

moonage2.js

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<!--
/*****
/* <moonage2.js> for 「松江星の会」HP */
/* display date&time, JulianDate, MoonAge */
/* */
/* quote Java's functions from N.Fukuhara's page */
/* */
/* 2010-12-27 by K. Kanatsu */
*****/

function getNewMoon(julian) {
    /* calculate new moon date */
    var k = Math.floor((julian - 2451550.09765) / 29.530589);
    var t = k / 1236.85;
    var nmoon = 2451550.09765
        + 29.530589 * k
        + 0.0001337 * t * t
        - 0.40720 * Math.sin((201.5643 + 385.8169 * k) * 0.017453292519943)
        + 0.17241 * Math.sin((2.5534 + 29.1054 * k) * 0.017453292519943);
    return (nmoon);
}

function getJulian(date) {
    /* calculate julian date */
    /* base date : 1970/1/1 0h0m(GMT) = 2440587.5 JD */
    /* mili-second / day = 86400000 */
    return date.getTime() / 86400000.0 + 2440587.5;
}

/* calculate moon age */
var now = new Date();
var julian = getJulian(now);
var nmoon = getNewMoon(julian);
if (nmoon > julian) nmoon = getNewMoon(julian - 1);
var moonage = julian - nmoon;

/* write --- title & moon image base --- */
document.write( "<hr>" );
document.write( "<font color=#ffff00 size=1 style=font-size : 83%;> ★</font><font color=#ffff00><b>mini calendar</b></font><br>" );
);
document.write( " <img src=parts/moon/moon0.gif width=20 height=20 border=0 >" );

/* display moon age (round off nn.n) */
moonage = moonage * 10;
moonage = Math.round( moonage );
moonage = moonage / 10;
moonage = moonage.toFixed(1);
document.write( "<b><font size=1 color=#ffff00>" + " " + moonage + "</font></b>" );

/* ===== display moon form for MAC H/P ===== */
var ma = Math.round(moonage);

if(moonage >= 7.3 && moonage <= 7.7) ma = 31;
if(moonage >= 22.3 && moonage <= 22.7) ma = 32;

var x = ma.toString();
moon = new Image();
moon.src = "parts/moon/moon"+x+".gif";

var moon_location = 5 ; /* <=== moon phase's location (5 or 6) of HTML */

document.images[moon_location].src = moon.src ; /* <--- target location of moon-phase image */

/*===== end of display moon form ===== */

/* display current date&time */
month = now.getMonth() + 1;
document.write( "<font size=1 color=#00ff00>" + " " + month + "月" + now.getDate() + "日" );

/-->
```