Test Report

SKILLVALUE
by Pentalog

DETAILS

Date :	2023 Jun 27 12:36 EEST
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Tags : Mobile, JavaScript, ReactJS, React Native
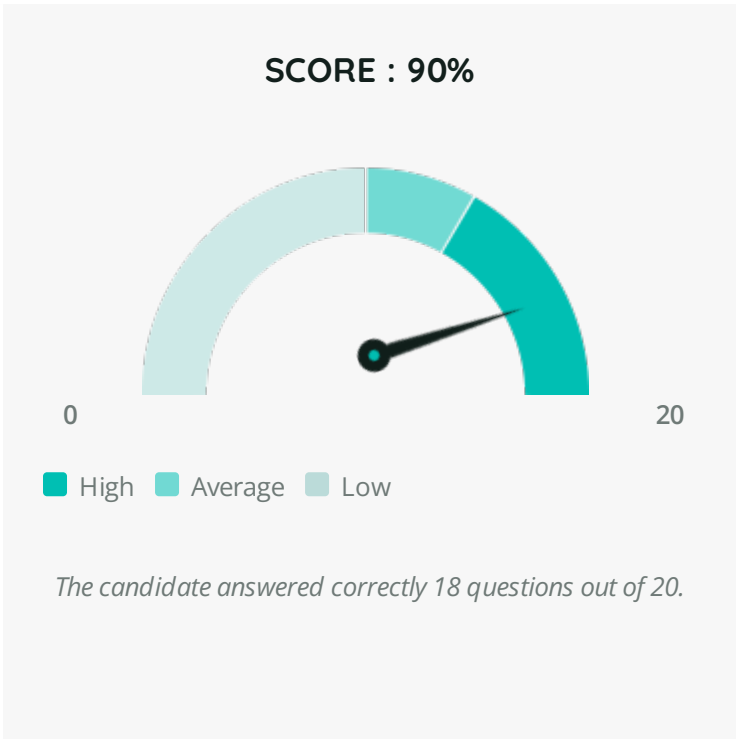
DESCRIPTION

Test name :	**React Native quiz advanced level**
Test language :	English
Test allowed time :	20m 00s
Number of questions :	20
Level :	Advanced
Test type :	Quiz

RESULTS

SCORE : 90%

0 — 20

■ High ■ Average ■ Low

The candidate answered correctly 18 questions out of 20.

SPEED

19m 57s

0 — 20m 00s

The candidate passed the test in 19m 57s, on a maximum duration of 20m 00s.
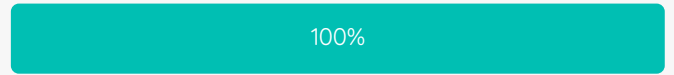
COMPARISON

95.89%

75%

50%
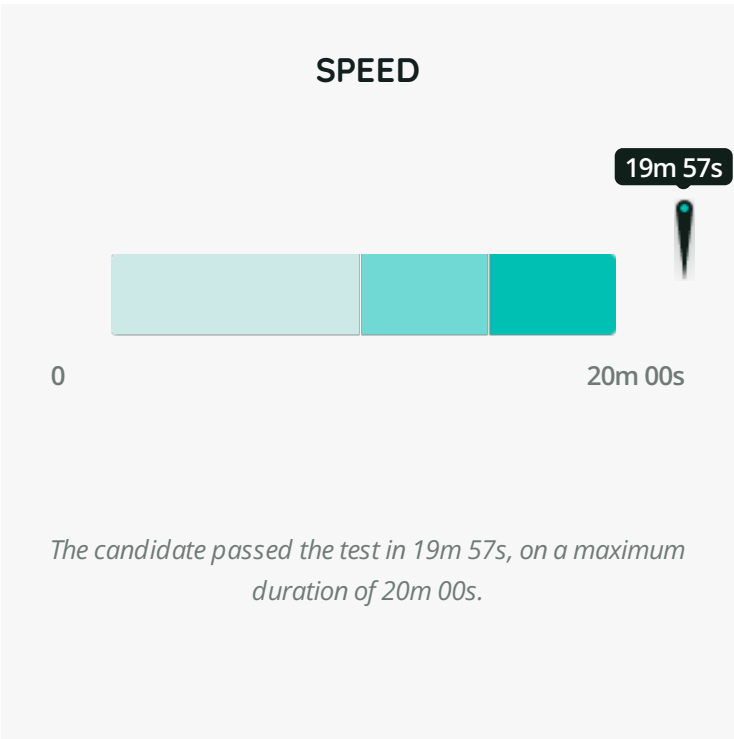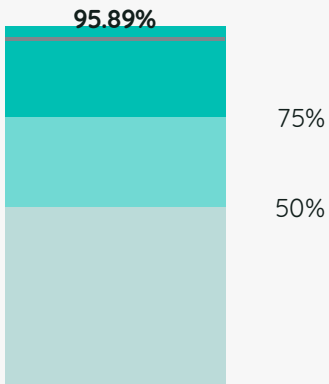
This candidate's score is higher than 95.89% of the
candidates that took the same test.

