

React Native Crash Course 2020

Traversy Media

What Is React Native?

React is a JS library/framework for creating UIs

React is agnostic. **React-DOM** is used to render in the browser (Web app)

React Native is a library that can compile react components into native components/widgets

React Native allows us to use React to create native iOS & Android applications

Single Codebase

Usually, an iOS app and Android app are completely separate apps (**Swift** vs **Java/Kotlin**)

With **React Native**, we can create one single codebase and build for both platforms

This saves a TON of time and money



Requirements

Mac - iOS/Android
Windows - Android

iOS: Latest Xcode & iOS Simulator

Android: Android Studio / SDK / Emulator (AVD)

Components

React Native includes built in components and APIs

Basic Components: View, Text, Image, TextInput, ScrollView, StyleSheet

UI: Button, Picker, Slider, Switch

List Views: FlatList, SectionList

iOS: ActionSheetIOS, AlertIOS, etc

Android: BackHandler, DatePickerAndroid, etc



Step1:

Installing the global cli:

```
npm i -g react-native-cli
```

Step2:

Setting up the project

`mkdir traversymediareactnativeproject`

`Cd traversymediareactnativeproject`

Firing up the project setup:

`react-native init ShoppingList`

Step3:

Downloading the react native project specific libraries:

`npm i react-native-vector-icons --save`

Step3:

Linking react native project specific libraries:

`react-native link react-native-vector-icons`

Step4:

Downloading the react native project specific libraries:

`npm i uuidv4 --save`

This package is used for generating id's

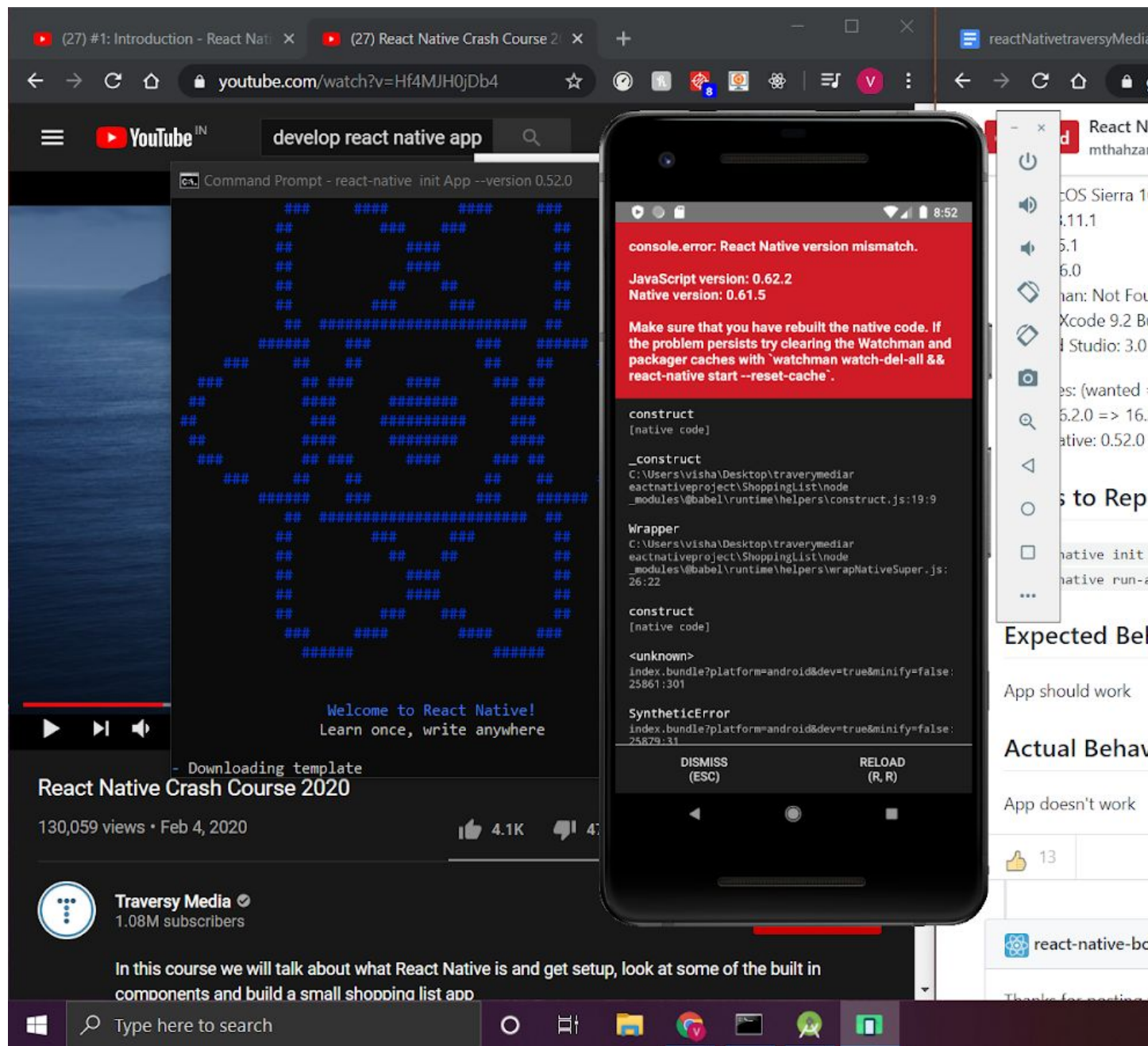
Step5:

Running the project as:

`React-native run-android`

It opens up the boiler plate for the application and also opens the console with the meter bundler to compile the javascript if any there.

