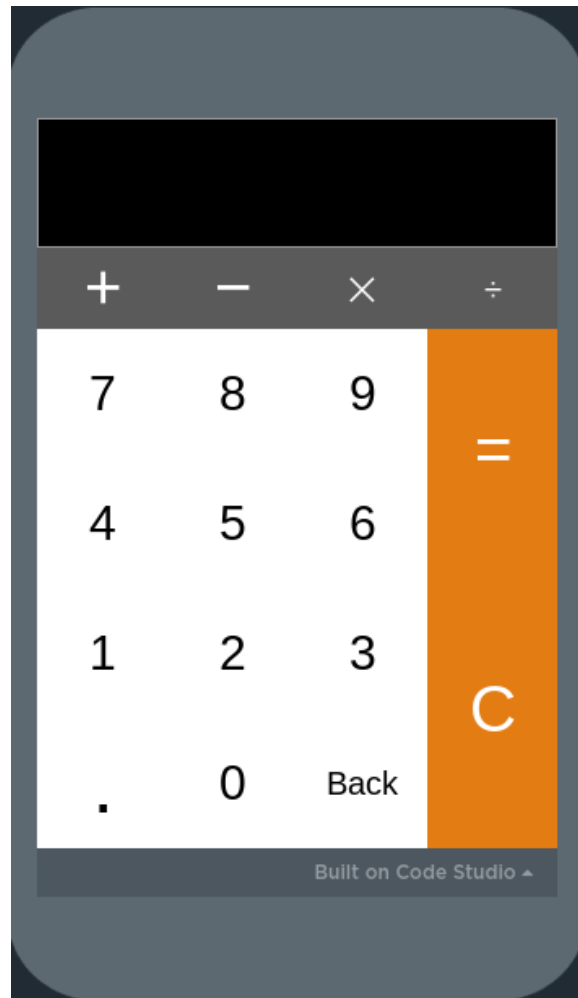


Code.org Calculator



Edward Ponder
Charles R. Drew Middle School
Hardware Modification
Level 3
ACTE Region 4

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Narrative

I chose to do this project to prove that code.org can be used for real-world applications. I have learned how to program in javascript. This has benefited me because I now know how to use code.org's app lab.

Software and Hardware used in Project

Computer the project was originally coded on: HP 11A G6 EE
Website: Code.org

Copy of Project



Code:

```
//Selector
onEvent("Website", "click", function(event) {
  open("https://codeprojects.org/m80Yt5y1AmLAL6__6122A4Tmd3RWWonljxB1Astmkc/index.html");
});
onEvent("Dice", "click", function(event) {
  setScreen("Game");
});
onEvent("TwoNUM", "click", function(event) {
  setScreen("Calculator2");
});
onEvent("ThreeNUM", "click", function(event) {
  setScreen("Calculator3");
});
onEvent("MultiCal", "click", function(event) {
  setScreen("MultiCalculator");
});
onEvent("FractionCalculator", "click", function(event) {
  setScreen("FractionCal");
});
onEvent("MessagingApp", "click", function(event) {
  setScreen("InfoScreen");
});
onEvent("Next", "click", function(event) {
  setScreen("Selector2");
});
onEvent("Previous2", "click", function(event) {
  setScreen("Selector");
});
onEvent("Next2", "click", function(event) {
  setScreen("Selector3");
});
onEvent("Previous3", "click", function(event) {
  setScreen("Selector2");
});
```

```

onEvent("RNGSEL", "click", function() {
    hideElement("Answer-RNG");
    setScreen("RNG");
});
onEvent("ClassicSel", "click", function() {
    setScreen("Classic");
});
//Calculator2NUM
hideElement("Answer");
onEvent("+", "click", function(event) {
    showElement("Answer");
    setText("Answer", getNumber("1") + getNumber("2"));
});
onEvent("-", "click", function(event) {
    showElement("Answer");
    setText("Answer", getNumber("1") - getNumber("2"));
});
onEvent("×", "click", function(event) {
    showElement("Answer");
    setText("Answer", getNumber("1") * getNumber("2"));
});
onEvent("÷", "click", function(event) {
    showElement("Answer");
    setText("Answer", getNumber("1") / getNumber("2"));
});
onEvent("C", "click", function(event) {
    hideElement("Answer");
    setText("1", "");
    setText("2", "");
});
onEvent("Back", "click", function(event) {
    setScreen("Selector2");
});
//Calculator3NUM
hideElement("Answer-3");
onEvent("+-3", "click", function(event) {
    showElement("Answer-3");
    setText("Answer-3", (getNumber("1-3") + getNumber("2-3")) + getNumber("3-3"));
});
onEvent("-3", "click", function(event) {
    showElement("Answer-3");
    setText("Answer-3", (getNumber("1-3") - getNumber("2-3")) - getNumber("3-3"));
});
onEvent("×-3", "click", function(event) {
    showElement("Answer-3");
    setText("Answer-3", (getNumber("1-3") * getNumber("2-3")) * getNumber("3-3"));
});
onEvent("÷-3", "click", function(event) {
    showElement("Answer-3");
    setText("Answer-3", (getNumber("1-3") / getNumber("2-3")) / getNumber("3-3"));
});
onEvent("C-3", "click", function(event) {
    hideElement("Answer-3");
    setText("1-3", "");
    setText("2-3", "");
    setText("3-3", "");
});