COVERAGE : 100%

100%

The candidate answered 20 of 20 questions

The correct answers are in green and the candidate's answers are the checked ones.

The candidate left the test 26 time(s) for a total duration of 566 seconds. More details can be found next
to each question.

1 **How can you create a new React Native project?**

```
npx create-react-app new-app
```

✅
```
npx react-native init new-app
```

```
npm create-react-native-app new-app
```

```
expo run new-app
```

2 Which of the following packages is used as the entry point into a React Native application?

✅ **AppRegistry**

App

AppEntry

RegisterComponent

3 Consider creating a style for specific components and using inline CSS style for other components. Which of the following statements are true?

Inline CSS style like

```
<Text style={{color: 'red'}}>Red Header</Text>
```

is better to use because it is easier to read and modify by having the style directly on each component. The ability to copy and paste the content of the render function from other ReactJS projects is also a big plus.

```
Style.create({...})
```

is a better alternative because it brings modularity and reusability to the CSS code.

```
StyleSheets.create({...});
```

❌ is a better alternative because you declare it at a global level and have the option to use it everywhere. You can also use it with the styled components package to obtain maximum performance.

```
StyleSheet.create({...});
```

is a better alternative because it passes the native bridge once, assigns an id, and every component using this style points to that id, avoiding unnecessary rendering.

4 Imagine you have to create an application that contains a large list of scrollable images, similar to Instagram. What do you use for this feature?

    DataSource

    ListView

✅ **FlatList**

    ScrollView

Time outside the test

Total time: 15s
Out of tab: 00s
left page 0 times

5 You want to create a layout with containers 1, 2, and 3 similar to the following image. What is the best way to do

it?


```
<View style={{ flex: 1, width: 500, height: 500 }}>
 <View style={{ flex: 1, flexGrow: 1 }} />
 <View style={{ flex: 1, flexGrow: 2 }} />
 <View style={{ flex: 1, flexGrow: 3 }} />
</View>
```

```
<View style={{ flex: 1, width: 500, height: 500 }}>
 <View style={{ flex: 1, width: 100 }} />
 <View style={{ flex: 1, width: 300 }} />
 <View style={{ flex: 1, width: 100 }} />
</View>
```

```
<View style={{ flex: 1, width: 500, height: 500 }}>
 <View style={{ flex: 1, flexGrow: 1 }} />
 <View style={{ flex: 1, flexGrow: 2 }} />
 <View style={{ flex: 1, flexGrow: 1 }} />
</View>
```
✅

```
<View style={{ flex: 1, width: 500, height: 500 }}>
 <View style={{ flex: 1, flexGrow: 1 }} />
 <View style={{ flex: 1, flexGrow: 2 }} />
 <View style={{ flex: 1, flexGrow: 4 }} />
</View>
```

Time outside the test

Total time: 18s
Out of tab: 00s
left page 0 times

6 An animation looks fragmented when you have complex calculations (aLotOfComputationFunction) at the press of a button in a container in which an animation is currently in progress. How can you create a smoother animation?

Put the function after a timeout of 500ms to wait for the animation to finish

```
handleOnPress() {
        setTimeout(() => {
                this.aLotOfComputationFunction();
        }, 500);
}
```

Put the handleOnPress function after a timeout of 500ms to wait for the animation to finish

```
setTimeout { () => {
        handleOnPress() {
                this.aLotOfComputationFunction();
        }, 500
}
```

Add a callback to React.useEffect that calls the aLotOfComputationFunction function

```
React.useEffect(() => {

        this.aLotOfComputationFunction();

}, [])
```

Wrap the complex calculation function inside requestAnimationFrame

```
handleOnPress() {
        requestAnimationFrame(() => {
                this.aLotOfComputationFunction();
        });
}
```

7 **What is a native iOS module?**

A class written in C that implements the NativeModules protocol.

✓ **An Objective-C class that implements the RCTBridgeModule protocol.**

The default React Native components (such as, but not only: "Switch", "Button", "Flatlist").

