

ណែនាំអោយស្គាល់ពី Validation Control ក្នុង Java Script

I. ដូចម្ដេចទៅដែលហៅថា Validation Control?

នៅក្នុងJava Script ការកំណត់នូវ Validation ទៅលើ Control Box សំខាន់ៗ របស់
Website គឺជាចំណុចមួយដែលសំខាន់ហើយមិនអាចអត់វាបាន។ Validation Control គឺសំដៅ
លើការ កំនត់នូវ ថាការបញ្ជូលទិន្នន័យក្នុង TextBox ឬ Control ណាមួយមានលក្ខណះ គ្រឹម គ្រូវទៅ
តាមតំរូវការរបស់ developer ឬទេ។ ខាងក្រោមនេះគឺជាការកំនត់លើ Validation ទៅ តាម Control
box ដែលសំខាន់ៗរបស់ JavaScript ដូចជា៖

ឧទាឋាវណ៏ ១៖

```
Run »
<!DOCTYPE html>
<html>
<head>
<script>
function validateForm() {
   var fname = document.forms["myForm"]["fname"].value;
   var lname = document.forms["myForm"]["lname"].value;
    if (fname == "" || lname=="") {
        document.getElementById('dis').innerHTML="Please Input Value first...!";
        return false;
</script>
</head>
<body>
<form name="myForm" action="/action_page.php"</pre>
onsubmit="return validateForm()" method="post">
First Name: <br/> <input type="text" name="fname">
<input type="submit" value="Submit"><br/>
Last Name: <br/> <input type="text" name="lname">
<input type="reset" value="Reset">
</form>
</body>
</html>
```

លទ្ធផលទទួលបាន៖

First Name:	
	Submit
Last Name:	
	Reset
Please Input Value first!	

ឧទាបាវណ៏ ២៖

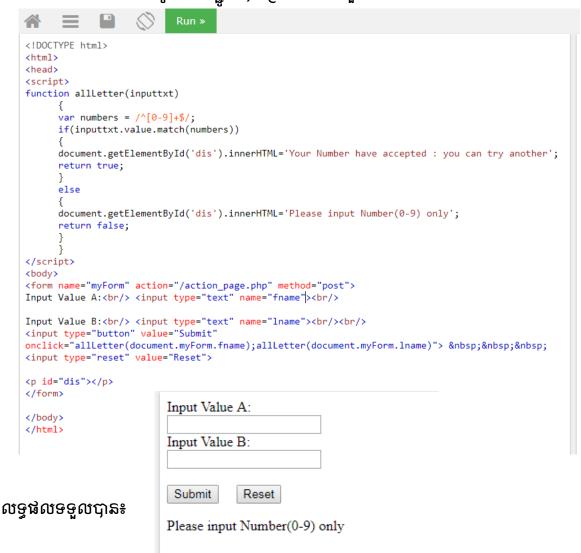


ឧទាបារណ៏ ៣៖ ការកំនត់នូវការបញ្ជូលបានត្រឹមតែអក្សរមួយគត់.



```
<body>
 <form name="myForm" action="/action_page.php" method="post">
 First Name: <br/>
<input type="text" name="fname" required>
 <input type="button" value="Submit"</pre>
onclick="allLetter(document.myForm.fname);allLetter(document.myForm.lname)"><br/>br/>
 Last Name: <br/> <input type="text" name="lname" required>
 <input type="reset" value="Reset">
 </form>
 </body>
                        First Name:
 </html>
                        Dara
                                                 Submit
                        Last Name:
                        Sok
                                                 Reset
លទ្ធផលទទួលបាន៖
```

ឧទាបារណ៏ ៤៖ ការកំនត់នូវការបញ្ជូលបានត្រឹមតែលេខមួយគត់.