```

```

onEvent("Back-3", "click", function(event) {
    setScreen("Selector2");
});
//Multiple
var S1;
var S2;
function S2F() {
    if (getChecked("2R1-S") === true) {
        S2 = S1 + getNumber("3-S");
        S3F();
    }
    if (getChecked("2R2-S") === true) {
        S2 = S1 - getNumber("3-S");
        S3F();
    }
    if (getChecked("2R3-S") === true) {
        S2 = S1 * getNumber("3-S");
        S3F();
    }
    if (getChecked("2R4-S") === true) {
        S2 = S1 / getNumber("3-S");
        S3F();
    }
}
function S3F() {
    if (getChecked("3R1-S") === true) {
        setText("Answer-S", S2 + getNumber("4-S"));
    }
    if (getChecked("3R2-S") === true) {
        setText("Answer-S", S2 - getNumber("4-S"));
    }
    if (getChecked("3R3-S") === true) {
        setText("Answer-S", S2 * getNumber("4-S"));
    }
    if (getChecked("3R4-S") === true) {
        setText("Answer-S", S2 / getNumber("4-S"));
    }
}
onEvent("=-S", "click", function(event) {
    if (getText("1-S") == "ABC") {
        setScreen("MusicPlayer");
    } else {
        if (getText("1-S") == "Random") {
            setScreen("RNG")
        } else {
            setScreen("MultiCalculatorAnswer");
            //S-1
            if (getChecked("1R1-S") === true) {
                S1 = getNumber("1-S") + getNumber("2-S");
                S2F();
            }
            if (getChecked("1R2-S") === true) {
                S1 = getNumber("1-S") - getNumber("2-S");
                S2F();
            }
            if (getChecked("1R3-S") === true) {
                S1 = getNumber("1-S") * getNumber("2-S");

```

```

        S2F();
    }
    if (getChecked("1R4-S") === true) {
        S1 = getNumber("1-S") / getNumber("2-S");
        S2F();
    }
}
});
onEvent("C-S", "click", function(event) {
    setText("1-S", "");
    setText("2-S", "");
    setText("3-S", "");
    setText("4-S", "");
});
onEvent("Back-S", "click", function(event) {
    setScreen("Selector");
});
onEvent("Back-M", "click", function(event) {
    setScreen("MultiCalculator");
});
//Fractions
hideElement("Answer-F");
onEvent("+F", "click", function(event) {
    showElement("Answer-F");
    setText("Answer-F", getNumber("1-F") / getNumber("2-F") + getNumber("3-F") / getNumber("4-F"));
});
onEvent("--F", "click", function(event) {
    showElement("Answer-F");
    setText("Answer-F", getNumber("1-F") / getNumber("2-F") - getNumber("3-F") / getNumber("4-F"));
});
onEvent("X-F", "click", function(event) {
    showElement("Answer-F");
    setText("Answer-F", (getNumber("1-F") / getNumber("2-F")) * (getNumber("3-F") / getNumber("4-F")));
});
onEvent("÷F", "click", function(event) {
    showElement("Answer-F");
    setText("Answer-F", (getNumber("1-F") / getNumber("2-F")) / (getNumber("3-F") / getNumber("4-F")));
});
onEvent("C-F", "click", function(event) {
    showElement("Answer-F");
    setText("1-F", "");
    setText("2-F", "");
    setText("3-F", "");
    setText("4-F", "");
});
onEvent("Back-F", "click", function(event) {
    setScreen("Selector2");
});
//Data
onEvent("OK-K", "click", function(event) {
    setScreen("KeyValuesRWPage");
});
onEvent("Back-K", "click", function(event) {
    setScreen("Selector");
});
//Write
onEvent("Save", "click", function(event) {

