

**BABU BANARASI DAS ENGINEERING COLLEGE**

**(AKTU Code : 508)**

*Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Lucknow*

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**DEPARTMENT OF INFORMATION TECHNOLOGY**

**B.TECH. (IT) – Second Year**

**Academic Session 2020-2021 (ODD SEMESTER)**

**MINI PROJECT ON CALCULATOR**

**Submitted By**

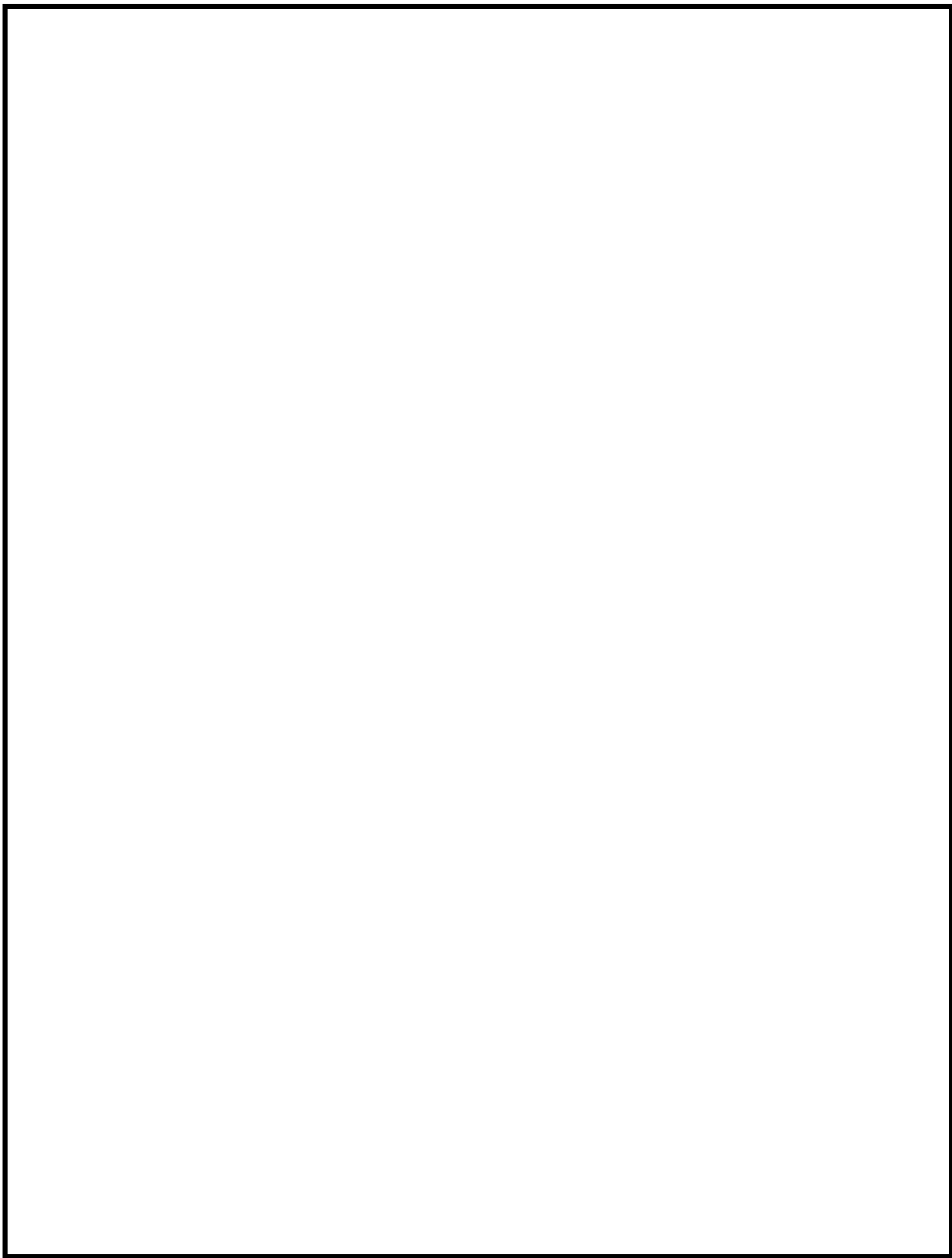
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**Submitted To**

Mr. Saurabh Singh

(Assistant Professor)



# ABSTRACT

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*The objective of this software is to reduce the work of all the people which is very huge task. The user work on calculation will be reduced drastically using this simple calculator. The system will be able to perform operations like addition, subtraction, multiplication, division, finding the square root of a number, etc. Simple calculator is user friendly and it is very easy to use.*

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# Acknowledgement

In completing this graduate project 's synopsis, we have been fortunate to have help, support and encouragement from many people. We would like to acknowledge them for their cooperation.