ឧទាហរណ៏ ៥៖ ការកំនត់នូវការបញ្ជូលបានត្រឹមតែលេខ និង អក្សរ A-Z, a-zគត់.

```
<!DOCTYPE html>
        <html>
        <head>
        <script>
        function allLetter(inputtxt)
              var numbers =letters = /^[0-9a-zA-Z]+$/;
              if(inputtxt.value.match(numbers))
              document.getElementById('dis').innerHTML='Your Number have accepted : you can try another';
              return true;
              else
              {
              document.getElementById('dis').innerHTML='Please input Number Floating (0-9) and A-Z only';
              return false;
        </script>
        <form name="myForm" action="/action page.php" method="post">
        Input Floating Value A:<br/> <input type="text" name="fname"><br/> <br/>
        Input Floating Value B:<br/> <input type="text" name="lname"><br/> <br/> <br/> <br/>
        <input type="button" value="Submit"</pre>
        onclick="allLetter(document.myForm.fname);allLetter(document.myForm.lname)">    
        <input type="reset" value="Reset">
        </form>
                                Input Floating Value A:
        </body>
        </html>
                                Input Floating Value B:
លទ្ធផលទទួលបាន៖
                                  Submit
                                               Reset
                                Please input Number Floating (0-9) and A-Z only
```

ឧទាឋាវណ៏ ៦៖ Javascript function to restrict length of user input

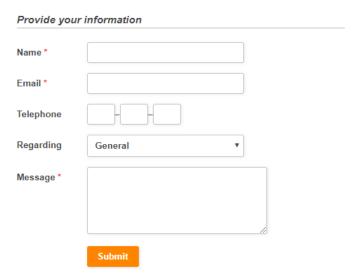
```
<!DOCTYPE html>
<html>
<head>
<script>
function stringlength(inputtxt, minlength, maxlength)
var field = inputtxt.value;
var mnlen = minlength;
var mxlen = maxlength;
if(field.length<mnlen || field.length> mxlen)
document.getElementById('dis').innerHTML="Please input the user id between " +mnlen+ " and "
+mxlen+ " characters";
return false;
}
else
document.getElementById('dis').innerHTML='Your userid have accepted.';
return true;
</script>
```



<body></body>	
	="myForm" action="/action_page.php" method="post">
Input valu	e A: <input name="fname" type="text"/>
<pre><input pre="" typ<=""/></pre>	e B: <input name="lname" type="text"/> e="button" value="Submit" tringlength(document.myForm.fname,1,10);stringlength(document.myForm.lname,1,10)">
&nbs	
<pre><input pre="" typ<=""/></pre>	e="reset" value="Reset">
<pre></pre>	">
	Input Value A:
	ETEC CENTER
	Input Value B:
	I.T Professional
លទ្ធផលទទួល	ប្រាសិ៖ Submit Reset Please input the user id between 1 and 10 characters

លំហាត់អនុវត្តន៏

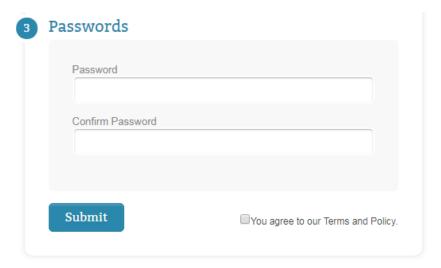
១) ចូវសវសេវ Validation Control សំរាប់៖



សំរាប់ Field ឈ្មោះបញ្ជូលបានតែអក្សរ A-Z, a-z និង Space ចំណែក email បញ្ជូលបាន តែ អក្សរ a-z, @, . 0-9 និង លេខទូរសព្ទ បានតែលេខ ពី 0-9?

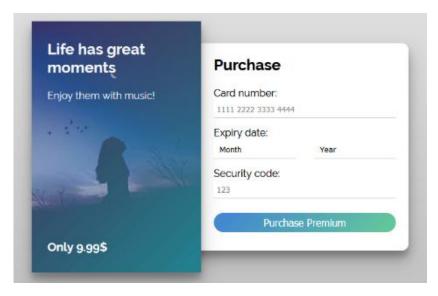


២) ចូរសរសេរ Validation Control សំរាប់៖



សំរាប់ Field Password និង Confirm Password បញ្ជូលបានតែអក្សរ A-Z, a-z និង @, \$ និង 0-9?

