

Sign Up to BriskMed

Native App Development

Time: 60 mins

Introduction

In this class, student/s will be introduced to a new app BriskMed to be developed in the React Native framework. Student/s will learn to use their app development skills to develop an app with a chat feature, ability to locate nearby doctors, and an appointment booking feature for the patients to communicate directly with their doctors. Student/s will learn about the concept of database and how we can use the Google Firebase services to store user details into it.

React Native Commands and Components Introduced

- `<Switch> </Switch>` Creates a React Toggle Switch Button component.

Vocabulary

- **Firebase:** Firebase is a realtime database lets you build rich, collaborative applications by allowing secure access to the database directly from client-side code..

Learning Objectives

Student/s should be able to:

- **Recall** the React Native components to develop an app in React Native.
- **Explain** differences between bottom tabs and stack navigation methods..
- **Demonstrate** how to stack multiple screens using stack navigator.
- **Illustrate** how to add the sign up functionality to the app with firebase connectivity.

Activities

1. Class Narrative: (2 mins)

- Brief the student/s we will take the first step in building the BriskMed application. We need to create a community of patients and doctors by helping them set up their accounts.

2. Concept Introduction Activity: (5 mins)

- Let the student/s play the explore-activity and observe the sign in and sign up screens.
- Guide the student/s to notice how the sign in and sign up screens are loading over one another on click.
- Guide the student/s to explore the toggle switch button which lets to select if the user is a patient or a doctor during sign up.
- Using the slides, explain how:
 - stack navigation and how to stack multiple screens

- how to sign up a user as a doctor or patient and store their information on Firebase database.
- A toggle switch button is added and its functionality and appearance are set.

3. Activity 1:: Stack Multiple Screens(12 mins)

Teacher Activity: (6 mins)

- Ask the student/s to recall the types of navigation methods in React Native.
- Explain to the student/s about the stack navigation method and how to stack multiple screens using stack navigator.

Student Activity: (6 mins)

- Guide the student/s to add Sign In, Sign Up screens and Bottom Tabs to stack navigator.

4. Activity 2:: Sign Up as a Patient(10 mins)

Teacher Activity: (5 mins)

- Explain to the student/s the fact that a user of BriskMed app could be a doctor or a patient.
- Irrespective of the user type the information of every user must be stored into a database.
- Introduce the concept of online database and Google firebase.
- Explain how to configure firebase connection in Snack Expo and the user details can be stored into firebase database for patients and doctors.
- Show how a unique identification number is generated against each user saved in database.

Student Activity: (5 mins)

- Guide the student/s to sign up a user as patient

5. Activity 3:: Sign Up as a Doctor(10 mins)

Teacher Activity: (5 mins)

- Explain the <Switch> component to add a toggle switch button in React Native.
- Demonstrate how to sign up a user as doctor and save the details in firebase database by updating the user object and database path.

Student Activity: (5 mins)

- Guide the student/s to add a user as doctor with firebase connectivity.

6. Introduce the Post class project: (2 min)

- Add a toggle switch button for the users to choose their identity as a student or security during sign up.

7. Test and Summarize the class learnings: (5 mins)

- Check for understanding through quizzes and summarize learning after respective missions.
- Summarize the overall class learning towards the end of the class.

8. Additional activities:

- Encourage the student/s to fix the bug in code since the user details of both the patient and the doctor in the BriskMed app are being stored in the same database.
- Encourage the student/s to display two more text fields to take inputs from users registering

as a doctor and save it into the doctors' database along with the existing ones.

9. State the Next Class Objective: (1 min)

- We will learn to help registered users Sign In to the BriskMed app.