Error logs in step 5:



One might face that error the solution for it is as below:

react-native init App --version 0.62.2

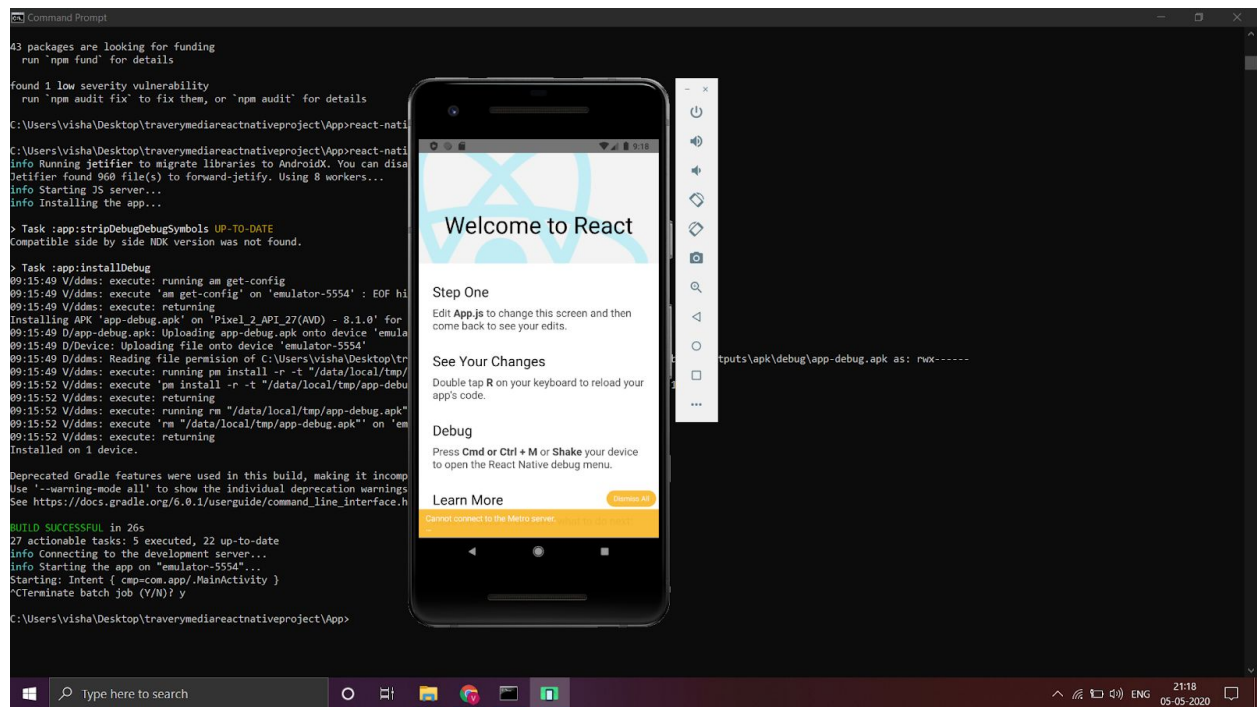
Then do

<https://stackoverflow.com/questions/52034544/react-native-build-failed>

npm install --save

react-native link

react-native run-android



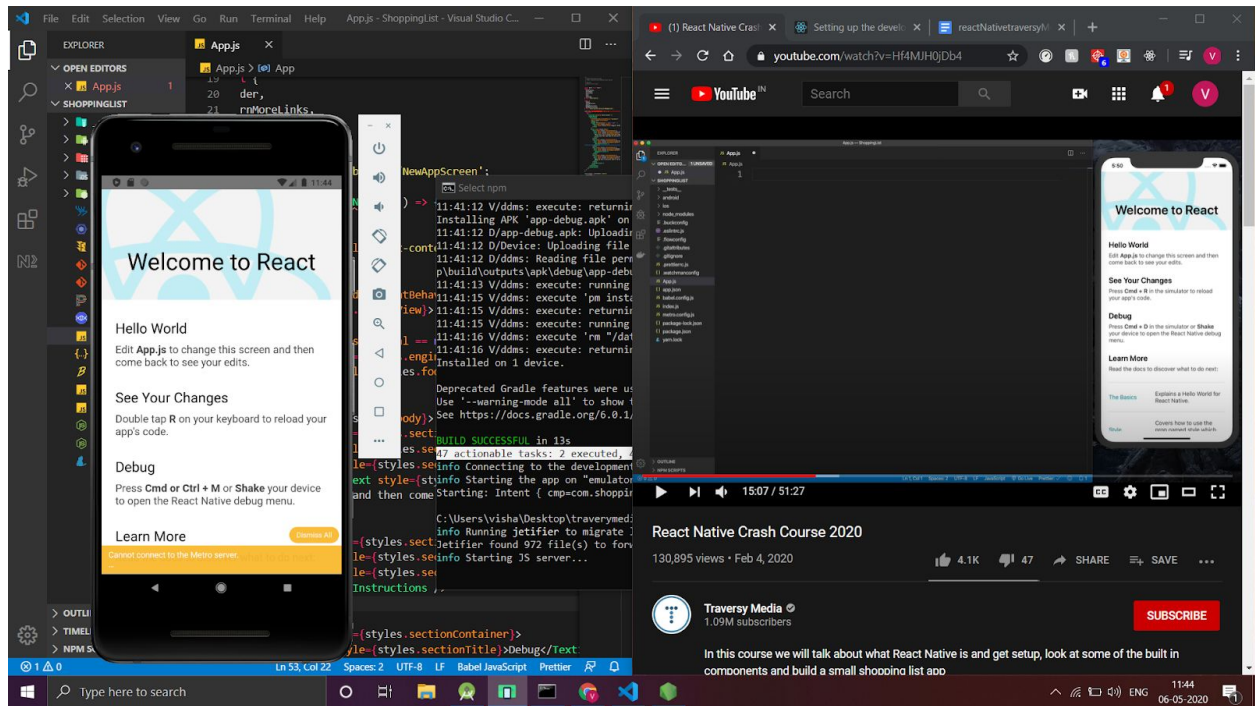
traversy media lot of bugs encountering in the npm package linking