An API (such as, but not only: "Keyboard", "Animated", "ImageEditor").

8 **How can you change a component without using state/props, and so without forcing a rendering of the subtree?**

✓ **Using setNativeProps to store the props in the native layer, but only for cases when re-rendering does not happen so often.**

Using accessibilityLabel property.

Using setState to set the state.

Using setAccessibilityFocus from the AccessibilityInfo API.

9 **What is the best way to create an infinite animation?**

Using Animation component.

Using Animation API.

Using Animation.Image component.

❌ Using Animated API.

10 In which lifecycle method is it recommended to load the server data to React Native?

constructor

componentWillMount

✅ **componentDidMount**

Render

11 Imagine you would like to log the number of multiple touches using the gesture responder system. For this, you would need a <View> that has the property onStartShouldSetResponder set to a function that you would call checkNumberOfMultipleTouches. How should that function look?

```
checkNumberOfMultipleTouches = (identifier) => {

    console.log(identifier);

  };
```

```
state = { multipleEventNumber: 0}
checkNumberOfMultipleTouches = (evt) => {
    console.log(this.state.multipleEventsNumber);
  };
```

✅
```
checkNumberOfMultipleTouches = (evt) => {
    console.log(evt.nativeEvent.touches.length);
  };
```

```
checkNumberOfMultipleTouches = (evt) => {
    console.log(ev.targetTouches.length);
  };
```

12 To style the layout of a <View>, you can use flexbox. How can you achieve this?

By setting display: 'flex', and flexDirection, justifyContent, alignItems properties.

By setting display: 'flex' property.

By setting display, flexDirection, justifyContent.

✅ **By setting flexDirection, justifyContent, alignItems properties.**

Time outside the test

Total time: 01m 08s
Out of tab: 27s
left page 1 times

(13) **One way of navigating between different screens in your application is by using:**

✅ **react-navigation and 'react-navigation-stack' packages.**

the react-native-viewpager package.

the 'react-router-dom' package.

NativeModules.

Time outside the test

Total time: 22s
Out of tab: 00s
left page 0 times

(14) **How can you set up a push notification system, or a synchronization system that will run in the background of the application?**

By using NativeModules.

By using BroadcastReceiver.

It is not possible to set up a push notification system in the application's background.

✅ **By using Headless JS.**

Time outside the test

Total time: 01m 08s
Out of tab: 41s
left page 3 times

(15) **How can you store data in your application?**

By importing AsyncStorage from 'react-native'.

✅ **By using '@react-native-community/async-storage' because AsyncStorage from 'react-native' is deprecated.**

By using localstorage.

By using globalVariable.

Time outside the test

Total time: 12s
Out of tab: 00s
left page 0 times

16 **If you run code which affects the render cycle (such as building large sets of elements) at the same time the animations are running you can have stutter in animation. How should you proceed?**

Use a setTimeout function that waits for the animation to finish (put an average of 1000 ms).

Place a callback after each animation and increase a counter. When the counter equals the number of animations call the function.

✅ **Use InteractionManager.**

Use ToastAndroid.

Time outside the test

Total time: 21s
Out of tab: 00s
left page 0 times

17 **How can you debug a React Native application directly in your Chrome browser (by accessing http://localhost: 8081/)?**

✅ **Select 'Debug JS Remotely' from Developer Menu ToastAndroid.**

Select 'Start Systrace' from Developer Menu ToastAndroid.

Select 'Show inspector' from Developer Menu ToastAndroid.

Select 'Show Perf Monitor' from Developer Menu ToastAndroid.

Time outside the test

Total time: 40s
Out of tab: 17s
left page 2 times

18 **In React Native, you can test the rendering of a component and then compare it to a snapshot file that was generated the first time the test ran. How can you do this?**

✅ **Using 'Jest' and react-test-renderer package.**

Using Stubs.

Using Mocks.

Using react-native-testing package.

19 Can you use a database in your React Native application?

No, because React Native is just JavaScript code, and you cannot install databases.

Yes, by using IndexedDB.

✅ **Yes, any database of your choosing, for example Realm, Firebase, SQLite, Core Data, PouchDB.**

No, you have to use REST APIs to store your data.

20 How can you persist the state when the application is closed?

You have to use a store to keep your data by using redux, react-redux.

✅ **You can use a redux store but you need to persist your data, so you need redux, react-redux, redux-persist.**

You use localstorage.

You cannot do this with React Native.