U.S. Standards:

CSTA: 2-AP-13, 2-AP-16, 2-AP-19

Links Table		
Activity	Activity Name	Link
Class Presentation	Sign Up to BriskMed	https://s3-whjr-curriculum-uploads.whjr.online/873287e5-952e-4489-b203-2cd3668d3da6.html
Explore Activity	Sign Up to BriskMed	https://snack.expo.dev/@procodingclass/wad-402-c57-sa3-2-sign-up-as-a-doctor-solution?platform=web
Teacher Activity 1	Stack Multiple Screens	https://snack.expo.dev/@procodingclass/wad-402-c57-ta1-stack-multiple-screens?platform=web
Teacher Activity 1 Solution	Stack Multiple Screens	https://snack.expo.dev/@procodingclass/wad-402-c57-ta1-stack-multiple-screens---solution?platform=web
Student Activity 1	Stack Multiple Screens	https://snack.expo.dev/@procodingclass/wad-402-c57-sa1-stack-multiple-screens?platform=web
Teacher Reference: Student Activity 1 Solution	Stack Multiple Screens	https://snack.expo.dev/@procodingclass/wad-402-c57-sa1-stack-multiple-screens--solution?platform=web
Teacher Activity 2	Sign Up as a Patient	https://snack.expo.dev/@procodingclass/wad-402-c57-ta2-sign-up-as-a-patient?platform=web
Teacher Activity 2 Solution	Sign Up as a Patient	https://snack.expo.dev/@procodingclass/wad-402-c57-ta2-sign-up-as-a-patient--solution?platform=web
Student Activity 2	Sign Up as a Patient	https://snack.expo.dev/@procodingclass/wad-402-c57-sa2-sign-up-as-a-patient?platform=web
Teacher Reference: Student Activity 2 Solution	Sign Up as a Patient	https://snack.expo.dev/@procodingclass/wad-402-c57-sa2-sign-up-as-a-patient--solution?platform=web
Teacher Activity 3	Sign Up as a Doctor	https://snack.expo.dev/@procodingclass/wad-402-c57-ta3-sign-up-as-a-doctor?platform=web

Teacher Activity 3 Solution	Sign Up as a Doctor	https://snack.expo.dev/@procodingclass/wad-402-c57-ta3-sign-up-as-a-doctor---solution?platform=web
Student Activity 3.1	Sign Up as a Doctor	https://snack.expo.dev/@procodingclass/wad-402-c57-sa3-1-add-switch-button?platform=web
Teacher Reference: Student Activity 3.1 Solution	Sign Up as a Doctor	https://snack.expo.dev/@procodingclass/wad-402-c57-sa3-1-add-switch-button--solution?platform=web
Student Activity 3.2	Sign Up as a Doctor	https://snack.expo.dev/@procodingclass/wad-402-c57-sa3-2-sign-up-as-a-doctor
Teacher Reference: Student Activity 3.2 Solution	Sign Up as a Doctor	https://snack.expo.dev/@procodingclass/wad-402-c57-sa3-2-sign-up-as-a-doctor-solution?platform=web
Student's Additional Activity 1	Debug	https://snack.expo.dev/@procodingclass/wad-402-c57-aa1-debug-the-firebase-code?platform=web
Teacher Reference: Student's Additional Activity 1 Solution	Debug	https://snack.expo.dev/@procodingclass/wad-402-c57-aa1-debug-the-firebase-code--solution?platform=web
Student's Additional Activity 2	Add Fields for Doctor Information	https://snack.expo.dev/@procodingclass/wad-402-c57-aa2-add-fields-for-doctor-information?platform=web
Teacher Reference: Student's Additional Activity 2 Solution	Add Fields for Doctor Information	https://snack.expo.dev/@procodingclass/wad-402-c57-aa2-add-fields-for-doctor-information--solution?platform=web
Post Class Project	Sign Up a User	https://snack.expo.dev/@procodingclass/wad-402-c57-pcp-sign-up-user-?platform=web
Teacher Reference: Post Class Project Solution	Sign Up a User	https://snack.expo.dev/@procodingclass/wad-402-c57-pcp-sign-up-user--solution?platform=web