**PROJECT NAME-CALCULATOR**

**System Analysis and Design (INFO 1113) S10**

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**Executive Summary**

The project that we are suggesting is calculator. We chose this as a project because calculator is used by everyone. We made a website on calculator and we wrote use case descriptions to show how are things are to be done. Use-case diagrams illustrate a system's high-level functions and scope. These graphics also show how the system and its actors interact. The use diagram tells how the user is depicting the system and it also tells what errors can user generally make. Coming to the class diagram, they are used to display the various objects in a system, as well as their qualities, operations, and interrelationships. Relational database is used as a storage and through which collected data can be accessed that are connected to each other.

**Use-Case diagram and Use-Case descriptions**

Use-Case diagram:

<https://lucid.app/lucidchart/8998928a-1a72-4410-bc92-a234072348f0/edit?invitationId=inv_7959b5ba-2bfd-40c8-8be7-c065e33d297c>

|  |
| --- |
| Use case Title: Calculator |
| Primary Actor: User |
| Level: White |
| Stakeholder: Developers and users |
| Precondition: Users have to enter the number. |
| Minimal Guarantee: If user entered the wrong equation then he can rollback. |
| Success Guarantee: Solution of the entered equation |
| Trigger: Press the button and perform an action |
| Main Success Scenario:   1. User will type an equation with the required operand. 2. User will use the equal button. 3. The system will calculate the equation. 4. Then the desired result will come. |
| Extension:  1a. When user enters the wrong number.  1a1.User will use the clear button and will start the program again.  1a2.Program will be closed by the user.  2a.When user clicks on the operand error message comes.  2a1.User will start the program again by clicking on the clear button.  2a2.Program will be closed by the user.  3. When sometimes user clicks on the clear button while writing the program.  3a1.User will start the program again by clicking on the clear button.  3a2.Program will be closed by the user. |

**Conclusion-**

The calculator is the project we choose for this assignment. Specifically, a calculator similar to the one you'd discover if you googled "calculator." This one, however, is not one that can be accessed on the website; instead, it is a computer software. To demonstrate the project's functions and how it works, a use-case diagram and explanations were created. To display the project's data in a table, relational database tables were created. To describe the classes and their relationships, a class diagram was created. A prototype was created to demonstrate how the project will function and seem to the user. The project requirements were created to illustrate the project's functional and non-functional requirements. Finally, a project experience is created to demonstrate and describe our group's experience with this project.

**Websites**

Trello: <https://trello.com/invite/b/obJed7rq/ca5ed56804526f8fa8ef333be4a9fa09/final-project>

GitHub group: <https://github.com/DarkShadowGithub/Group-Cs-Group->

Braeden’s GitHub: <https://github.com/DarkShadowGithub/Group-C>

Simran’s GitHub: <https://github.com/Sim-09/Use-case-title>

Joban’s GitHub:

**Conclusion**

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**Report**

I worked on the project named Calculator with my group members. There were many of the functions that I learnt like making websites, how to use github and trello . And more importantly I learned how to make those analysis diagrams .As an International student I got this opportunity to work with different people from different regions I’m very much glad . Earlier I did found difficult but later on my peers helped me and supported me. Moreover I personally enjoyed doing my tasks though it was quite hard. Learned many of the things like first time ever I prepared the group website and worked on it. The tasks that I got were making the group website, use case description and conclusion and many more.

**Work Cited**

Petersen, C. (n.d.). *What is a software calculator?* What Is a Software Calculator? (with picture). Retrieved September 30, 2021, from <https://www.wise-geek.com/what-is-a-software-calculator.htm>.

Anonymous. (2021, August 16). *What is a calculator?* What is a Calculator? Retrieved October 1, 2021, from <https://www.computerhope.com/jargon/c/calc.htm>

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