៣) ចូរសរសេរ Validation Control សំរាប់៖



សំរាប់ Card Number និង Security បញ្ជូលបានតែ0-9 ចំនួន 15 គួលេខ និង Month បញ្ជូលបានតែ a-z, A-Z និង Year បញ្ជូលបាន ៤ Digit ហើយជាតួលេខថែមទៀត។

ឧទាបារណ៏ ១៖

```
Run »
<html>
<script type="text/javascript">
  function checkForm(form)
    // validation fails if the input is blank
   if(form.inputfield.value == "") {
     alert("Error: Input is empty!");
     form.inputfield.focus();
     return false;
   // regular expression to match only alphanumeric characters and spaces
   var re = /^[\w] + $/;
    // validation fails if the input doesn't match our regular expression
   if(!re.test(form.inputfield.value)) {
     alert("Error: Input contains invalid characters!");
     form.inputfield.focus();
     return false;
    // validation was successful
   return true;
</script>
<body>
<h1 align=center> Regular expression to match only alphanumeric characters and spaces</h1>
<hr />
<form method="POST" action="#" onsubmit="return checkForm(this);">
Input: <input type="text" size="32" name="inputfield">
<input type="submit">
</body>
</form>
</html>
```

លទ្ធផលទទួលបាន៖

Input: Submit

ឧទាបារណ៏ ២៖





ឧទាបារណ៏ ៣៖ HTML 5

```
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```

លំហាត់អនុវត្តន៏ ១(គេអោយកូដ Java Script ដូចខាងព្រោមចូរសរសេរកូដអោយគេអាច បង្កើតនូវ Form ហើយ ហៅ Script នោះចេញមកព្រាវិញ្ញ)

```
function checkForm(form)
{
   if(form.username.value == "") {
      alert("Error: Username cannot be blank!");
      form.username.focus();
      return false;
   }
   re = /^\w+$/;
   if(!re.test(form.username.value)) {
      alert("Error: Username must contain only letters, numbers and underscores!");
      form.username.focus();
      return false;
   }
}
```

