**THIẾT KẾ WEB – ASSIGNMENT 05**

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**A01.html**

<!DOCTYPE html>

<html>

<head>

    <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

    <title>A01</title>

    <script type="text/javascript" src="A01.js"></script>

</head>

<body>

</body>

</html>

**A01.js**

id = prompt("Mời bạn nhập MSSV: ");

Name = prompt("Mời bạn nhập Họ và tên: ");

Class = prompt("Mời bạn nhập Lớp: ");

*var* info = [id, Name, Class];

document.write("<table width='100%' border='1' cellspacing='0' cellpadding='0' >");

document.write("<tr><td colspan='3' align=center> Danh sách sinh viên </td></tr>");

document.write("<tr>");

document.write("<td align=center> MSSV </td>");

document.write("<td align=center> Họ tên </td>");

document.write("<td align=center> Lớp </td>");

document.write("</tr>");

document.write("<tr>");

*for* (i = 0; i < 3; i++)

{

    document.write("<td align=center>" + info[i] + "</td>");

}

document.write("</tr>");

document.write("</table>");

**Result**

**Graphical user interface, application

Description automatically generated Graphical user interface, application, table

Description automatically generated**

**A02.html**

<!DOCTYPE html>

<html>

<head>

    <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

    <title>A02</title>

    <link href="A02.css" rel="stylesheet" type="text/css" />

    <script type="text/javascript" src="A02.js"></script>

</head>

<body>

    <form action="" method="get" name="frmInvoice">

        <table cellpadding="0" cellspacing="0">

            <tr class="title">

                <td class="id"> STT </td>

                <td> Tên hàng </td>

                <td class="input"> Số lượng có </td>

                <td class="input"> Số lượng mua </td>

                <td class="input"> Đơn giá </td>

                <td class="chk"> Chọn mua </td>

            </tr>

            <tr>

                <td class="id"> 1 </td>

                <td> CPU </td>

                <td> <input name="SoLuongCo" id="A1" type="text" value="10" readonly="readonly"/> </td>

                <td> <input name="SoLuongMua" id="B1" type="text" onChange="chk(1)"/> </td>

                <td> <input name="DonGia" id="C1" type="text" value="100" readonly="readonly"/> </td>

                <td class="chk"> <input id="chk1" type="checkbox" onchange="check(1)"/> </td>

            </tr>

            <tr>

                <td class="id"> 2 </td>

                <td> RAM </td>

                <td> <input name="SoLuongCo" id="A2" type="text" value="10" readonly="readonly"/> </td>

                <td> <input name="SoLuongMua" id="B2" type="text" onchange="chk(2)"/> </td>

                <td> <input name="DonGia" id="C2" type="text" value="50" readonly="readonly"/> </td>

                <td class="chk"> <input id="chk2" type="checkbox" onchange="check(2)"/> </td>

            </tr>

            <tr>

                <td class="id"> 3 </td>

                <td> HDD </td>

                <td> <input name="SoLuongCo" id="A3" type="text" value="10" readonly="readonly"/> </td>

                <td> <input name="SoLuongMua" id="B3" type="text" onchange="chk(3)"/> </td>

                <td> <input name="DonGia" id="C3" type="text" value="80" readonly="readonly"/> </td>

                <td class="chk"> <input id="chk3" name="ChonMua" type="checkbox" onchange="check(3)"/> </td>

            </tr>

            <tr>

                <td></td>

                <td> <input type="button" value="OK" onclick="calculate()" </td>

                <td class="totalCell" colspan="3"> Tổng: <input name="Total" type="text" readonly="readonly"/> </td>

                <td class="chk"> <input id="chkVAT" name="VAT" type="checkbox"/> VAT </td>

            </tr>

        </table>

    </form>

    <p id="demo"></p>

</body>

</html>

**A02.css**

*@charset* "utf-8";

table, tr, td {

    border: 1px solid #BFBFBF;

}

table {

    width: 100%;

    padding: 0;

    margin: 0;

}

.input {

    width: 30px;

}

.id, .chk {

    text-align: center;

}

.totalCell {

    text-align: right;

}

.title > td {

    text-align: center;

}

**A02.js**

*function* chk(row)

{

*var* b = parseInt(document.getElementById("B" + row).value);

*var* a = parseInt(document.getElementById("A" + row).value);

*if* (b < 0 || b > a)

    {

        alert("Số lượng không đủ đáp ứng. Xin hãy nhập lại.");

        document.getElementById('B' + row).value = '';

    }

}

*function* check(row)

{

*var* chkNode = document.getElementById("chk" + row);

*if* (chkNode.checked == true) {

*var* b = parseInt(document.getElementById('B' + row).value);

*var* c = parseInt(document.getElementById('C' + row).value);

*var* result = b \* c;

*return* result;

    }

*else*

    {

*return* 0;

    }

}

*function* calculate()

{

*var* numRow = parseInt((document.getElementsByName("SoLuongCo")).length);