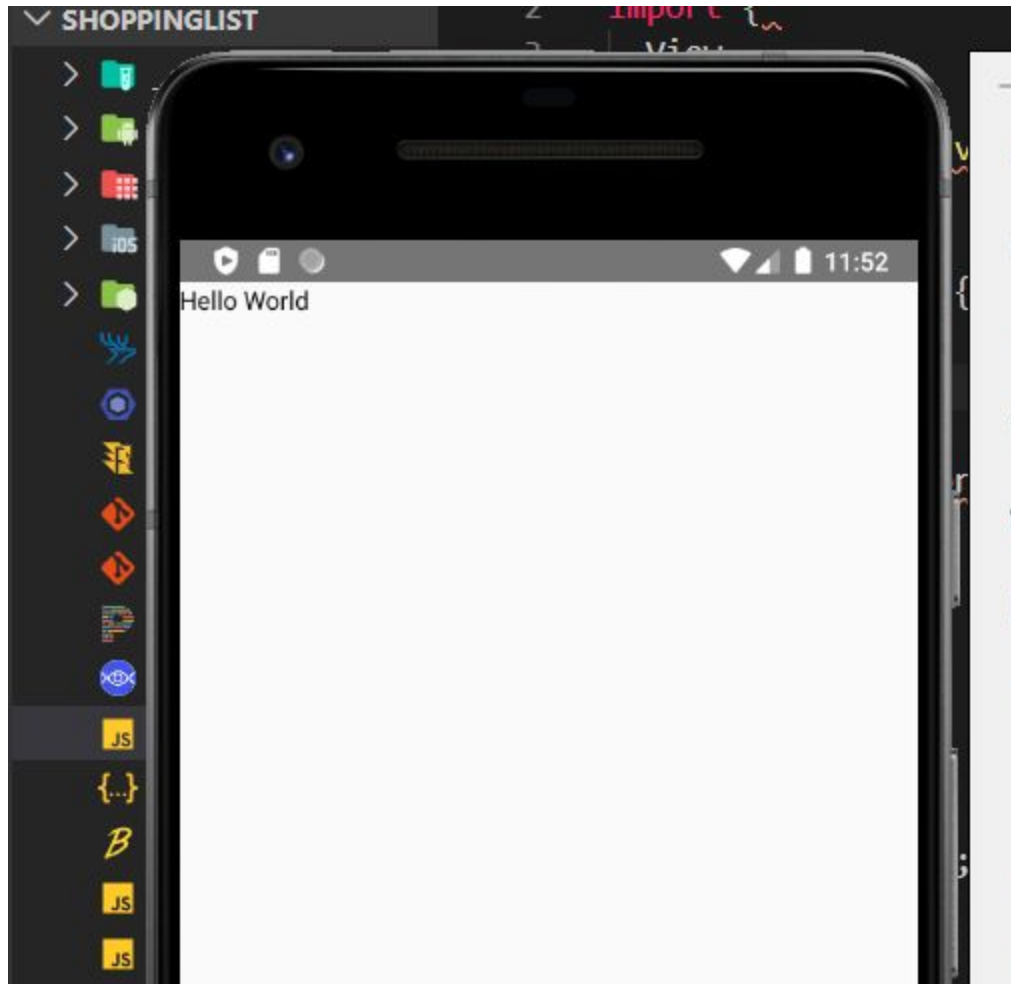
This was because my android studio is downloaded in another directory and it wasn't able to compile the gradle solution. So the app build in the android studio itself then run the app using `react-native run-android`

So now in order to run the code I will first have to compile the code in the android studio. Then I would have to run the react-developmental server.

Step 6:

Changing the react native to show hello world: and we see that even the hot reloading now works





Step 7:

After some styling:

Code:

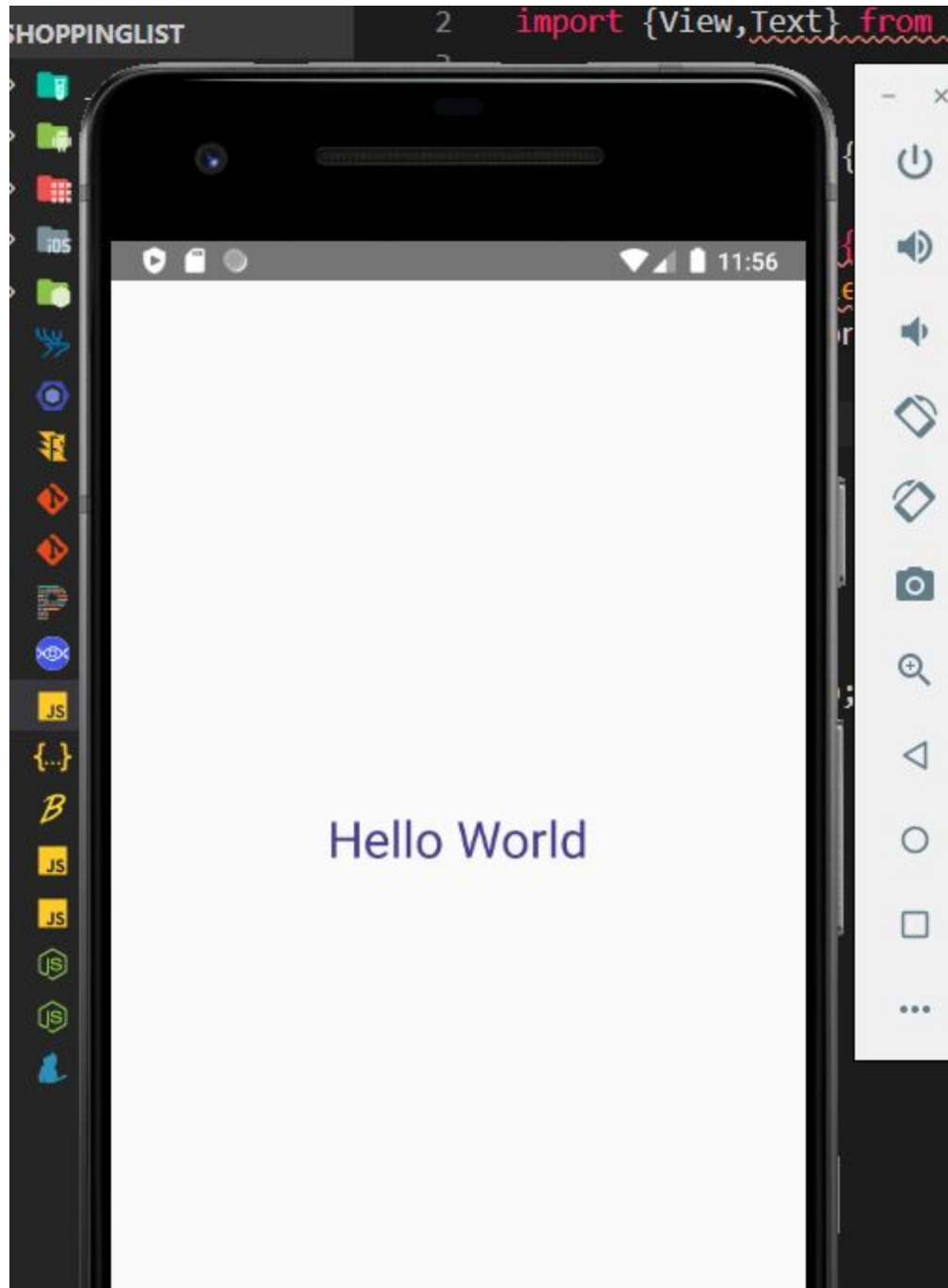
```
import React from 'react';
import {View,Text} from 'react-native';

const App = () => {
  return (
    <View style={{flex:1, justifyContent: 'center',
alignItems:'center'}}>
      <Text style={{color:'darkslateblue', fontSize: 30}} Hello World>
```