```
if(form.pwd1.value != "" && form.pwd1.value == form.pwd2.value) {
     if(form.pwd1.value.length < 6) {
       alert("Error: Password must contain at least six characters!");
       form.pwd1.focus();
       return false;
     if(form.pwd1.value == form.username.value) {
       alert("Error: Password must be different from Username!");
       form.pwd1.focus();
       return false;
     re = /[0-9]/;
     if(!re.test(form.pwd1.value)) {
        alert("Error: password must contain at least one number (0-9)!");
        form.pwd1.focus();
        return false;
     re = /[a-z]/;
     if(!re.test(form.pwd1.value)) {
        alert("Error: password must contain at least one lowercase letter (a-z)!");
        form.pwd1.focus();
       return false;
     re = /[A-Z]/;
     if(!re.test(form.pwd1.value)) {
        alert("Error: password must contain at least one uppercase letter (A-Z)!");
        form.pwd1.focus();
        return false;
     }
    } else {
     alert("Error: Please check that you've entered and confirmed your password!");
     form.pwd1.focus();
     return false;
    alert("You entered a valid password: " + form.pwd1.value);
    return true;
</script>
```

លទ្ធផលទទួលបាន៖





លំហាត់អនុវត្តន៏ ២(ចូរប្រើប្រាស់នូវ HTML5 ជាមួយនិងការដាក់ Icon លើ Text Field ?



Ref: https://www.the-art-of-web.com/javascript/validate-password/

លំហាត់អនុវត្តន៏ ៣(ចូរប្រើប្រាស់នូវ HTML5 ជាមួយនិងការដាក់ Icon លើ Text Field ដោយប្រើប្រាស់នូវ Event change សំរាប់ Validate ទៅកាន់ Form ដូចខាងក្រោម៖

✓ Name: A-Z, a-z 🛱 Space

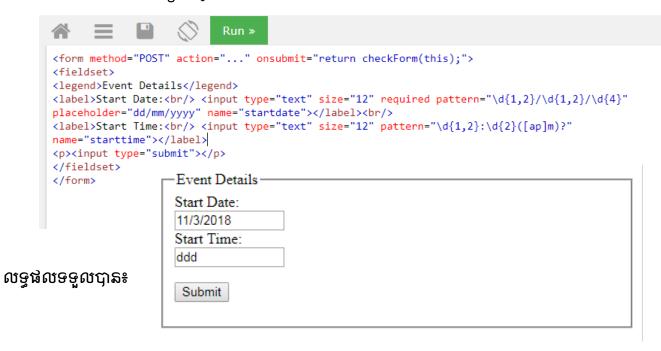
✓ Email: a-z, 0-9, @, _ , .

√ Telephone: 0-9,() 🛱 Space

out	What you will study	Career	Experience	Studying at UON	How to ap
Stu	ıdy a degred	e in co	mputer	science at	UON
_					
Nam	ress:				
Add	ress:				
E-ma	ail ress:				
Pass	sword:				
Tele	phone:			Caralla	1 1
	ECT YOUR				M B
er.					The same of the sa
	IRSE				



- II. ការ Validate ទៅលើ ពត៌មានជាប្រភេទថ្ងៃខែឆ្នាំ
 - 2.1. របៀបធ្វើ Validate តាម HTML5



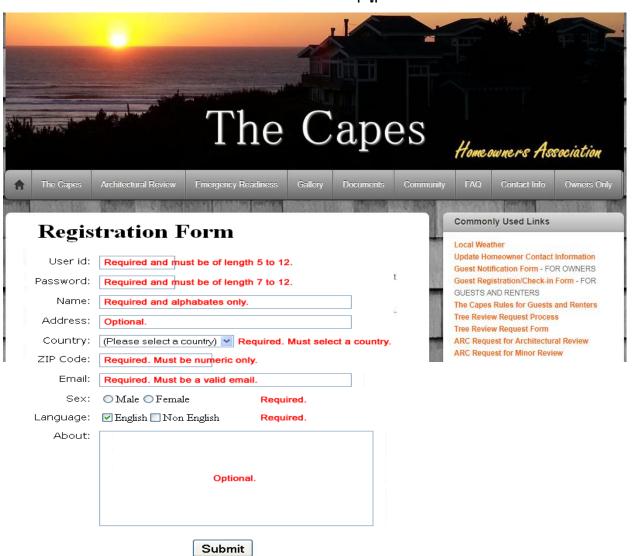
2.2. របៀបធ្វើ Validate តាម JavaScript

```
Run »
<script type="text/javascript">
  function checkForm(form)
    // regular expression to match required date format
   re = /^{d{1,2}}/d{1,2}//d{4};
   if(form.startdate.value != '' && !form.startdate.value.match(re)) {
      alert("Invalid date format: " + form.startdate.value);
      form.startdate.focus();
      return false;
    // regular expression to match required time format
   re = /^{d{1,2}:\d{2}([ap]m)?}/;
    if(form.starttime.value != '' && !form.starttime.value.match(re)) {
      alert("Invalid time format: " + form.starttime.value);
      form.starttime.focus();
      return false;
    alert("All input fields have been validated!");
    return true;
</script>
```



