

# PROJECT REPORT

ON

Windows Calculator Using HTML, CSS And JAVASCRIPT  
Submitted on partial fulfillment for the three years degree course  
**Batchelor of Vocational (Information Technology)**  
Of  
**GAUHATI UNIVERSITY**



Submitted by -

Name: BVOC (IT) 6<sup>TH</sup> SEM (GROUP D)

Guided By -

Dr. Devajit Mahanta

H.O.D. of B.Voc. (IT)

DEPARTMENT OF B.VOC.(IT) 6<sup>TH</sup> (SEM GROUP D)  
NALBARI COMMERCE COLLAGE  
NALBARI, ASSAM- 781334

NAME: MIRZANUR RAHMAN

ROLL NO: UA -211-200-0029

## **ACKNOWLEDGEMENT**

**HTML - The Engine of Intelligence:** **HTML** It seems like you might be referring to the HTML anchor tag, which is used to create hyperlinks within a web page. The "#" symbol, when used in a URL with an anchor tag, refers to a specific section or element within the same page. It's commonly used for creating internal page links or navigating within a single webpage to a specific section.

**XAML - Crafting User-Friendly Design:** XAML brought the calculator's user interface to life with its declarative markup language. The collaboration between C# and XAML seamlessly blended logic with design. XAML's support for data binding and styling added a touch of elegance to the interface, creating a user-friendly and visually appealing experience.

**WPF - Dynamic and Responsive Interface:** WPF played a crucial role in making the interface dynamic and responsive. Its features, including data binding and animation support, contributed to an engaging user experience. The seamless integration with XAML allowed for the creation of interactive UI elements, enhancing the overall usability of the calculator.

**.NET 5.0 - Modernizing Development:** Embracing .NET 5.0 was a decision to embrace modern development practices. The enhancements and cross-platform capabilities of .NET 5.0 elevated the project to contemporary standards. This not only ensured high performance but also positioned the calculator at the forefront of modern software development.

**Gratitude to the Community:** I express my gratitude to the .NET community for its continuous support. The collaborative spirit and shared knowledge within the community were instrumental in overcoming challenges and pushing the boundaries of the project. The vibrant .NET ecosystem significantly contributed to the success of this endeavor.

## **About Visual studio**

**Visual Studio** is a powerful integrated development environment (IDE) created by Microsoft. It's widely used by software developers for various programming languages, including C#, C++, and Python. This IDE offers a comprehensive set of tools and features to streamline the software development process. One of the standout features of Visual Studio is its rich code editor, which provides code completion, debugging, and real-time syntax checking, making it easier to write clean and error-free code. The integrated debugger is robust, helping developers identify and fix issues quickly.

Visual Studio supports a wide range of project types, from desktop applications to web and mobile development. It has excellent integration with Azure, Microsoft's cloud platform, making it a preferred choice for cloud-based application development.

Extensions and add-ons, available through the Visual Studio Marketplace, enhance the IDE's functionality. Developers can customize their development environment by adding extensions that cater to their specific needs.

Version control is made easy with built-in Git support, enabling collaborative coding and code version management. Visual Studio also includes excellent tools for unit testing and continuous integration, ensuring software quality.

The Visual Studio ecosystem extends to Visual Studio Code, a lightweight code editor, and Visual Studio Online, which offers cloud-based development collaboration and code repositories.

Overall, Visual Studio is a comprehensive software development environment that caters to both individual and team needs. It simplifies and enhances the software development process with its feature-rich environment and extensive integration capabilities.



## **Language's & There use's**

### **Use of HTML**

In this program, we are using HTML to create content for the calculator UI; that means we are creating boxes, input fields, buttons, etc.

### **Use of CSS**

We are using CSS for managing the content of HTML like the content color, width, height, font size, padding, margin, etc.

### **Use of JavaScript**

In a calculator, it is established that there are different buttons and all these buttons have different functions. For example, the + button performs the addition operation, and – performs the subtraction, and it is possible to assign these operations to these buttons using JavaScript.

### **Developing a Real-Time Calculator**

Following are the files in HTML, CSS, and JavaScript respectively to develop the real-time calculator –

#### **calculator.html**

This is the HTML file for our calculator below. Here, we are using the HTML script to create the content of the calculator UI. We are including the buttons of a calculator, input fields, etc.

In the HTML code, we are also using an onclick event; it means that whenever the user clicks on any of the buttons then the corresponding operation is performed at the backend of the calculator.

## **Contents**

### **1. Introduction**

- Background of the Project
- Problem Statement
- Objectives
- Scope of the Project
- Significance of the Project
- Methodology

### **2. Literature Review**

- Overview of Calculator Applications
- Related Technologies (HTML, Windows Application)
- Previous Work and Research

### **3. System Design**

- System Architecture
- Use Case Diagrams
- Class Diagrams
- Database Design (if applicable)
- User Interface Design

### **4. Implementation**

- Programming Languages and Tools
- Algorithms and Data Structures
- Code Structure
- Key Features and Functionalities
- Challenges Faced during Implementation

### **5. Testing and Quality Assurance**

- Testing Strategy

- Test Cases and Results
- Bug Tracking and Resolution
- Performance Testing (if applicable)

#### 6. User Documentation

- User Manual

#### 7. Project Management

- Project Timeline
- Resource Allocation
- Risk Assessment and Mitigation
- Budget (if applicable)

#### 8. Future Enhancements

- Proposed Features for Future Versions
- User Feedback and Improvement Plans

#### 9. Conclusion

- Summary of Achievements
- Lessons Learned
- Project's Impact

#### 10. References

- List of Books, Journals, Websites, and Resources Used

#### 11. Appendices

- Code Samples
- Screenshots and Diagrams
- Survey Forms (if used for user feedback)