**Arithmetic Calculator**

### A Project Work

*Submitted in the partial fulfillment for the award of the degree of*

# BACHELOR OF ENGINEERING

### IN NAME\_OF\_SPECIALIZED\_BRANCH

### Computer science (cloud computing)

### Submitted by:

### NAME OF THE STUDENT

Yashasvi Bakshi

Harshit

### University Roll Number

### 18BCS4069

### 18BCS4103

### Under the Supervision of:

### SUPERVISORS NAME



# APEX INSITUTE OF TECHNOLOGY

### CHANDIGARH UNIVERSITY, GHARUAN, MOHALI - 140413,

**PUNJAB**

#### MONTH & YEAR

Jul 2019

**DECLARATION**

I, **‘Yashasvi Bakshi, Harshit**, student of **‘Bachelor of Engineering in Branch Name’**, **session: 2018 - 2019**, Apex Institute of Technology, Chandigarh University, Punjab, hereby declare that the work presented in this Project Work entitled ‘**Topic Name’** is the outcome of our own bona fide work and is correct to the best of our knowledge and this work has been undertaken taking care of Engineering Ethics. It contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

#### Date:

### Place: ( Yashavi Bakshi

### Harshit )

### Candidate UID:

### 18BCS4069

### 18BCS4103

### 

**CERTIFICATE**

This is to certify that the work embodies in this dissertation entitled ***‘Arithmetic calculator’*** being submitted by **Yashasvi Bakshi ,Harshit Roll Nos. –18BCS4069,18BCS4103** for partial fulfillment of the requirement for the award of **Bachelor of Engineering** in ***computer science (cloud computing)*** discipline to Apex Institute of Technology, Chandigarh University, Punjab during the academic year 2018 - 2019 is a record of bonafide piece of work, undertaken by him/her the supervision of the undersigned.

