Main Points/Key Points Notes **Building React Native App** 1. Building a BMI Calculator app. Text **BMI Calculator** Weight in KG TextInput Height in CM View Calculate Button BMI: 0 🐟 Text 2. Break the design into presentational components. **Description** Component 1. <View>...</View> To render the app. To display the title and 2. <Text>...</Text> result of BMI calculation. To get inputs for Weight & 3. <TextInput/> Height from users. An event trigger to perform 4. <Button/> a calculation for BMI. To display BMI status with 5. Alert.alert() native alert(iOS & Android). Summary

Main Points/Key Points	Notes Building React Native App 3. Creating a BMI Calculator Project. a. Create a BMI Calculator project using command (CLI).			
				Native Code
			Windows & Mac react-native init BMICalculator	
	Wi	thout Native Code		
	Windows & Mac expo init BMICa			
	b. React Native pro	ject structure and its folders.		
	File Name	Description		
	android	It contains android platform and its specific code.		
	ios	It contains iOS platform and its specific code.		
	node_modules	<pre>npm dependencies and recorde in package.json file.</pre>		
	.flowconfig	Flow feature, type checking for JavaScript.		
	.gitignore	File paths for non-version control.		
	.watchmanconfi	File watcher records any changes to the file. Configuration for watchman.		
	index.js	entry point of the application. App.js is imported in this file.		
	App.js	Default code for the React Native app (can be replaced using index.js).		
	package.json	It holds all the npm configurations.		
	S ₁	ımmary		

Main Points/Key Points

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Building React Native App

4. Constructor.

```
Set Initial State

constructor(){
    super();
    this.state = {
        weight: 0,
        height: 0,
        bmi: 0
    }
}
```

5. Calculate BMI.

```
Update State
calculateBMI = () => {
    this.setState({bmi: Number((
     this.state.weight/Math.pow(this.state.height,2)
     ) * 10000).toFixed(1)},
        () => {
          if(this.state.bmi < 18.5){</pre>
          Alert.alert('You are underweight!');
          } else if(this.state.bmi >= 18.5 &&
              this.state.bmi <= 24.9){</pre>
              Alert.alert('You are having a normal
              weight. Well done!');
          } else if(this.state.bmi >= 25 &&
              this.state.bmi <= 29.9){</pre>
              Alert.alert('You are overweight!');
          } else if(this.state.bmi >= 30){
              Alert.alert('You are obese. Please watch
              your diet!');
    });
  }
```

Summary

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Building React Native App

6. Render Presentational Components.

```
Display Output
render() {
    return (
      <View>
      <Text>BMI Calculator</Text>
      <TextInput onChangeText={(weight) =>
         this.setState({weight})}
         placeholder='Weight in KG'/>
      <TextInput onChangeText={(height) =>
         this.setState({height})}
         placeholder='Height in CM'/>
      <Button color="#841584"
         onPress={this.calculateBMI}
         title='Calculate'/>
      <Text>BMI: {this.state.bmi}</Text>
      </View>
   );
  }
}
```

7. References

- a. Dabit, N. (2018). *React Native in Action*. New York, NY: Manning Publications Co.
- b. Facebook Inc. React Native Reference, version 0.57. Available at https://facebook.github.io/react-native/

Summary