I would like to thank Mr. Saurabh Singh, Assistant IT professor, BBDEC for guiding us through each and every step of the process with knowledge and support. Thank you for your advice, guidance and assistance in understanding this project on Calculator.

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# Introduction

The primary aim of the calculator application to provide an easy way to calculate day to day calculations with ease and quickly and prevent human error in calculation which may cause a big problem and it provide a method to perform arithmetic operation by pressing a few buttons and perform calculation. It provides an easy way for elderly people to perform calculations and save time in doing calculation.

# Technology Used

For this project ,we will use the Vs code .VISUAL STUDIO CODE is a free and powerful source –code editor that runs on the desktop.The project setup is really simple. Because we only want to use JavaScript without any frameworks. Start by creating a new project folder in VS Code, and inside that project folder, create three empty new files of HTML, CSS and javaScript. The Html file is the entry point for our website and contains the HTML code. And the CSS file designs of the content of the HTML. Whereas the javascript add functionality in the calculator.

# Features

1. Addition: It can perform addition of multiple values within a few seconds.
2. Subtraction: It can perform subtraction of multiple values within a few seconds.
3. Multiplication: It can perform multiplication of multiple values within a few seconds.
4. Division: It can perform division of multiple values within a few seconds.



# Hardware and Software Specification

RAM	512 MB
Hard Disk	10 GB
Processor	1.0 GHz

Software	HTML, CSS and JS
Operating System	Windows or equivalent

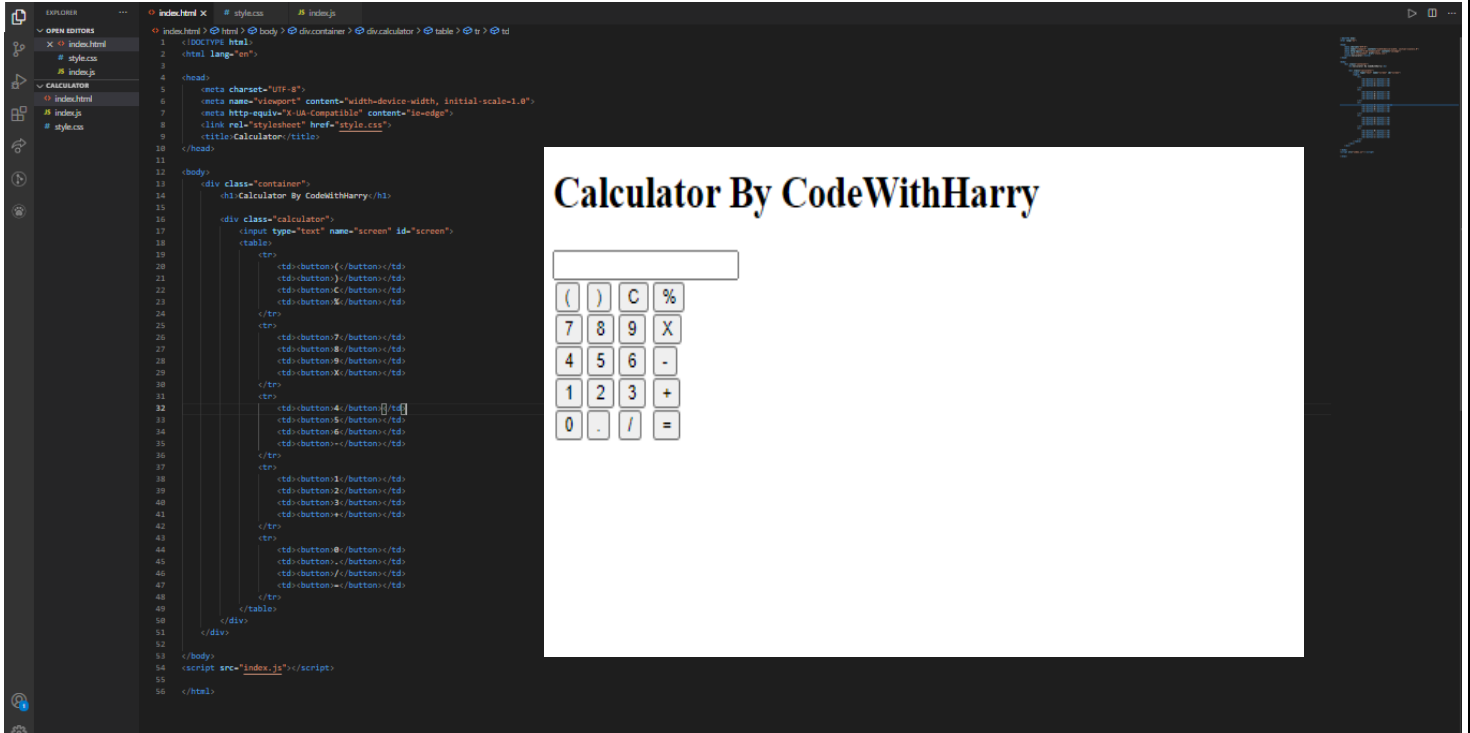
# Functionality

It can perform various arithmetic operations such as

1. Addition which is summing two or more numbers to get sum. It is performed using eval() method in calculator application.
