# Department of Computing

**CS-213: Advanced Programming**

**Class: BSCS 7AB**

# Lab 11: React Native Calculator Application

**Date: 05 December, 2019**

**Time: 10:00-01:00pm & 02:00-05:00pm**

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# CS-7A

# Lab 11: React Native Calculator Application

**Lab Task**

Create a basic calculator app in react native

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| Solution |
| Task Code:  import React from 'react';  import { TouchableOpacity, Button,Text, View, StyleSheet } from 'react-native';  import { Card } from 'react-native-paper';  export default class App extends React.Component {  constructor() {  super()  this.state={  resultText:"",  calculationText:""  }  }  calculateResult(){  const text=this.state.resultText  this.setState({  calculationText: eval(text)  })    }  operate(operation){  switch(operation){  case "C":  const text=  this.state.resultText.split('')  text.pop()  this.setState({  resultText:text.join('')  })  case '+':  case '-':  case '\*':  case '/':  const lastChar=this.state.resultText.split('').pop()  if(this.operations.indexOf(lastChar)>0){  return  }  if(this.state.text==""){  return  }  this.setState({  resultText: this.state.resultText+operation  })  }  }  buttonPressed(text){  this.setState({  resultText: this.state.resultText+text  })  if(text=='='){  return this.calculateResult()  }  }  render() {    return (  <View style={styles.container}>  <View style={styles.result}>  <Text style={styles.resultText}>3-2</Text>  </View>  <View style={styles.calculation}>  <Text style={styles.calculationText}>1</Text>  </View>  <View style={styles.buttons}>  <View style={styles.numbers}>  <View style={styles.row}>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} styles={styles.btn}>  <Text styles={styles.btnText}> 1 </Text>  </TouchableOpacity>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} styles={styles.btn}>  <Text styles={styles.btnText}> 2 </Text>  </TouchableOpacity>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} styles={styles.btn}>  <Text styles={styles.btnText}> 3 </Text>  </TouchableOpacity>    </View>  <View style={styles.row}>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} styles={styles.btn}>  <Text styles={styles.btnText}> 4 </Text>  </TouchableOpacity>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} styles={styles.btn}>  <Text styles={styles.btnText}> 5 </Text>  </TouchableOpacity>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} styles={styles.btn}>  <Text styles={styles.btnText}> 6 </Text>  </TouchableOpacity>  </View>  <View style={styles.row}>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} styles={styles.btn}>  <Text styles={styles.btnText}> 7 </Text>  </TouchableOpacity>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} styles={styles.btn}>  <Text styles={styles.btnText}> 8 </Text>  </TouchableOpacity>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} styles={styles.btn}>  <Text styles={styles.btnText}> 9 </Text>  </TouchableOpacity>  </View>  <View style={styles.row}>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} styles={styles.btn}>  <Text styles={styles.btnText}> '=' </Text>  </TouchableOpacity>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} styles={styles.btn}>  <Text styles={styles.btnText}> 0 </Text>  </TouchableOpacity>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} styles={styles.btn}>  <Text styles={styles.btnText}> 'C' </Text>  </TouchableOpacity>  </View>  </View>  <View style={styles.numbers}></View>  <View style={styles.numbers}></View>  <View style={styles.numbers}></View>  <View style={styles.operations}>  <TouchableOpacity style={styles.btn}>  <Text style={styles.white}>+</Text></TouchableOpacity>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} style={styles.btn}>  <Text style={styles.white}>-</Text></TouchableOpacity>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} style={styles.btn}>  <Text style={styles.white}>\*</Text></TouchableOpacity>  <TouchableOpacity OnPress={()=>this.buttonPressed(eval)} style={styles.btn}>  <Text style={styles.white}>/</Text></TouchableOpacity>  </View>  </View>    </View>  );  }  }  const styles = StyleSheet.create({  container: {  flex:1  },  row:{  flexDirection:'row',  flex:1,  justifyContent:'space-around',  alignItems:'center'  },  btn:{  flex:1,  borderColor:'brown',  justifyContent:'center',  alignItems:'stretch',  alignSelf:'stretch'  },  btnText:{  fontSize:'20'  },  resultText:{  fontSize:30,  color:'white'  },  calculationText:{  fontSize:24,  color:'white'  },  white:{  color:'white'  },  result:{  flex:2,  backgroundColor:'red',  justifyContent:'center',  alignItems:'flex-end'  },  calculation:{  flex:1,  backgroundColor:'green',  justifyContent:'center',  alignItems:'flex-end'  },  buttons:{  flex:7,  flexDirection:'row'  },  numbers:{  flex:3,  backgroundColor:'yellow',  },  operations:{  flex: 1,  justifyContent:'space-around',  alignItem:'stretch',  backgroundColor:'black'  }  })  Task Output Screenshot:  Addition:    Multiplication:    Division:    Subtraction: |