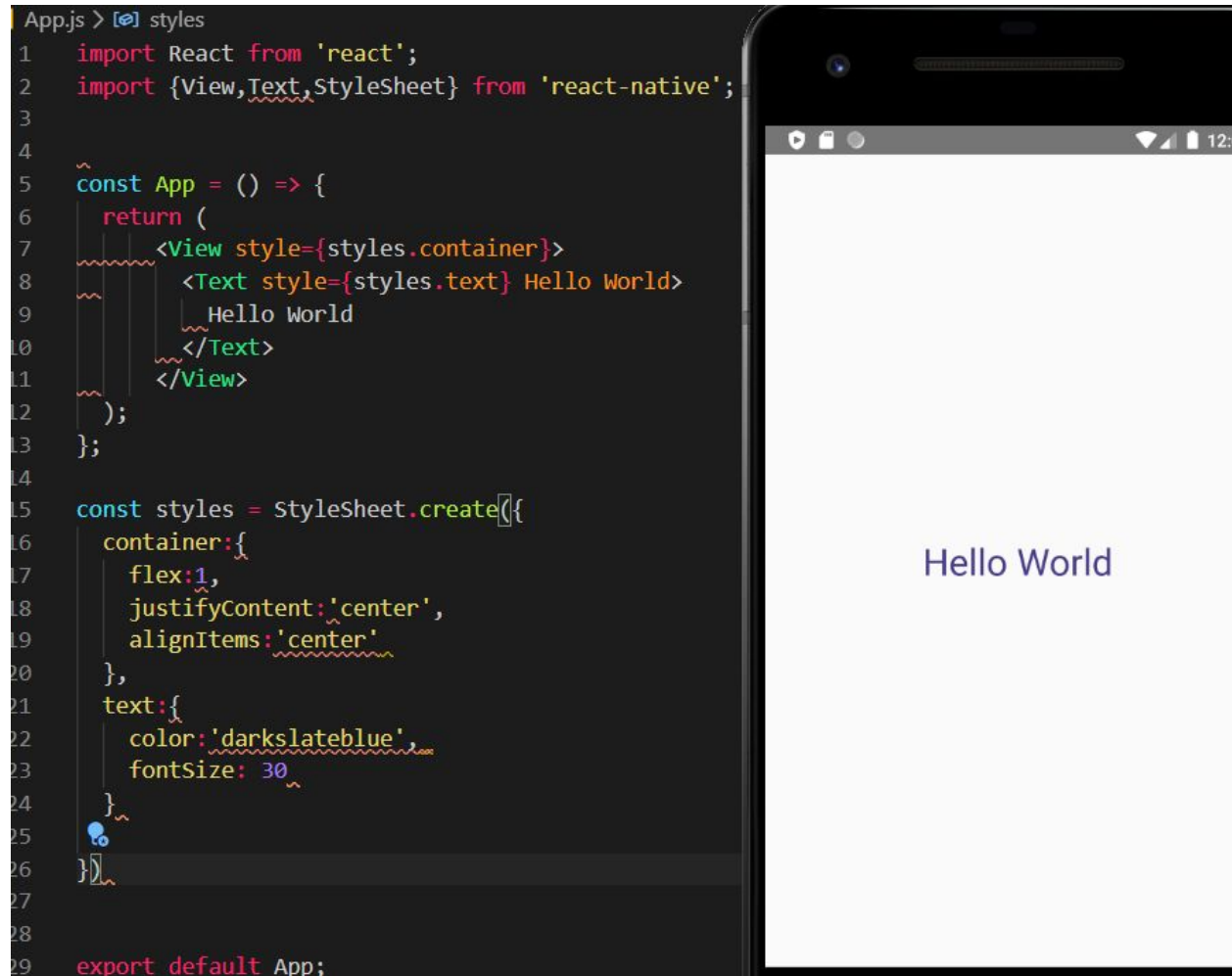
```
        Hello World
      </Text>
    </View>
  );
};

export default App;
```

O/p:



Step 8: after adding styles in variable:



Loading an image:

Code:

```
import React from 'react';
import {View, Text, Image, StyleSheet} from 'react-native';

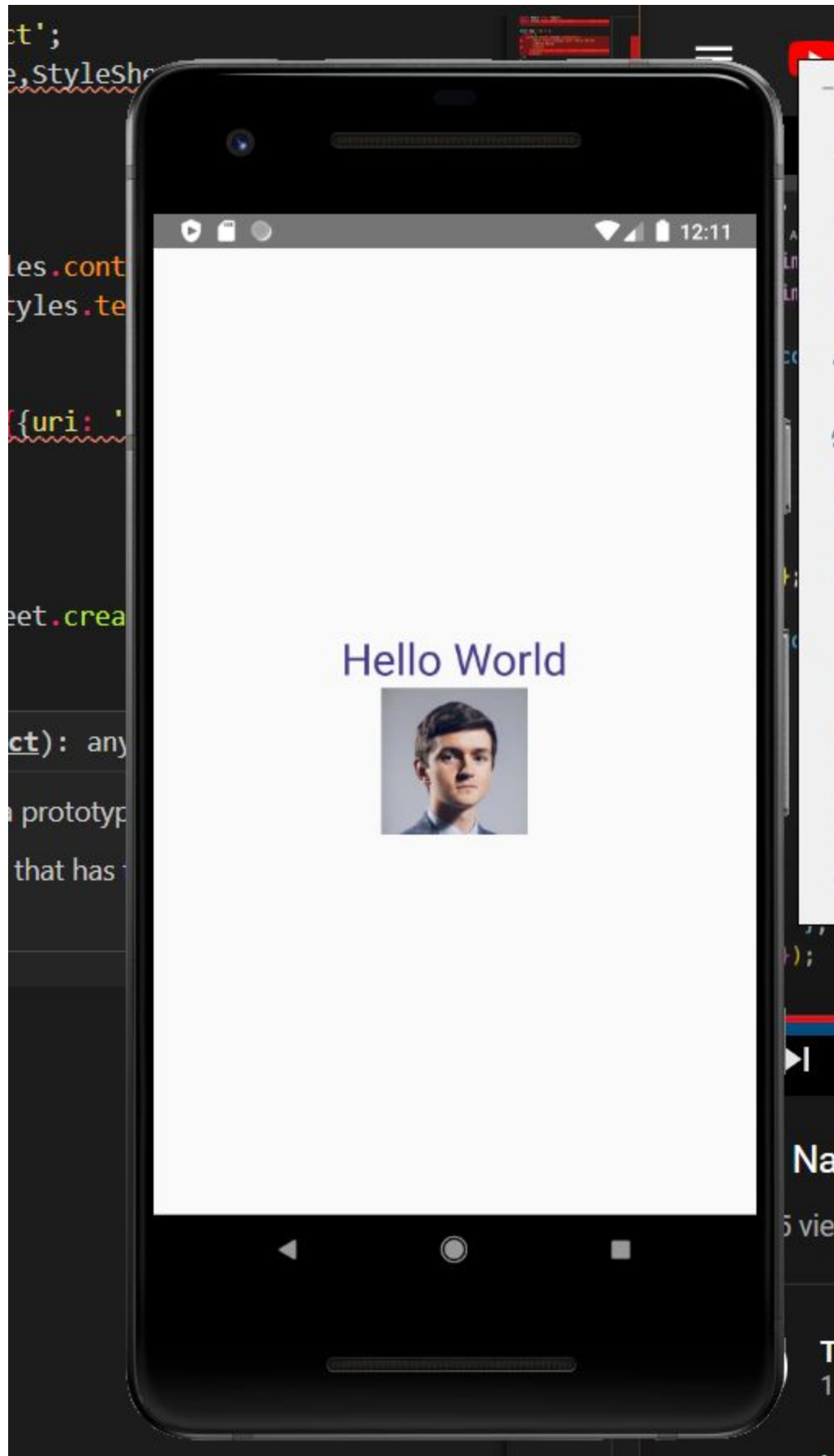
const App = () => {
  return (
    <View style={styles.container}>
      <Text style={styles.text} Hello World>
        Hello World
      </Text>
      <Image source={{uri:
'https://randomuser.me/api/portraits/men/1.jpg'}} style={styles.img}/>
```

```
        </View>
      );
    };

const styles = StyleSheet.create({
  container:{
    flex:1,
    justifyContent:'center',
    alignItems:'center'
  },
  text:{
    color:'darkslateblue',
    fontSize: 30
  },
  img:{
    width:100,
    height:100
  }
});

export default App;
```

o/p:

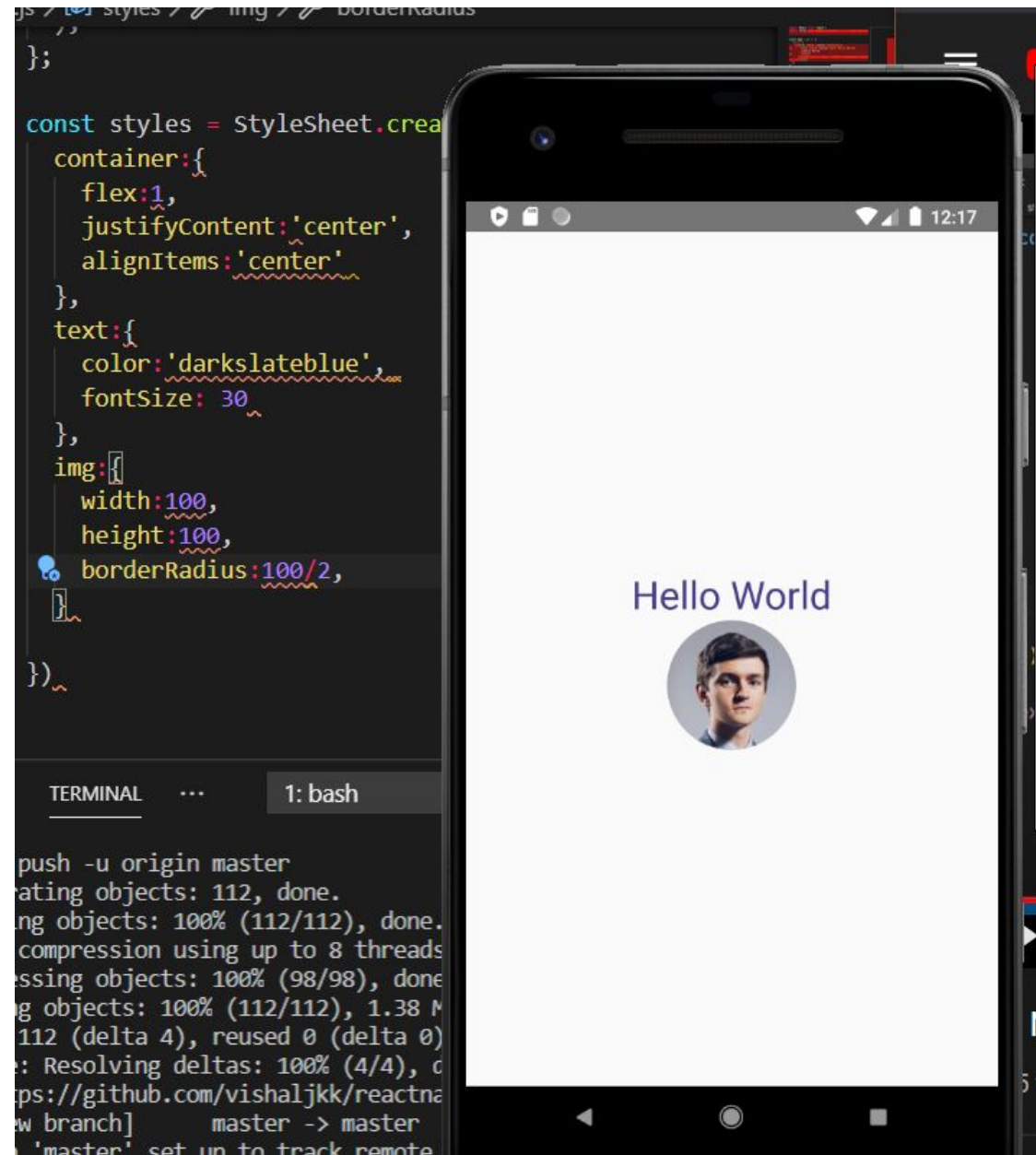


Bordercircle radius on an image:

Code:

```
img:{  
  width:100,  
  height:100,  
  borderRadius:100/2,  
}
```

op:



Step 9: successfully added the header component:

Code :

Header.js

```
import React from 'react';
import {View,Text,StyleSheet} from 'react-native';

const Header = () => {
  return (
    <View style={styles.header}>
      <Text style={styles.text} Hello World>
        Hello World
      </Text>
    </View>
  );
};

const styles = StyleSheet.create({
  header:{
    height:60,
    padding:15,
    backgroundColor:'darkslateblue'
  },
  text:{
    color:'#fff',
    fontSize:23,
    textAlign:'center'
  }
});

export default Header;
```

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App.js:

```
import React from 'react';
import {View,Text,StyleSheet} from 'react-native';
import Header from '../components/Header'

const App = () => {
  return (
    <View style={styles.container}>
      <Header/>
    </View>
  );
};

const styles = StyleSheet.create({
  container:{
    flex:1,
  },
})

export default App;
```




Step 10:

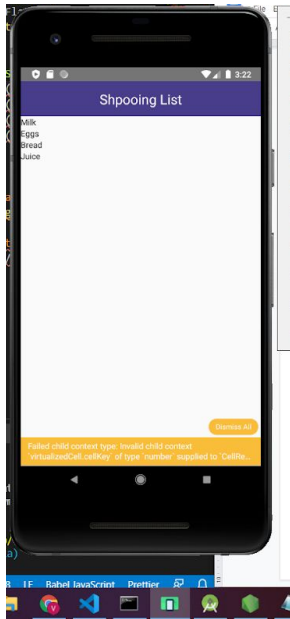
Then we do passing of props for passing the title for header.

Step 11:

Then we use functional components with hooks.

Step 12:

Flat list view for rendering of items



With css item lis viewt:

Code:

```
import React from 'react';
import {View,Text,StyleSheet,TouchableOpacity} from 'react-native';
import Icon from 'react-native-vector-icons/dist/FontAwesome';

const ListItem = ({item}) => {
  return (
    <TouchableOpacity style={styles.listItem}>
      <View style={styles.listItemView}>
        <Text style={styles.listItemText}>{item.text}</Text>
        <Icon name='remove' size={20} color='firebrick' onPress={()=>
deleteItem(item.id)}/>
      </View>
    </TouchableOpacity>
  );
};

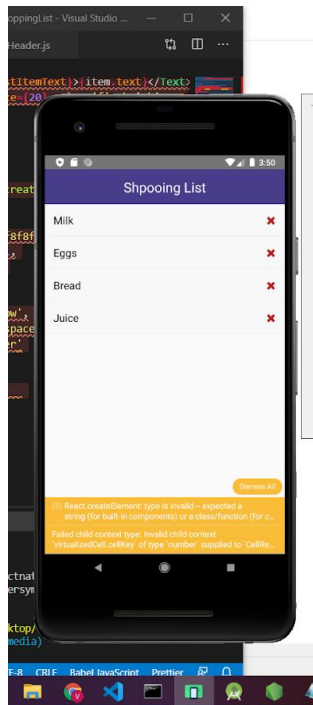
const styles = StyleSheet.create({
  listItem:{
    padding:15,
    backgroundColor:'#f8f8f8',
```

```

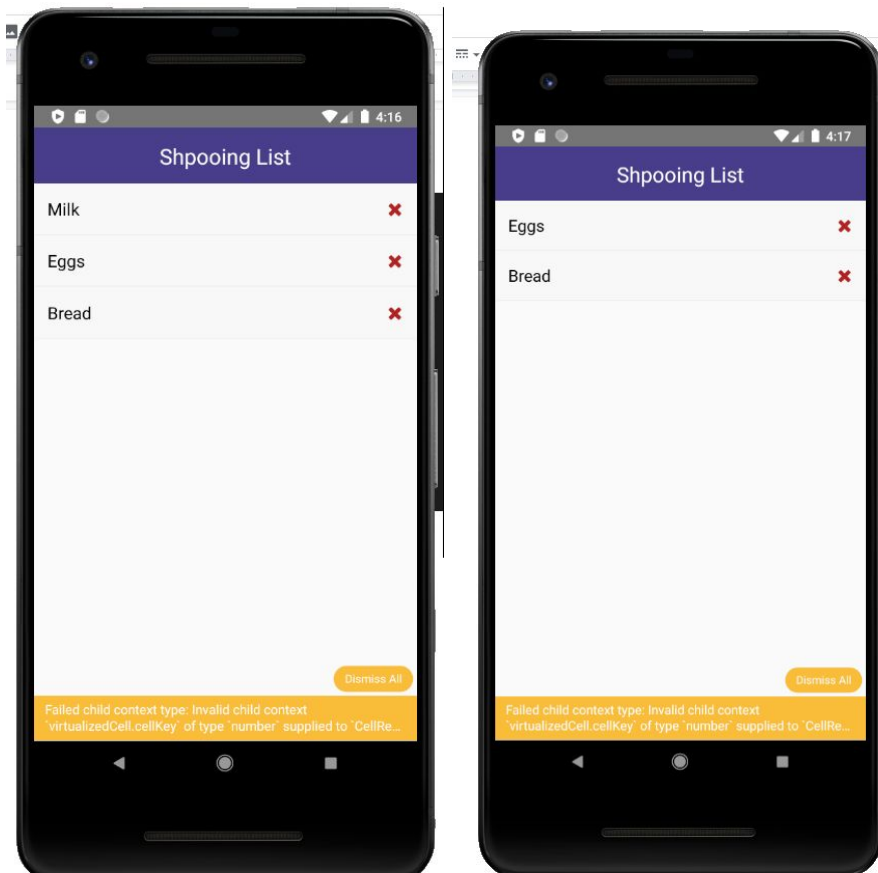
        borderBottomWidth:1,
        borderColor:'#eee'
    },
    listItemView:{
        flexDirection:'row',
        justifyContent:'space-between',
        alignItems:'center'
    },
    listItemText:{
        fontSize: 18,
    }
});

export default ListItem;

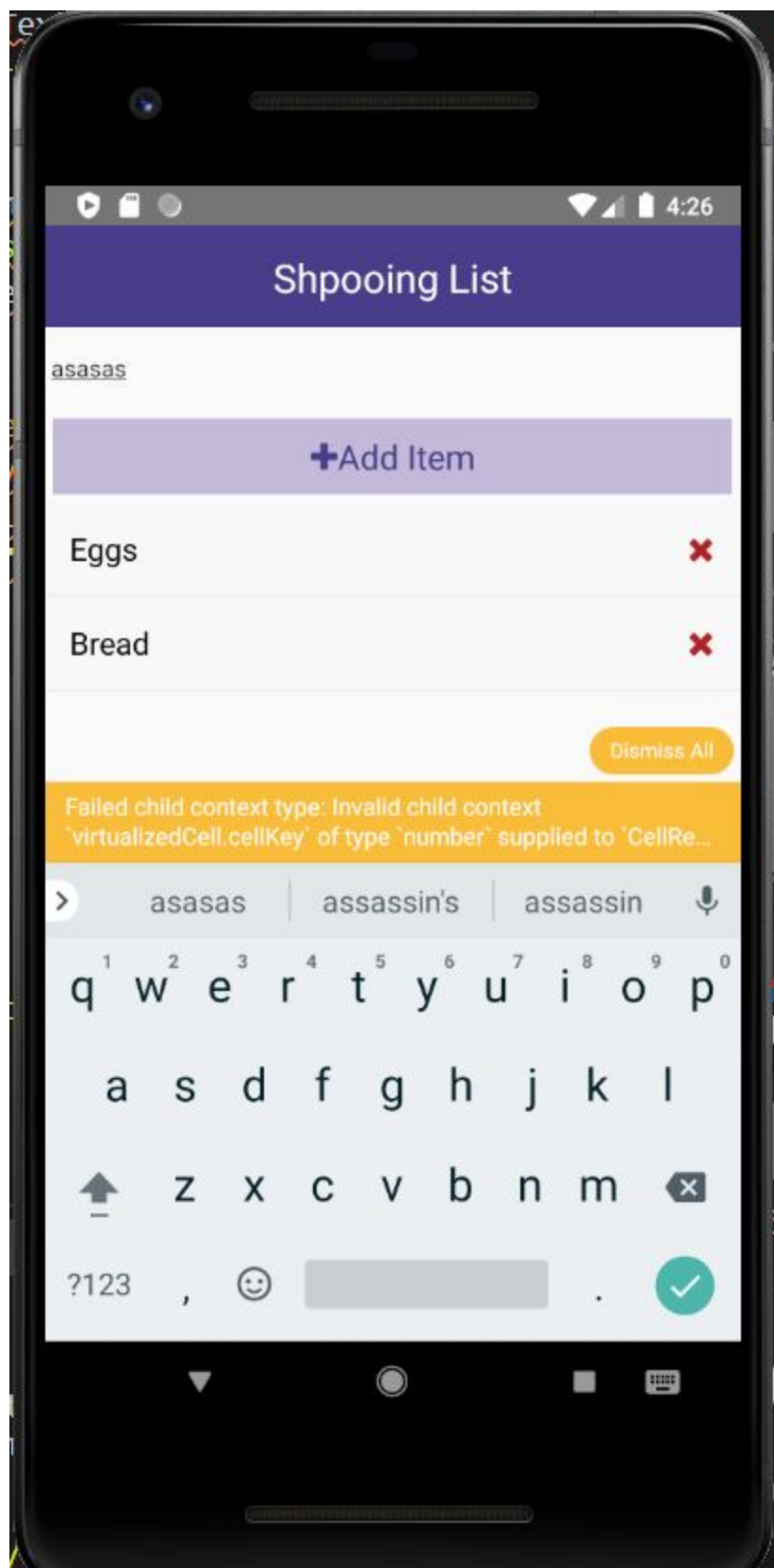
```