2. Subtraction is an arithmetic operation that represents the operation of removing objects from a collection. The result of a subtraction is called a difference. It is performed using eval() method in calculator application.
3. Multiplication means repeated addition of a number. The result is called product. It is performed using eval() method in calculator application.
4. Division is a method of distributing a group of things into equal parts. It is one of the four basic operations of arithmetic, which gives a fair result of sharing. It is performed using eval() method in calculator application.

# Screenshots

## 1. Code index.html



## 2. Code style.css

```
File Edit Selection View Go Run Terminal Help
style.css - Visual Studio Code

index.html
index.js
style.css

# style.css
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.container {
  text-align: center;
  margin-top: 20px;
}

table {
  margin: auto;
}

input {
  border-radius: 20px;
  border: 1px solid #808080;
  font-size: 16px;
  height: 40px;
  width: 400px;
}

button {
  border-radius: 20px;
  font-size: 16px;
  background-color: #808080;
  width: 60px;
  height: 40px;
  margin: 5px;
}

.calculator {
  border: 1px solid #808080;
  background-color: #ffffff;
  padding: 10px;
  border-radius: 10px;
  display: inline-block;
}

h1 {
  font-size: 20px;
  font-family: 'Courier New', Courier, monospace;
}

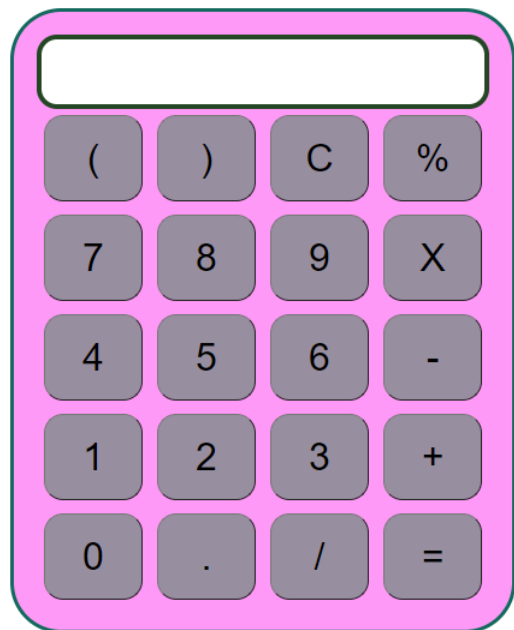
.container {
  text-align: center;
  margin-top: 20px;
}

table {
  margin: auto;
}

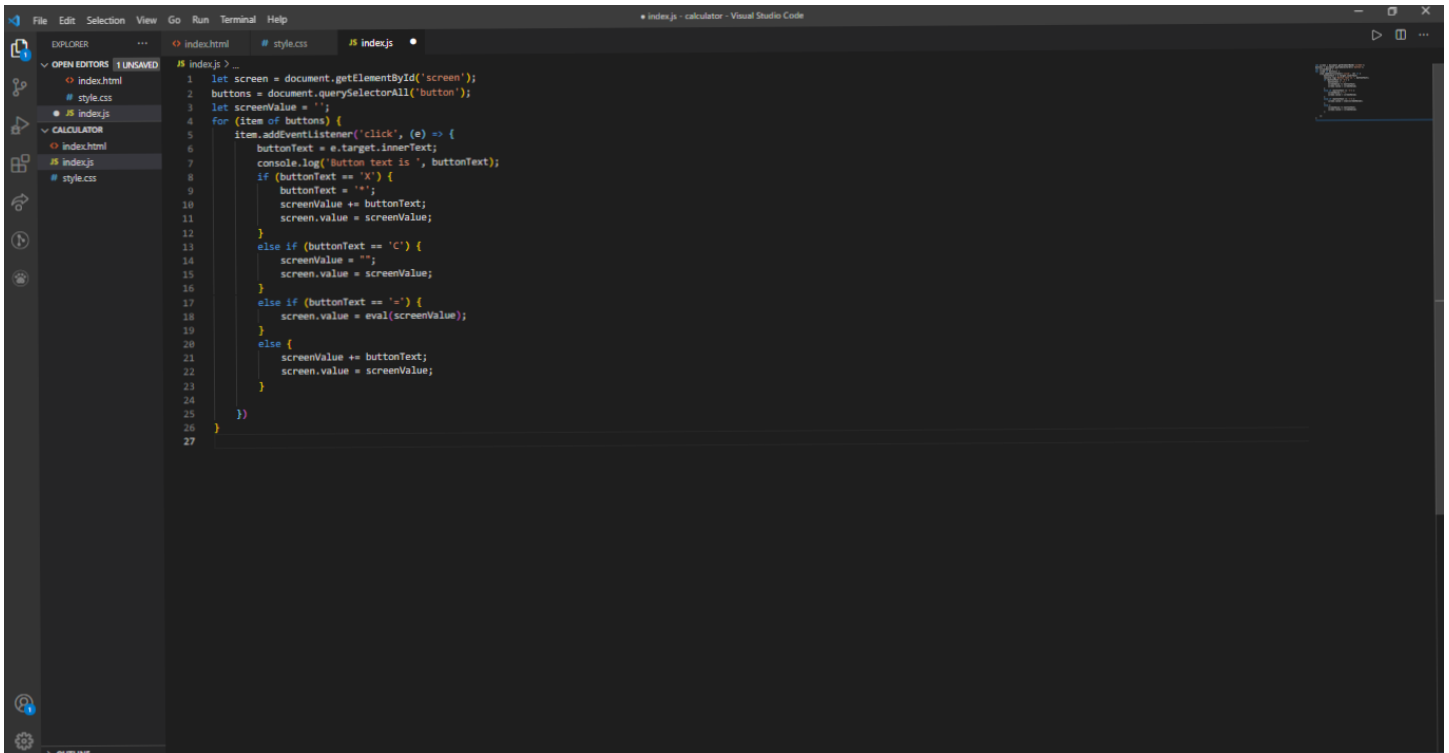
input {
  border-radius: 20px;
  border: 1px solid #808080;
  font-size: 16px;
  height: 40px;
  width: 400px;
}

button {
  border-radius: 20px;
  font-size: 16px;
  background-color: #808080;
  width: 60px;
  height: 40px;
  margin: 5px;
}

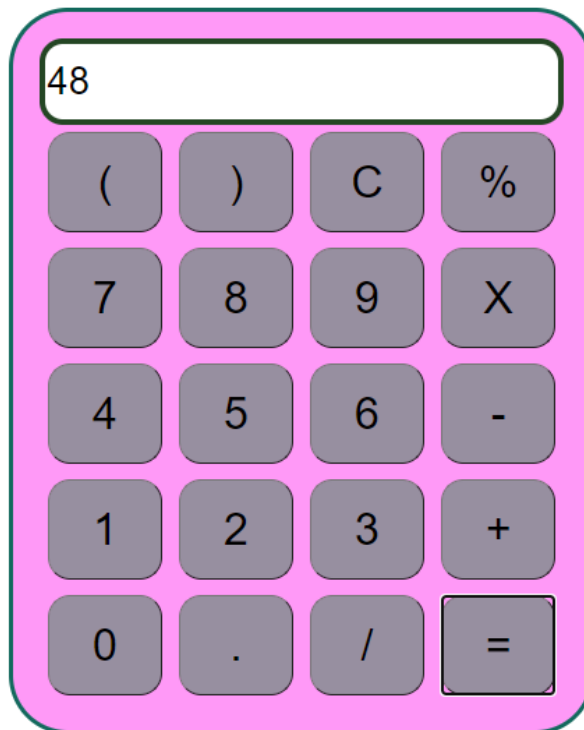
.calculator {
  border: 1px solid #808080;
  background-color: #ffffff;
  padding: 10px;
  border-radius: 10px;
  display: inline-block;
}
```