```
<form method="POST" action="..." onsubmit="return checkForm(this);">
  <fieldset>
  <legend>Event Details</legend>
  <label>Start Date:<br/> <input type="text" size="12" placeholder="dd/mm/yyyy" name="startdate">
  </label><br/>
  <label>Start Time:<br/><input type="text" size="12" pattern="\d{1,2}:\d{2}([ap]m)?"</pre>
  name="starttime"></label>
  <input type="submit">
  </fieldset>
                          Event Details
   </form>
                          Start Date:
                           11/3/2018
លទ្ធផលទទួលបាន៖
                          Start Time:
                           11:15
                           Submit
```

លំហាត់អនុវត្តន៏



រៀបរៀងដោយសាស្ត្រាចារ្យៈ ហេង ភក្តិណា អនុបណ្ឌិតពត៌មានវិទ្យា ឯកទេសបង្កើតកម្មវិធី



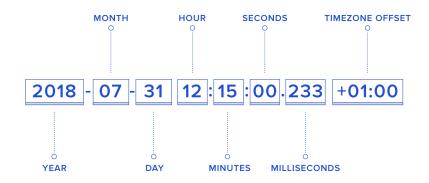
ណែនាំអោយស្គាល់ពី Build In Function ក្នុង Java Script

នៅក្នុង Java Script មាននូវ ប្រភេទ Function ដែលគេ build វារូចជាច្រើនសំរាប់ ជំនួយអ្នកក្នុងការសរសេរកូដអោយប្រសើរជាដើម។ Function ទាំងនោះមាននូវ មុខងារ និងតួនាទីទៅតាម បរិបទនៃការងារបស់នាក់។

Date Function

Date function គឺជាប្រភេទ Function ដែលសំរាប់ទាញយកពេលវេលា ដូចជាថ្ងៃខែឆ្នាំ ឬ ម៉ោង នាទី និង Second ជាដើម។ ខាងក្រោមគឺជាប្រភេទ Function របស់ Date និង Time ៖

- ✓ getFullYear(): ទាញយក year ដែលមាន ៤ digit number (yyyy)
- ✓ getMonth(): ទាញយកខែពី(0-11)
- ✓ getDate(): ទាញយកថ្ងៃចាប់ពី (1-31)
- ✓ getHours(): ទាញយកម៉ោង (0-23)
- ✓ getMinutes(): ទាញយកនាទី (0-59)
- ✓ getSeconds():ទាញយកវិនាទី (0-59)
- ✓ getDay(): ទាញយកថ្ងៃ (0-6)





ឧទាហរណ៍ ១៖

```
<!DOCTYPE html>
<html>
<body>
<h2>JavaScript Date function</h2>
<script>
var currentDate = new Date();
var date = currentDate.getDate();
var month = currentDate.getMonth(); //Be careful! January is 0 not 1
var year = currentDate.getFullYear();
var dateString = "Today is=" + date + "/" +(month + 1) + "/" + year;
document.getElementById("demo").innerHTML = dateString;
</script>
</body>
                          JavaScript Date function
</html>
```

លទ្ធផលទទួលបាន៖

Today is=30/10/2018

ឧទាហរណ៍ ២៖

```
Run »
<!DOCTYPE html>
<html>
<body>
<h2>JavaScript Date format function</h2>
<hr />
<script>
var myDate = new Date("October 21, 2018");
var date = myDate.getDate();
var month = myDate.getMonth();
var year = myDate.getFullYear();
function pad(n) {
    return n<10 ? '0'+n : n
var ddmmyyyy = pad(date) + "/" + pad(month + 1) + "/" + year;
document.getElementById("demo").innerHTML = "Your Format Date=" + ddmmyyyy;
</script>
</body>
</html>
```

លទ្ធផលទទួលបាន៖

JavaScript Date format function

Your Format Date=21/10/2018

ឧទាហរណ៍ ៣៖

```
<html>
<html>
<html>
<html>
<body>

<hr />

<script>
var date1 = new Date("July 19, 2014");
var date2 = new Date("July 28, 2014");

if(date1 > date2) {
    document.getElementById("demo").innerHTML=date2+ " are First date is more recent";
} else {
    document.getElementById("demo").innerHTML=date2+ " are Second date is more recent";
}

<p
```

លទ្ធផលទទួលបាន៖

Mon Jul 28 2014 00:00:00 GMT+0700 (Indochina Time) are Second date is more recent

ឧទាហរណ៍ ៤៖