```



```

var id = getText("Recallid1") + getNumber("slider1");
if (id == "Help0") {
    setText("Message", "Nope");
} else {
    getKeyValue(id, function (value) {
        if (value == undefined) {
            setKeyValue(id, getText("Message"), function () {

            });
        } else {
            setKeyValue(id, (value + ", ") + getText("Message"), function (record) {

            });
        }
    });
}
//Read
//Info
onEvent("OK-M", "click", function(event) {
    setScreen("Messenger");
});
//Send
onEvent("Send-M", "click", function(event) {
    if (getText("Username-M") == "Account") {
        setScreen("AccountCreator");
    } else {
        if ((getText("Username-M") == "Info" || getText("Username-M") == "Help") || getText("Username-M") == "help") {
            setText("Message-M", prompt("Why would you do that?"));
        } else {
            getKeyValue(getText("Username-M"), function (Message) {
                if (Message == undefined) {
                    setKeyValue(getText("Username-M"), getText("Message-M"), function () {

                    });
                } else {
                    setKeyValue(getText("Username-M"), (Message + ",\n") + getText("Message-M"), function (record) {

                    });
                }
            });
        }
    }
});
//Receive
onEvent("Recieve-M", "click", function() {
    getKeyValue(getText("Password-M"), function (Username) {
        getKeyValue(Username, function (Message) {
            setText("ReceivedMessage-M", Message);
        });
    });
});
timedLoop(100, function() {
    if (getChecked("isRepeat-M") === true) {
        getKeyValue(getText("Password-M"), function (value) {
            getKeyValue(value, function (Message) {
                setText("ReceivedMessage-M", Message);
            });
        });
    }
});

```

```

    });
    });
}
});
//AccountCreator
onEvent("Create-AC", "click", function() {
    setKeyValue(getText("Password-AC"), getText("Username-AC"), function () {});
    setScreen("Messenger");
});
//Dice Game
onEvent("Back-G", "click", function() {
    setScreen("Selector3");
});
onEvent("Roll-G", "click", function() {
    var P = randomNumber(2, 12);
    var C = randomNumber(2, 12);
    setText("PDice-G", P);
    setText("COMDice-G", C);
    if (P > C) {
        setText("WorL-G", "You Won");
    } else if ((P < C)) {
        setText("WorL-G", "You Lost");
    } else {
        setText("WorL-G", "Tie");
    }
});
//RNG
onEvent("Generate-RNG", "click", function() {
    setText("Answer-RNG", randomNumber(getNumber("Input1-RNG"), getNumber("Input2-RNG")));
    showElement("Answer-RNG");
});
onEvent("Clear-RNG", "click", function() {
    hideElement("Answer-RNG");
    setText("Input1-RNG", "");
    setText("Input2-RNG", "");
});
onEvent("Back-RNG", "click", function() {
    setScreen("Selector3");
});
//Music Player
var MPURL;
onEvent("Play-MP", "click", function() {
    if (getText("Sel-MP") == "1") {
        MPURL = "sound://category_male_voiceover/objective_achieved_male.mp3";
    } else {

    }
    playSound(MPURL, false);
});
onEvent("Stop-MP", "click", function() {
    stopSound();
});
onEvent("Back-MP", "click", function() {
    setScreen("Selector3");
});
//Classic
var NumC = "";