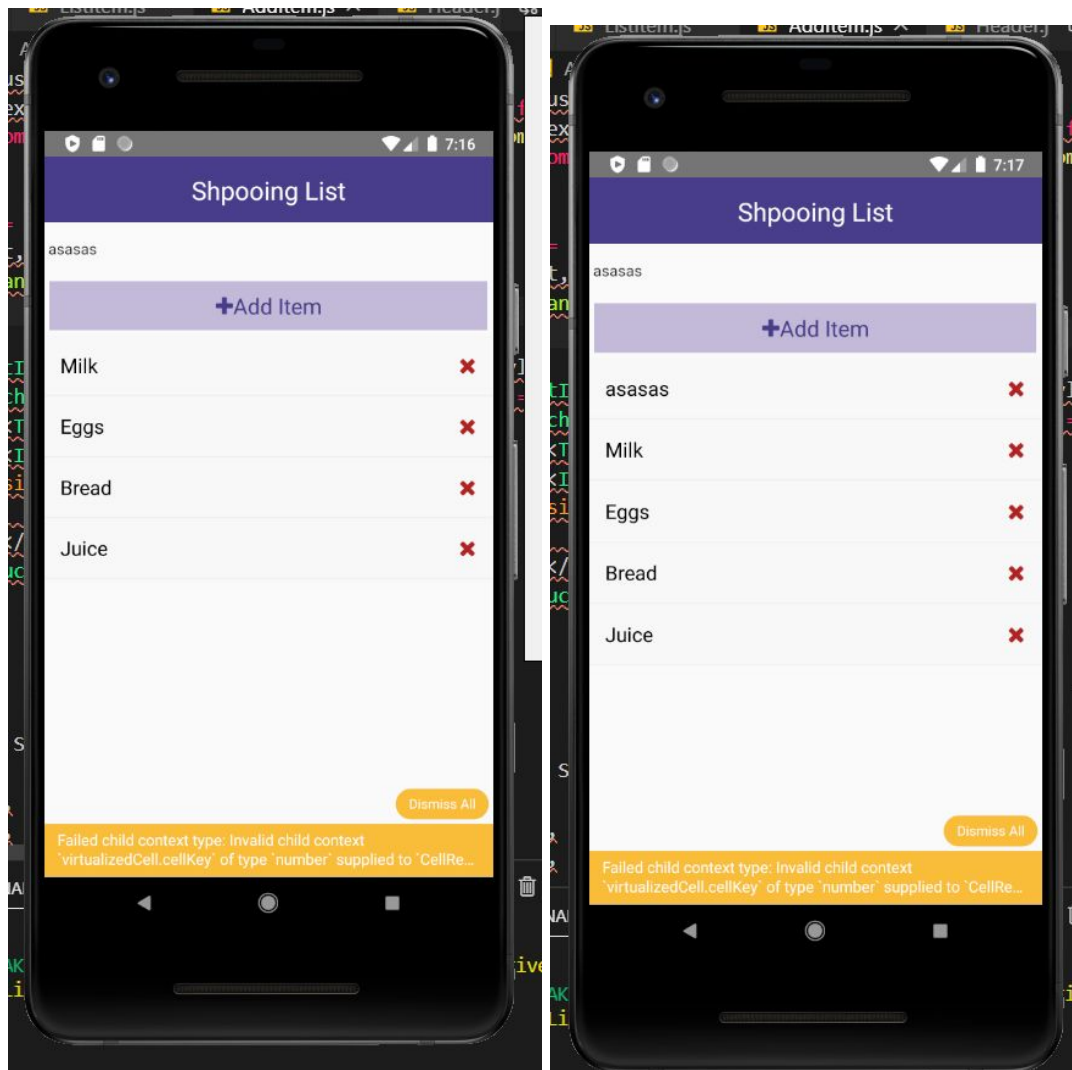
Delete item successfully implemented:



Final adding of the component:



Adding an item: tot the list



Code:

AddItem.js

```
import React, {useState} from 'react';
import {View, Text, StyleSheet, TextInput, TouchableOpacity} from
'react-native';
import Icon from 'react-native-vector-icons/dist/FontAwesome';

const AddItem = ({title, addItem}) => {
  const [text, setText] = useState('');
  const onChange = (textValue) => setText(textValue);
  return (
    <View>
```

```

        <TextInput placeholder="Add Item..." styles={styles.input}
onChangeText={onChange}/>
        <TouchableOpacity style={styles.btn}
onPress={ () => addItem(text) }>
            <Text style={styles.btnText}>
                <Icon name="plus"
                    size={20}/>
                Add Item
            </Text>
        </TouchableOpacity>

    </View>
);
};

const styles = StyleSheet.create({
    input: {
        height: 60,
        padding: 8,
        margin: 5,
    },
    btn: {
        backgroundColor: '#c2bad8',
        padding: 9,
        margin: 5,
    },
    btnText: {
        color: 'darkslateblue',
        fontSize: 20,
        textAlign: 'center',
    }
});

export default AddItem;

```


Change in App.js:

```
const addItem = (text) =>{
  setItems(prevItems=>{
    console.log("adding item")
    return [{id:Math.floor(Math.random() * 1000),text},...prevItems];
  });
};

return (
  <View style={styles.container}>
    <Header title='Shpooing List' />
    <AddItem addItem={addItem} />
    <FlatList
      data={items} renderItem={({item}) => (
        <ListItem item={item} deleteItem={deleteItem} />
      )} />
  </View>
);
};
```