

# Task 1

## App Development

### React Native / Flutter



#### PROBLEM STATEMENT:

Since the offline classes have begun, Rasheed has been continuously missing classes. He feels that he will be able to maintain the minimum attendance of 75% if there was a way to track his attendance. Help him out by making an app with the following features:

**Note:** You are allowed to choose either React Native or Flutter to complete your tasks.

#### LEVEL – 0:

- Setting up React Native / Flutter.

#### LEVEL – 1:

- Maintaining a list of courses.
- Adding a course to the list.
- Ability to update the number of classes attended and the number of classes missed for each course.

#### LEVEL – 2:

- Feature to delete any course.
- Display the attendance percentage for all the courses.
- An Indication if attendance percentage drops below the minimum for any of the courses.

**Note:** It is not required to store the data once you exit the app.

Happy Coding :)

**GUIDELINES:**

Use of 3<sup>rd</sup> party libraries is allowed.

Deadline: Saturday, 18<sup>th</sup> June 2022

**REACT NATIVE RESOURCES:**

React Native is an open-source mobile development framework for cross-platform mobile development. It allows developers to create web user Interfaces in JavaScript based on reusable visual components.

We have put together a list of quality resources that will help you get started with App Development in React Native.

Note – You DO NOT need to know React, you can jump into React Native!

**GETTING STARTED:**

Official Documentation:

<https://reactnative.dev/>

Installation and Environment Setup:

<https://reactnative.dev/docs/environment-setup>

<https://www.youtube.com/watch?v=oZFCt69Bccc&t=936s>

React Fundamentals - An Introduction to React Basics:

<https://reactnative.dev/docs/intro-react>

Native Components and API - A list of all the basic and advanced built-in components:

<https://reactnative.dev/docs/components-and-apis>

**VIDEO GUIDE RESOURCES:**

React Native Crash Course for Beginners - by Academind

<https://www.youtube.com/playlist?list=PL4cUxeGkcC9ixPU-QkScoRBVxtPPzVjrQ>

React Native Tutorial for Beginners - Video Series by The Net Ninja

<https://www.youtube.com/playlist?list=PL4cUxeGkcC9ixPU-QkScoRBVxtPPzVjrQ>

CodeDamn - Popular JavaScript and App Development channel

<https://www.youtube.com/playlist?list=PLYxzS5yYQIHANFLwcsSzt3ellbYTG1h>

JavaScript Tutorial for Beginners – by Programming with Mosh

<https://www.youtube.com/watch?v=W6NZfCO5SIk&t=1787s>

## FLUTTER RESOURCES:

Flutter is an app SDK for building high-performance, high-fidelity apps for iOS, Android, web, and desktop from a single codebase.

We have compiled a few resources to get you started with flutter:

### GETTING STARTED

The official docs are great way to learn more about flutter and get started:

<https://flutter.dev/docs/>

Installation and Environment Setup:

Using flutter on Android Studio:

For Windows installation:

<https://flutter.dev/docs/get-started/install/windows>

If you are having trouble with the link above, this is a good step by step video:

[https://www.youtube.com/watch?time\\_continue=49&v=Z2ugnpCQuyW&feature=emb\\_lo\\_go](https://www.youtube.com/watch?time_continue=49&v=Z2ugnpCQuyW&feature=emb_lo_go)

For Linux installation:

<https://flutter.dev/docs/get-started/install/linux>

For macOS:

<https://flutter.dev/docs/get-started/install/macos>

Installing the flutter plugin on Visual Studio Code:

<https://medium.com/techspace-usict/set-up-flutter-for-windows-in-vscode-e7e26d01f6f0>

### TUTORIALS AND RESOURCES-

Learn more about flutter:

<https://www.youtube.com/watch?v=bKueYVtV0eA&list=PL4cUxeGkcC9jLYyp2Aoh6hcWuxFDX6PBJ&index=2>

The basics of DART programming:

<https://www.youtube.com/watch?v=FLQVhw1NYQ&list=PL4cUxeGkcC9jLYyp2Aoh6hcWuxFDX6PBJ&index=3>

Set up your first app on flutter:

<https://www.youtube.com/watch?v=TSIhiZ5jRB0&list=PL4cUxeGkcC9jLYyp2Aoh6hcWuxFDX6PBJ&index=4>

Everything is a widget! – Basic widgets in flutter:

<https://medium.com/flutter-community/flutter-basic-widgets-349e24140453>

## VIDEO GUIDE RESOURCES:

Flutter tutorial for beginners by The Net Ninja is a good way to get started:

<https://www.youtube.com/watch?v=1ukSR1GRtMU&list=PL4cUxeGkcC9jLYyp2Aoh6hcWuxFDX6PBJ>

Flutter crash course for beginners by Academind covers the basics well:

<https://www.youtube.com/watch?v=x0uinJvhNxI>