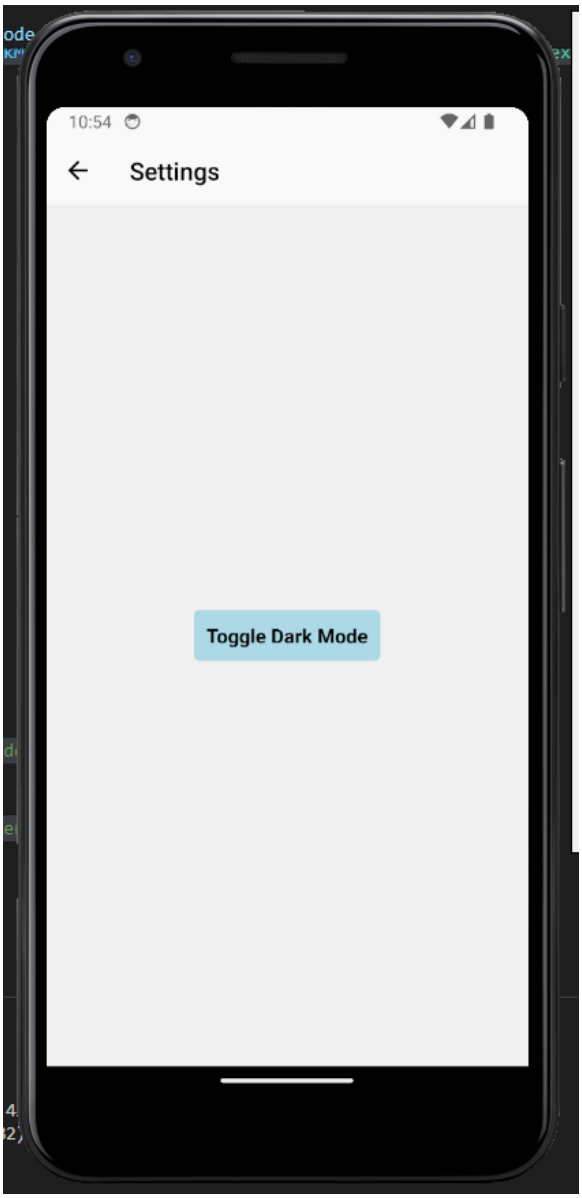
When subtracting more than your balance has



When clicking on “Clear History”



When clicking on “Settings”



5) When you toggle dark mode, the screen and everything else turns into Dark Mode! We made the dark mode into more of a dark gray rather than a pitch black so that it's easier on the eyes. There's also a "Toggle Light Mode" option that appears once you click on "Toggle Dark Mode". When you click "Toggle Light Mode", the screens throughout the whole app goes back to normal.