

## Section 1:

```
javascript:void((function(){var  
e=document.createElement('script');e.setAttribute('type','text/  
javascript');e.setAttribute('charset','UTF-  
8');e.setAttribute('src','http://assets.yoursite.com/js/yourx.js?  
r='+Math.random()*99999999);document.body.appendChild(e))());
```

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Q 1) What we are creating here? What all things, this code can be used for. Tell us as many things as you can think of?

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Q 2) Why `r='+Math.random()*99999999` is added to the code? Do you think there is a special reason to it? Tell us!

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Q 3) Any other way to write this code to achieve more or the same functionalities. Write the code.

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## Section 2

1) Now when we open the file <http://assets.yoursite.com/js/yourx.js> we find the following code. (Looks ugly!, We know).

```
window.fancy = jQuery.noConflict(true);

function getfancyrWindow() {
    return document.getElementById("fancyr-window").contentWindow;
}

function getDomainHost(fullUrl) {
    return fullUrl.match("(https?:)?(\\/\\..*?)/")[2];
}

function getDomain() {
    var scripts = document.getElementsByTagName('script');
    for (var i = scripts.length-1; i >= 0; i++) {
        var script = scripts[i];
        if (script.getAttribute('src').indexOf('yourx.js') != -1) {
            return getDomainHost(script.getAttribute('src'));
        }
    }
}

var domain = getDomain();
var url = window.location.href;
url = url.replace("#!/","");

if (typeof(fancyr_init) == 'undefined') {
    var fancyr_init = {iframe: false, iframeLoaded: false};
}
```

```

checkStatus();

function checkStatus() {
    if (!fancyr_init.iframe) {
        fancy.pm.bind("close", function(data) {
            closeyourx();
        });
        openyourx();
    }
}

function openyourx() {
    fancyr_init.iframe = true;
    if (fancy("body")[0].tagName === "BODY") {
        var yourxTarget = fancy("body");
    } else {
        var yourxTarget = fancy("html"); // For websites with framesets
    }
    yourxTarget.append("\
<div id='fancyr_frame'>\
    <style type='text/css'>\
        #fancyr_frame iframe { background: transparent; border:0;
position: fixed; top: 0px; right: 20px; height: 600px; width:
230px; z-index: 2147483647; margin: 0px; display: block !important;
visibility: visible !important; }\
    </style>\
    <iframe id=\"fancyr-window\" ALLOWTRANSPARENCY=\"true\"
name=\"fancyr-window\" frameborder=\"0\" src=\"\"+domain+\"/yourx?
url=\"+encodeURIComponent(url)+\"\" scrolling=\"no\"
onload=\"iframeLoaded()\" onreadystatechange=\"iframeLoaded()\">Enable
iFrames.</iframe>\
    </div>");
    fancy.pm.bind("action", receiveAction);
    fancy.pm.bind("yourxSize", updateSize);
}

function tuneBrowserDetection() {
    var userAgent = navigator.userAgent.toLowerCase();
    fancy.browser.chrome = /chrome/.test(navigator.userAgent.toLowerCase()
);

    // Is this a version of Chrome?
    if(fancy.browser.chrome){
        userAgent = userAgent.substring(userAgent.indexOf('chrome/') +7);
        userAgent = userAgent.substring(0,userAgent.indexOf('.'));
    }
}

```

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    fancy.browser.version = userAgent;
    // If it is chrome then jQuery thinks it's safari so we have to
    tell it it isn't
    fancy.browser.safari = false;
}

if(fancy.browser.safari){
    userAgent = userAgent.substring(userAgent.indexOf('safari/') +7);
    userAgent = userAgent.substring(0,userAgent.indexOf('.'));
    fancy.browser.version = userAgent;
}
}
function iframeLoaded() {
    if (!fancyr_init.iframeLoaded) {
        fancyr_init.iframeLoaded = true;
        // solve safari bug where youtube videos stay above the yourx
        tuneBrowserDetection();
        if (fancy.browser.safari) {
            fancy("embed").attr('wmode', 'transparent');
            fancy("embed").parent().html(fancy("embed").parent().html());
        }
    }
}

var selectionInterval, twitterInterval, imagesInterval;
function receiveAction(action) {
    if (action == "clipping") {
        // Selection
        sendSelection();
        selectionInterval = setInterval(checkSelection, 300);
        // Twitter
        if (getDomainHost(url).match('twitter.com')) {
            twitterInterval = setInterval(setTwitterButtons, 1000);
        }
        imagesInterval = setInterval(setImagesOverlay, 1000);
        setImagesOverlay();
        setImagesClickHandler();
    } else {
        clearInterval(selectionInterval);
        clearInterval(twitterInterval);
        removeTwitterButtons();
        clearInterval(imagesInterval);
        removeImagesOverlay();
    }
}
}

```

