*Project Title: Animation Calculator.*

# Aim:

To demonstrate to the instructor the ability to utilize JavaScript, CSS and HTML to build a fully functioning calculator (non-scientific).

# Implementation:

Followed an agile methodology, where the team gathered for daily scrum meetings to discuss the backlog and distribute tasks upon the members. Each member was given the freedom to work on their own version of design as well, providing a chance for everyone to learn the programming languages used. A design with the least bugs was chosen to be built upon by all members.

# Usage Notes:

Dark mode can be introduced by checking the "dark mode" checkbox. Animation (which is an extra feature) can also be introduced when the animation checkbox is checked. Animation sequences and restrictions are as follows:

Any button click starts the electron animation, simulating how electrons move beneath a computing device.

Clear button when there is content on the display is a disturbance of zeros and ones that simulates a reboot.

Add animation only works with positive numbers that sum up to 10 and no decimals (acceptable: 5 + 5; not acceptable: 5 + 6).

Subtract animation works with positive numbers that are not bigger than 5 non decimal and when the left-hand side number is bigger than the right-hand side number (acceptable: 5-2; not acceptable: 6-3, -3-5, 2.5-4, 3-5).

Division animation works under the left-hand side restriction and positive non-decimal integer just like subtraction, and the left-hand side integer must not be greater than 7 (acceptable: 4/3; not acceptable: 2.5/2, 3/4, 7/3).

Multiplication animation works with positive non-decimal integers that are both not greater than 3 (acceptable 3\*3; not acceptable: 4\*2, -3\*3, 0.5 \* 2).

Undo and redo buttons work (while redo only works on the last undo action). Changing signs button is green on the left side and decimal button on the right side (note that only one decimal number can occupy the screen at a time and the button would be disabled). There is a full list of keyboard shortcuts shown after clicking on keyboard shortcuts. As well as an inner navigational system to ease traversing the calculator when using the keyboard arrows.