### Approved and Supervised by

Signature of Supervisor **(Supervisor's Name)** **Designation, Department**

### Forwarded by

#### ( Dr. Bhupinder Singh ) Professor & Head of Department

### EXTERNAL EXAMINER

Signature of External Examiner

#### (External Examiner's Name)

# Table of Contents

|  |  |  |
| --- | --- | --- |
|  | Title Page | I |
|  | Declaration of the Student | Ii |
|  | Certificate of the Guide | Iii |
|  | Abstract | Iv |
|  | Acknowledgement | V |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| **3.** | **SYSTEM ANALYSIS & DESIGN** |  |
|  | Take input in num1 &num2  Perform the actions on the numbers |  |
|  | SAVE THE RESULT    **PSEUDO CODE :-**  package calculator;  import java.awt.Color;  import java.awt.Dimension;  import java.awt.Font;  import java.awt.event.ActionEvent;  import java.awt.event.ActionListener;  import javax.swing.BorderFactory;  import javax.swing.ImageIcon;  import javax.swing.JButton;  import javax.swing.JFrame;  import javax.swing.JPanel;  import javax.swing.JTextArea;  import javax.swing.border.Border;  public class calculators implements ActionListener {  JFrame frame = new JFrame();  JPanel panel = new JPanel();  JTextArea textarea = new JTextArea(2,15);    JButton button1 = new JButton();  JButton button2 = new JButton();  JButton button3 = new JButton();  JButton button4 = new JButton();  JButton button5 = new JButton();  JButton button6 = new JButton();  JButton button7 = new JButton();  JButton button8 = new JButton();  JButton button9 = new JButton();  JButton button0 = new JButton();    JButton buttonadd = new JButton();  JButton buttonsub = new JButton();  JButton buttonmul = new JButton();  JButton buttondiv = new JButton();  JButton buttonclear = new JButton();  JButton buttondot = new JButton();  JButton buttonequal = new JButton();    double number1,number2,result;  int addc=0,subc=0 , mulc=0, divc=0;    public calculators() {  frame.setSize(500,450);  frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);  frame.setVisible(true);  frame.setTitle("Project Calculator");  frame.setResizable(false);  frame.add(panel);    panel.setBackground(Color.LIGHT\_GRAY);  Border border = BorderFactory.createLineBorder(Color.BLACK , 18);  panel.setBorder(border);  panel.add(textarea);  textarea.setBackground(Color.WHITE );  Border tborder = BorderFactory.createLineBorder(Color.BLACK , 5);  textarea.setBorder(tborder);    Font font = new Font("arial",Font.BOLD,33);  textarea.setFont(font);  textarea.setForeground(Color.BLUE);  textarea.setPreferredSize(new Dimension(12,10));  textarea.setLineWrap(true);  panel.add(buttonclear);  panel.add(button0);  panel.add(button1);  panel.add(button2);  panel.add(button3);  panel.add(button4);  panel.add(button5);  panel.add(button6);  panel.add(button7);  panel.add(button8);  panel.add(button9);  panel.add(buttondot);  panel.add(buttonmul);  panel.add(buttonsub);  panel.add(buttonadd);  panel.add(buttondiv);    panel.add(buttonequal);  button1.setPreferredSize( new Dimension(100,45));  button1.setIcon(new ImageIcon("E:\\buttons for calculator\\button1.png"));    button2.setPreferredSize( new Dimension(100,45));  button2.setIcon(new ImageIcon("E:\\buttons for calculator\\button2.png"));    button3.setPreferredSize( new Dimension(100,45));  button3.setIcon(new ImageIcon("E:\\buttons for calculator\\button3.png"));    button4.setPreferredSize( new Dimension(100,45));  button4.setIcon(new ImageIcon("E:\\buttons for calculator\\button4.png"));    button5.setPreferredSize( new Dimension(100,45));  button5.setIcon(new ImageIcon("E:\\buttons for calculator\\button5.png"));    button6.setPreferredSize( new Dimension(100,45));  button6.setIcon(new ImageIcon("E:\\buttons for calculator\\button6.png"));    button7.setPreferredSize( new Dimension(100,45));  button7.setIcon(new ImageIcon("E:\\buttons for calculator\\button7.png"));    button8.setPreferredSize( new Dimension(100,45));  button8.setIcon(new ImageIcon("E:\\buttons for calculator\\button8.png"));    button9.setPreferredSize( new Dimension(100,45));  button9.setIcon(new ImageIcon("E:\\buttons for calculator\\button9.png"));    button0.setPreferredSize( new Dimension(100,45));  button0.setIcon(new ImageIcon("E:\\buttons for calculator\\button0.png"));    buttondot.setPreferredSize( new Dimension(100,45));  buttondot.setIcon(new ImageIcon("E:\\buttons for calculator\\buttondot.png"));    buttonsub.setPreferredSize( new Dimension(100,45));  buttonsub.setIcon(new ImageIcon("E:\\buttons for calculator\\buttonsub.png"));    buttonmul.setPreferredSize( new Dimension(100,45));  buttonmul.setIcon(new ImageIcon("E:\\buttons for calculator\\buttonmul.png"));    buttondiv.setPreferredSize( new Dimension(100,45));  buttondiv.setIcon(new ImageIcon("E:\\buttons for calculator\\buttondiv.png"));    buttonadd.setPreferredSize( new Dimension(100,45));  buttonadd.setIcon(new ImageIcon("E:\\buttons for calculator\\buttonadd.png"));    buttonclear.setPreferredSize( new Dimension(100,45));  buttonclear.setIcon(new ImageIcon("E:\\buttons for calculator\\buttonclear.png"));    buttonequal.setPreferredSize( new Dimension(200,45));  buttonequal.setIcon(new ImageIcon("E:\\buttons for calculator\\buttonequal.png"));        button1.addActionListener(this);  button2.addActionListener(this);  button3.addActionListener(this);  button4.addActionListener(this);  button5.addActionListener(this);  button6.addActionListener(this);  button7.addActionListener(this);  button8.addActionListener(this);  button9.addActionListener(this);  button0.addActionListener(this);  buttonadd.addActionListener(this);  buttonsub.addActionListener(this);  buttonmul.addActionListener(this);  buttondiv.addActionListener(this);  buttondot.addActionListener(this);  buttonequal.addActionListener(this);  buttonclear.addActionListener(this);  }    public void actionPerformed(ActionEvent e) {  Object source = e.getSource();  if(source==buttonclear) {  number1=0.0;  number2=0.0;  textarea.setText(" ");  }  if(source==button1) {  textarea.append("1");  }  if(source==button2) {  textarea.append("2");  }  if(source==button3) {  textarea.append("3");  }  if(source==button4) {  textarea.append("4");  }  if(source==button5) {  textarea.append("5");  }  if(source==button6) {  textarea.append("6");  }  if(source==button7) {  textarea.append("7");  }  if(source==button8) {  textarea.append("8");  }  if(source==button9) {  textarea.append("9");  }  if(source==button0) {  textarea.append("0");  }  if(source==buttondot) {  textarea.append(".");  }  if(source==buttonadd) {  number1=number\_reader();  textarea.setText("");  addc = 1;  divc = 0;  mulc = 0;  subc = 0;  }  if(source==buttondiv) {  number1=number\_reader();  textarea.setText("");  addc = 0;  divc = 1;  mulc = 0;  subc = 0;  }  if(source==buttonsub) {  number1=number\_reader();  textarea.setText("");  addc = 0;  divc = 0;  mulc = 0;  subc = 1;  }  if(source==buttonmul) {  number1=number\_reader();  textarea.setText("");  addc = 0;  divc = 0;  mulc = 1;  subc = 0;  }  if(source==buttonequal) {  number2=number\_reader();  if(addc>0) {  result = number1+number2;  textarea.setText(Double.toString(result));  }  if(divc>0) {  result = number1/number2;  textarea.setText(Double.toString(result));  }  if(mulc>0) {  result = number1\*number2;  textarea.setText(Double.toString(result));  }  if(subc>0) {  result = number1-number2;  textarea.setText(Double.toString(result));  }  }  }  public double number\_reader(){  double num1;  String s;  s=textarea.getText();  num1=Double.valueOf(s);  return num1;  }  } |  |

|  |
| --- |
| **CONCLUSIONS / RECOMMENDATIONS**  We can add more scientific feature like logarithms trigonometric function and also we can add another window that can have different convertor. |
| **REFERENCES:**  **Facility member of Chandigarh university and google.** |
| **APPENDICES** |

ii