```
<!DOCTYPE html>
<html>
<body>
<h2>JavaScript Get Date</h2>
<hr />
<script>
var d = new Date();
var months =
["January", "February", "March", "April", "May", "June", "July", "August", "September", "October", "November
", "December"];
\label{lem:document.getElementById("demo").innerHTML = "This Month=" + months[d.getMonth()] + " < br/> This Month=" +
Day=" + d.getDate() + "<br/>This Year=" + d.getFullYear()
</script>
</body>
</html>
```



លទ្ធផលទទួលបាន៖

JavaScript Get Date

This Month=October This Day=30 This Year=2018

លំហាត់អនុវត្តន៏

JavaScript Date Object lets us work with dates:

Tue Oct 30 2018 09:57:57 GMT+0700 (Indochina Time)

Year: 2018 Month: 10 Day: 30 Hours: 9 Minutes 57 Seconds: 57

ឧទាហរណ៍ ៥៖

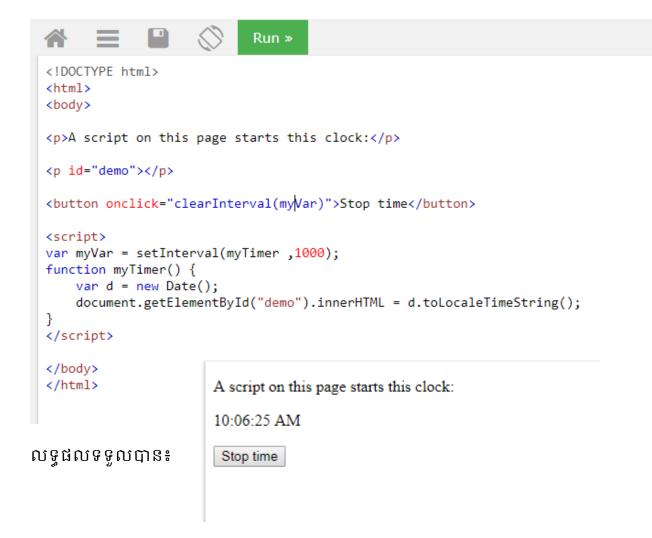
```
Run »
<!DOCTYPE html>
<html>
<head>
<script>
function startTime() {
   var today = new Date();
   var h = today.getHours();
   var m = today.getMinutes();
   var s = today.getSeconds();
    m = checkTime(m);
    s = checkTime(s);
    document.getElementById('txt').innerHTML ="Your Time now running=" +
   h + ":" + m + ":" + s;
   var t = setTimeout(startTime, 500);
function checkTime(i) {
   if (i < 10) {i = "0" + i}; // add zero in front of numbers < 10
    return i;
</script>
</head>
<body onload="startTime()">
<h3> Timing function JavaScript</h3>
<hr/>
<div id="txt"></div>
</body>
</html>
```

លទ្ធផលទទួលបាន៖

Timing function JavaScript

Your Time now running=10:05:08

ឧទាហរណ៍ ៦៖





ឧទាហរណ៍ ៧៖

```
Run »
<!DOCTYPE html>
<html>
<body>
<h3> Display video with 1 Minute</h3>
<button onclick="openNext();">Click it</button><br/><br/>
<iframe id='the_iframe' width="500" height="200"></iframe>
<script>
var urls = [
    'https://www.youtube.com/embed/wZNYDzNGB-Q',
    'https://www.youtube.com/embed/DRs0Kw2rUVQ',
    'https://www.youtube.com/embed/JmENgrVOwgA',
    'https://www.youtube.com/embed/2vEStDd6HVY'
];
var seconds = 30;
function openNext(){
    document.getElementById('the_iframe').src = urls.shift();
    if(urls.length)setTimeout('openNext()',10*1000);
</script>
</body>
</html>
```

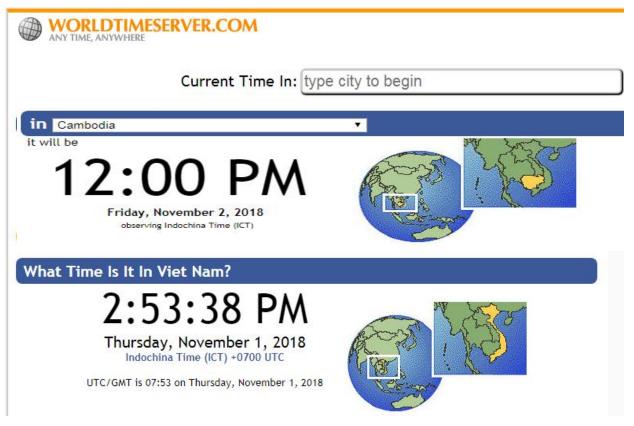
Display video with 1 Minute

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```
<html>
<head>
<title>JavaScript calendar</title>
<script>
function displayCalendar(){
var htmlContent ="";
var FebNumberOfDays ="";
var counter = 1;
var dateNow = new Date();
var m=prompt("Input Month=");
var month = m-1;
 var nextMonth = month+1; //+1; //Used to match up the current month with the correct start
date.
var prevMonth = month -1;
 var day = dateNow.getDate();
var year = dateNow.getFullYear();
 //Determing if February (28,or 29)
 if (month == 1){
    if ( (year%100!=0) && (year%4==0) || (year%400==0)){
     FebNumberOfDays = 29;
    }else{
     FebNumberOfDays = 28;
}
```



