<u>**Android club**</u>

<u>**Development Journey**</u>

<u>**App name: Stopwatch**</u>

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This is an article which will be describing our development journey of the app "Stopwatch ". So, we decided to develop this app because we found that most of the stop watch apps that we have on our phone is either complex or has many push notifications (ads). So, we thought that we could develop a proper stopwatch app which is easy to use and also doesn't have complex UI and most importantly doesn't give push ads.

So, we first sat together and decided on how we can divide the work amongst ourselves so that we could finish the project within the deadline. We decided to divide the project into 5 components:

- Control
- Header
- Result
- Stopwatch
- Utility

Contributions:

Arun Prasath did Control and Header part.

Sai Rashwant did Result, stopwatch and utility.

We first installed a package called "React-native-paper" to ease our job of designing the buttons.

Now we defined each component and their work:

Control: This component defines how the buttons will work when the clock is running and when the clock is not running.

Here we used TouchableOpacity to create 2 buttons which will change the text on it based on whether the clock is running or not.

We used StyleSheet to style the buttons.

Header: This component defines how the Stop watch logo will look.

We used Appbar to display the "Stopwatch" name on the app.

Result: This component takes care of calculating how the clock should run and how the result has to be calculated.

It displays the laps using scroll view. If the number of laps crosses 3 it will give the scroll option to see the laps information.

Again, here we used style sheets to design the section.

Stopwatch: This component combines every other component, and uses it develop the UI of the stopwatch app.

This section uses states for its functioning.

Here we have defined few functions handleLeftButtonPress and handleRightButtonPress which ensures that buttons change based on the running state of the clock. It also updates the results based on the option that's chosen.

Utility: This defines on how the numbers should be displayed on the screen.

The padding is adjusted based on the size of the number. This makes sure that the clock runs as intended and looks neat.

Errors faced:

During the development of the app we faced 3 main errors.

Typos:

This was a real problem for us during the development of the app. A small typo during the development of the app led us to a huge

problem at the end. We got an error which asked to check the imports that we had on the stopwatch.js file. We had to read every single line of the code again to find out that we had mistyped a function name. It took us a lot of time to find this error.

Styling the page:

This is not exactly an error but it was very hard to debug every UI bug that we got after finishing the code.

React native CLI malfunctioning:

When we tried to install react-native-paper the whole project got corrupted and we had to start from the beginning once again using React native Expo (online).

So, after working for all these days we got our final output on 16/06/2022.

Then we proceeded to develop this whole document for the submission of the final project.

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