*var* total = 0;

*for* (i = 0; i < numRow; i++)

    {

*var* i\_total = check(i+1);

        total = total + i\_total;

    }

*var* chkVat = document.getElementById("chkVAT");

*if* (chkVat.checked == true)

    {

        total = total + total \* 0.1;

    }

    document.frmInvoice.Total.value = total;

}

**Result**

**Table

Description automatically generated with medium confidence**

**A03.html**

<!DOCTYPE html>

<html>

<head>

    <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

    <title>Calculator</title>

    <link href="A03.css" rel="stylesheet" type="text/css" />

</head>

<body>

    <div id="container">

        <div id="calculator">

            <div id="result">

                <div id="history">

                    <p id="history-value"></p>

                </div>

                <div id="output">

                    <p id="output-value"></p>

                </div>

            </div>

            <div id="keyboard">

                <button class="operator" id="backspace">CE</button>

                <button class="operator" id="clear">C</button>

                <button class="number" id="plusmn">&plusmn;</button>

                <button class="operator" id="%">%</button>

                <button class="number" id="7">7</button>

                <button class="number" id="8">8</button>

                <button class="number" id="9">9</button>

                <button class="operator" id="/">&divide;</button>

                <button class="number" id="4">4</button>

                <button class="number" id="5">5</button>

                <button class="number" id="6">6</button>

                <button class="operator" id="\*">&times;</button>

                <button class="number" id="1">1</button>

                <button class="number" id="2">2</button>

                <button class="number" id="3">3</button>

                <button class="operator" id="-">-</button>

                <button class="number" id="0">0</button>

                <button class="number" id=".">.</button>

                <button class="operator" id="equal">=</button>

                <button class="operator" id="+">+</button>

            </div>

        </div>

    </div>

    <script type="text/javascript" src="A03.js"></script>

</body>

</html>

**A03.css**

\* {

    margin: 0px;

    padding: 0px;

}

body {

    background: #2d354a;

    font-family: dosis, sans-serif;

}

#container {

    border: 1px solid #2d354a;

    width: 318px;

    height: 480px;

    position: fixed;

    left: 38%;

    top: 10%;

    box-shadow: 2px 4px 19px;

    background: #2d354a;

    border-radius: 20px;

}

#calculator {

    margin: 40px 7%;

}

#result {

    background: white;

    width: 247px;

    height: 60px;

    padding: 10px;

    margin: 10px 0%;

    border-radius: 4px;

    border: none;

    font-family: comic Neue, cursive;

    font-weight: bolder;

    text-align: right;

}

#history {

    height: 20px;

    margin: 0 20px;

    font-size: 15px;

    color: #919191;

}

#output {

    margin: 0 20px;

    font-size: 30px;

}

.operator, .number {

    margin: 5px;

    width: 55px;

    height: 55px;

    border-radius: 60px;

    font-size: 20px;

    border: none;

    border-bottom: none;

    box-shadow: 5px 0px 8px 1px #191919;

    background: white;

    color: #2d354a;

    cursor: pointer;

    font-family: comic Neue, cursive;

    font-weight: bolder;

    outline: none;

}

.number:hover {

    background: #CACCCE;

}

.operator, #plusmn {

    background: #325683;

    color: white;

}

.operator:hover, #plusmn:hover {

    background: #274869;

}

#backspace, #clear, #equal {

    color: #2d354a;

    background: #D97E5F;

}

#backspace:hover, #clear:hover, #equal:hover {

    background: #B5694F;

}

**A03.js**

*function* getHistory() {

*return* document.getElementById("history-value").innerText;

}

*function* printHistory(num) {

    document.getElementById("history-value").innerText = num;

}

*function* getOutput() {

*return* document.getElementById("output-value").innerText;

}

*function* printOutput(num) {

*if* (num=="") {

        document.getElementById("output-value").innerText = num;

    }

*else* {

        document.getElementById("output-value").innerText = getFormattedNumer(num);

    }

}

*function* getFormattedNumer(num) {

*if* (num == "-") {

*return* "";

    }

*var* value = num.toLocaleString("en");

*return* value;

}

*function* reverseNumberFormat(num) {

*return* num.replace(/,/g, '');

}

*var* operator = document.getElementsByClassName("operator");

*for* (*var* i = 0; i < operator.length; i++) {

    operator[i].addEventListener('click', *function*() {

*if* (*this*.id == "clear") {

            printHistory("");

            printOutput("");

        }

*else* *if* (*this*.id == "backspace") {

*var* output = reverseNumberFormat(getOutput()).toString();

*if* (output) {

                output = output.substring(0, output.length-1);

                printOutput(output);

            }

        }

*else* {

*var* output = getOutput();

*var* history = getHistory();

*if* (output == "" && history != "") {

*if* (isNaN(history[history.length-1])) {

                    history = history.substring(0, history.length-1);