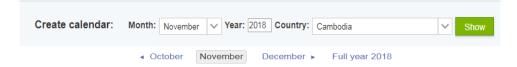
```
// names of months and week days.
  var monthNames =
 ["January","February","March","April","May","June","July","August","September","October","Novemb
 er", "December"];
 var dayNames = ["Sunday","Monday","Tuesday","Wednesday","Thrusday","Friday", "Saturday"];
  var dayPerMonth = ["31",
 ""+FebNumberOfDays+"","31","30","31","30","31","31","30","31","30","31"]
  // days in previous month and next one , and day of week.
  var nextDate = new Date(nextMonth +' 1 ,'+year);
  var weekdays= nextDate.getDay();
  var weekdays2 = weekdays
  var numOfDays = dayPerMonth[month];
  // this leave a white space for days of pervious month.
  while (weekdays>0){
    htmlContent += "";
  // used in next loop.
     weekdays--;
  // loop to build the calander body.
  while (counter <= numOfDays){</pre>
     // When to start new line.
    if (weekdays2 > 6){
        weekdays2 = 0;
        htmlContent += "";
    }
   // if counter is current day.
   // highlight current day using the CSS defined in header.
   if (counter == day){
       htmlContent +="<td class='dayNow' onMouseOver='this.style.background=\"#FF0000\";
this.style.color=\"#FFFFFF\"' "+
       "onMouseOut='this.style.background=\"#FFFFFF\";
this.style.color=\"#00FF00\"'>"+counter+"";
       htmlContent +="<td class='monthNow' onMouseOver='this.style.background=\"#FF0000\"'"+
       " onMouseOut='this.style.background=\"#FFFFFF\"'>"+counter+"";
   weekdays2++;
   counter++;
 }
 // building the calendar html body.
var calendarBody = " "
 +monthNames[month]+" "+ year +"";
 calendarBody += " Sun Mon Tues"+
 "Wed Thurs Fri Sat ";
calendarBody += "";
 calendarBody += htmlContent;
calendarBody += "";
// set the content of div .
document.getElementById("calendar").innerHTML=calendarBody;
</script>
</head>
```



```
<body onload="displayCalendar()">
 <h2><center>Demo Calendar Month</center></h2>
<div id="calendar"></div>
<style>
.monthPre{
color: gray;
 text-align: center;
.monthNow{
color: blue;
 text-align: center;
.dayNow{
border: 2px solid black;
 color: #FF0000;
 text-align: center;
.calendar td{
htmlContent: 2px;
 width: 40px;
.monthNow th{
background-color: #000000;
color: #FFFFFF;
 text-align: center;
                                                           Demo Calendar Month
.dayNames{
background: #0FF000;
color: #FFFFFF;
                                      February 2018
 text-align: center;
                                          Wed Thurs
                                                 1
                                                           3
</style>
</html>
                                                          10
                                 5
                                      6
                                            7
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```

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Calendar for November 2018 (Cambodia)

November Mon Tue Wed Thu Fri Sat Sun							
Won	140	Wed	1	2	3	4	
5	6	7	8	9	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	
26	27	28	29	30			