### 3. Code index.js



```
1 let screen = document.getElementById('screen');
2 buttons = document.querySelectorAll('button');
3 let screenValue = '';
4 for (item of buttons) {
5     item.addEventListener('click', (e) => {
6         buttonText = e.target.innerText;
7         console.log('Button text is ', buttonText);
8         if (buttonText == 'X') {
9             buttonText = '*';
10            screenValue += buttonText;
11            screen.value = screenValue;
12        }
13        else if (buttonText == 'C') {
14            screenValue = '';
15            screen.value = screenValue;
16        }
17        else if (buttonText == '=') {
18            screen.value = eval(screenValue);
19        }
20        else {
21            screenValue += buttonText;
22            screen.value = screenValue;
23        }
24    });
25 }
26 }
27 }
```



# CONCLUSION

This project is created to help the people with their day to day calculation and remove the factor of human error in calculation. This project also helps the elderly person to perform calculation.

# FUTURE SCOPE

This project has scope for some improvement in future. It will be able to implement in future after making some changes and modification as it is made at very low level. It can be possible to make user friendly by adding more variety of functions to it. To make it touch sensitive i.e., screen touch so no need to touch key buttons, snaps can also added.

# Reference

1. <https://www.w3schools.com/>
2. <https://codewithharry.com/>