```

```

var Num2C = "";
var Num3C = "";
var E1C = "";
var E2C = "";
var E3C = "";
var CounterC = 0;
var TempNum2C = "";
var TempNum3C = "";
function ClassicFunction(n) {
    onEvent(n, "click", function() {
        setText("Answer-C", getText("Answer-C") + getText(n));
    });
}
function VarSetASMD(n) {
    onEvent(n, "click", function() {
        if (E1C == "") {
            CounterC = CounterC + 1;
            E1C = getText(n);
            NumC = getNumber("Answer-C");
            setText("Answer-C", "");
        } else if ((E2C == "")) {
            CounterC = CounterC + 1;
            E2C = getText(n);
            Num2C = getNumber("Answer-C");
            setText("Answer-C", "");
        } else if (E3C == "") {
            CounterC = CounterC + 1;
            E3C = getText(n);
            Num3C = getNumber("Answer-C");
            setText("Answer-C", "");
        } else {
            setText("Answer-C", "Error");
        }
    });
}
ClassicFunction("9-C");
ClassicFunction("8-C");
ClassicFunction("7-C");
ClassicFunction("6-C");
ClassicFunction("5-C");
ClassicFunction("4-C");
ClassicFunction("3-C");
ClassicFunction("2-C");
ClassicFunction("1-C");
ClassicFunction("0-C");
ClassicFunction(".-C");
VarSetASMD("+C");
VarSetASMD("-C");
VarSetASMD("/-C");
VarSetASMD("x-C");
onEvent("C-C", "click", function() {
    setText("Answer-C", "");
    NumC = "";
    Num2C = "";
    Num3C = "";
    E1C = "";
    E2C = "";

```

```

E3C = "";
TempNum2C = "";
TempNum3C = "";
CounterC = 0;
});
onEvent("Back-C", "click", function() {
    setScreen("Selector");
});
function FOA() {
    if (CounterC == 2) {
        if (E2C == "+") {
            setText("Answer-C", TempNum2C + getNumber("Answer-C"));
        } else if ((E2C == "-")) {
            setText("Answer-C", TempNum2C - getNumber("Answer-C"));
        } else if ((E2C == "X")) {
            setText("Answer-C", TempNum2C * getNumber("Answer-C"));
        } else if ((E2C == "÷")) {
            setText("Answer-C", TempNum2C / getNumber("Answer-C"));
        }
    } else if (CounterC >= 3) {
        if (E2C == "+") {
            TempNum3C = TempNum2C + getNumber("Answer-C");
            FOA3();
        } else if ((E2C == "-")) {
            TempNum3C = TempNum2C - getNumber("Answer-C");
            FOA3();
        } else if ((E2C == "X")) {
            TempNum3C = TempNum2C * getNumber("Answer-C");
            FOA3();
        } else if ((E2C == "÷")) {
            TempNum3C = TempNum2C / getNumber("Answer-C");
            FOA3();
        }
    } else {
        setText("Answer-C", "Error");
    }
}
function FOA3() {
    if (E3C == "+") {
        setText("Answer-C", TempNum3C + getNumber("Answer-C"));
    } else if ((E3C == "-")) {
        setText("Answer-C", TempNum3C - getNumber("Answer-C"));
    } else if ((E3C == "X")) {
        setText("Answer-C", TempNum3C * getNumber("Answer-C"));
    } else if ((E3C == "÷")) {
        setText("Answer-C", TempNum3C / getNumber("Answer-C"));
    }
}
onEvent("=-C", "click", function() {
    if (CounterC == 1) {
        if (E1C == "+") {
            setText("Answer-C", NumC + getNumber("Answer-C"));
        } else if ((E1C == "-")) {
            setText("Answer-C", NumC - getNumber("Answer-C"));
        } else if ((E1C == "X")) {
            setText("Answer-C", NumC * getNumber("Answer-C"));
        } else if ((E1C == "÷")) {

```

```
        setText("Answer-C", NumC / getNumber("Answer-C"));
    }
} else if ((CounterC >= 2)) {
    if (E1C == "+") {
        TempNum2C = NumC + Num2C;
        FOA();
    } else if ((E1C == "-")) {
        TempNum2C = NumC - Num2C;
        FOA();
    } else if ((E1C == "×")) {
        TempNum2C = NumC * Num2C;
        FOA();
    } else if ((E1C == "÷")) {
        TempNum2C = NumC / Num2C;
        FOA();
    }
} else {
    setText("Answer-C", "Error");
}
});
```

Works Cited/Bibliography

Code.org