                }

            }

*if* (output != "" || history != "") {

                output = output == "" ? output:reverseNumberFormat(output);

                history = history + output;

*if* (*this*.id == "equal") {

*var* result = eval(history);

                    printOutput(result);

                    printHistory("");

                }

*else* {

                    history = history + *this*.id;

                    printHistory(history);

                    printOutput("");

                }

            }

        }

    });

}

*var* number = document.getElementsByClassName("number");

*for* (*var* i = 0; i < number.length; i++) {

    number[i].addEventListener('click', *function*() {

*var* output = reverseNumberFormat(getOutput());

*if* (output != NaN) {

*if* (*this*.id == "plusmn") {

*if* (output[0] == "-") {

                    output = output.substring(1, output.length);

                }

*else* {

                    output = "-" + output; }

            }

*else* {

                output = output + *this*.id;}

            printOutput(output);

        }

    });

}

**Result**

**A screenshot of a calculator

Description automatically generated with medium confidence**

**A04.html**

<!DOCTYPE html>

<html>

<head>

    <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

    <title>Clock</title>

    <link href="A04.css" rel="stylesheet" type="text/css" />

</head>

<body>

    <div class="clock">

        <div class="hour">

            <div class="hr" id="hr"></div>

        </div>

        <div class="min">

            <div class="mn" id="mn"></div>

        </div>

        <div class="sec">

            <div class="sc" id="sc"></div>

        </div>

        <span class="digitalClock" id="digitalClock">10:12 AM</span>

    </div>

    <script type="text/javascript" src="A04.js"></script>

</body>

</html>

**A04.css**

\* {

    margin: 0;

    padding: 0;

    box-sizing: border-box;

}

body {

    display: flex;

    justify-content: center;

    align-items: center;

    min-height: 100vh;

    background: #68a4ff;

}

.clock {

    position: fixed;

    width: 350px;

    height: 350px;

    display: flex;

    justify-content: center;

    align-items: center;

    background: #fff url(../images\_Lab05/clock\_new.png);

    background-size: cover;

    border-radius: 50%;

    border: 20px solid #fff;

    box-shadow: inset 0 0 30px rgba(0,0,0,.1),

                0 20px 20px rgba(0,0,0,.2),

                0 0 0 4px rgba(255,255,255,1);

}

.clock::before {

    content: ' ';

    position: absolute;

    width: 15px;

    height: 15px;

    background: #848484;

    border: 2px solid #fff;

    z-index: 4;

    border-radius: 50%;

}

.hour, .min, .sec {

    position: absolute;

}

.hour, .hr {

    width: 160px;

    height: 160px;

    z-index: 1;

}

.min, .mn {

    width: 190px;

    height: 190px;

    z-index: 2;

}

.sec, .sc {

    width: 230px;

    height: 230px;

    z-index: 3;

}

.hr, .mn, .sc {

    display: flex;

    justify-content: center;

    position: absolute;

    border-radius: 50%;

}

.hr::before {

    content: ' ';

    position: absolute;

    width: 8px;

    height: 80px;

    background: #848484;

    border-radius: 6px 6px 0 0;

}

.mn::before {

    content: ' ';

    position: absolute;

    width: 4px;

    height: 90px;

    background: #d6d6d6;

    border-radius: 6px 6px 0 0;

}

.sc::before {

    content: ' ';

    position: absolute;

    width: 2px;

    height: 150px;

    background: #ff6767;

    border-radius: 6px 6px 0 0;

}

.digitalClock {

    position: absolute;

    z-index: 0;

    font-family: sans-serif;

    background: #f3f2f2;

    padding: 6px 10px 6px 10px;

    font-size: 22px;

    font-weight: bold;

    top: 68%;

    left: 33%;

    transform: translateY(-50%);

    box-shadow: inset 0 0 2px 2px #0000001a;

    border-radius: 2px;

    text-align: center;

}

**A04.js**

*var* hour = document.getElementById("hr");

*var* min = document.getElementById("mn");

*var* sec = document.getElementById("sc");

*var* digitalClock = document.getElementById("digitalClock");

*function* setClockTime() {

*const* day = new Date();

*const* hh = day.getHours();

*const* mm = day.getMinutes();

*const* ss = day.getSeconds();

*const* hourDeg = (hh \* 30) + (mm \* 0.5);

*const* minDeg = (mm \* 6) + (ss \* 0.1);

*const* secDeg = (ss \* 6);

    hour.style.transform = `rotateZ(${hourDeg}deg)`;

    min.style.transform = `rotateZ(${minDeg}deg)`;

    sec.style.transform = `rotateZ(${secDeg}deg)`;

    digitalClock.innerText = `${hh%12<10?'0':''}${hh % 12}:${mm<10?'0':''}${mm} ${hh>12?'PM':'AM'}`;

}

setClockTime();

setInterval(setClockTime, 1000);

**Result**

**A screenshot of a clock

Description automatically generated with medium confidence**