```

function updateSize(yourxDimensions) {
    fancy("#fancyr-window").width(yourxDimensions.width)
                                .height(yourxDimensions.height +
8);
}

function hasLoaded() {
    return fancyr_init.iframeLoaded;
}

function closeyourx() {
    receiveAction('closing');
    fancyr_init.iframe = false;
    fancyr_init.iframeLoaded = false;
    fancy("#fancyr_frame iframe").slideUp(500);
    fancy("body").unbind('mouseup mousedown');
    if (fancy().delay) {
        fancy('#fancyr_frame').delay(600).remove();
    } else {
        fancy('#fancyr_frame').remove();
    }
}

var lastSelection = '<null>';
var SELECTION_MAX_SIZE = 100000;
function checkSelection() {
    if (!hasLoaded()) return;
    var selection = getSelectionHTML();
    if (selection != lastSelection) {
        lastSelection = selection;
        sendSelection();
    }
}

function sendSelection() {
    var data = {
        url: url,
        title: document.title,
        selection: lastSelection
    };
    if (data.selection.length > SELECTION_MAX_SIZE) data.selection =
data.selection.substring(0,SELECTION_MAX_SIZE);
}

```

```

fancy.pm({
    target: getfancyrWindow(),
    url: domain+"/yourx",
    type: "selection",
    data: data
});
}

var getSelectedText = function(){
    var t = '';
    if(window.getSelection){
        t = window.getSelection();
    }else if(document.getSelection){
        t = document.getSelection();
    }else if(document.selection){
        t = document.selection.createRange().text;
    }
    return t;
}

function getSelectionHTML() {
    var userSelection;
    if (window.getSelection) {

        userSelection = window.getSelection ();
        // Get the range:
        if (userSelection.getRangeAt) {
            if (userSelection.rangeCount > 0)
                var range = userSelection.getRangeAt(0);
            else
                return '';
        } else {
            var range = document.createRange ();
            range.setStart (userSelection.anchorNode, userSelection.anchorOffset);
            range.setEnd (userSelection.focusNode, userSelection.focusOffset);
        }

        var clonedSelection = range.cloneContents ();
        var div = document.createElement ('div');

        div.appendChild (clonedSelection);
        return div.innerHTML;
    } else if (document.selection) {
        // Explorer selection, return the HTML
        try {

```

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        userSelection = document.selection.createRange ();
        return userSelection.htmlText;
    } catch (err) {
        return '';
    }
} else {
    return '';
}
}

```

```

function setTwitterButtons() {
    if (!hasLoaded()) return;
    // Add buttons
    fancy('.tweet').not(':has(.sm-lock)').find('.stream-item-
footer').not(':has(.fancyr-clip-tweet)').each(function() {
        fancy('.context',this).after(
            fancy('<a href="#" class="fancyr-clip-tweet details">Clip
tweet</a>')
                .css('color','#D03737')
                .css('vertical-align','middle')
                .css('padding-right','6px')
                .css('font-weight','bold')
            );
    });
    // Set buttons callback
    fancy('.tweet .fancyr-clip-tweet').die('click').live('click',
function() {
    var tweet = fancy(this).parents('.tweet');
    var data = {
        tweet_id: tweet.attr('data-tweet-id'),
        tweet_author: tweet.attr('data-screen-name')
    }
    fancy.pm({
        target: getfancyrWindow(),
        url: domain+"/yourx",
        type: "clip-tweet",
        data: data
    });
});
}

```

```

function removeTwitterButtons() {
    fancy('.tweet .fancyr-clip-tweet').remove();
}

```

```

}

function blockedWebsite() {
    return url.match('flickr\.com/photos/.+?/.+?/') ||
        url.match('google\.{2,4}/images') ||
        url.match('scribd\.com/doc') ||
        url.match(/((http:\\\\(itunes\.apple\.com\\/.*))|(https:\\\\(itunes\.apple\.com\\/.*)))/i) ||
}

function blockedImageUrl(imageSrc) {
    return imageSrc.match('google\.com/vt/lyrs') ||
        imageSrc.match('google\.com/kh/') ||
        imageSrc.match('maps\.gstatic\.com') ||
        imageSrc.match('yimg\.com') ||
        imageSrc.match('googleapis');
}

var fancyrImageCount = 0;
function setImagesOverlay() {
    if (!hasLoaded()) return;
    if (blockedWebsite()) return;

    var images = fancy('img').filter(function () {
        return fancy(this).height() > 128 && fancy(this).width() > 128 &&
fancy(this).is(":visible");
    });

    updateImagesOverlay();

    images.each(function () {
        var image = fancy(this);

        if (!image.attr('data-image-id')) {

            var imageSrc = image.get(0).src;
            if (blockedImageUrl(imageSrc)) return;

            var div = fancy('<div />');
            fancy("body").prepend(div);
            var maxZindex = 2147483646;
            var imageZindex = parseInt(image.css('z-index'));
            if (isNaN(imageZindex)) {
                var zindex = maxZindex;
            } else {
                var zindex = imageZindex + 1;
            }
        }
    });
}

```



```

        if (imageZindex >= maxZindex) {
            image.css('z-index', maxZindex - 1);
        }
    }
    if (zindex == 1 && fancy.browser.msie) zindex = maxZindex; // IE
    doesn't distinguish between z-index: auto and 0
    if (fancy('#tumblr_lightbox').size() > 0)
        fancy('#tumblr_lightbox').css('z-index',maxZindex-1);

    div.attr('style','\
        position: absolute !important;\
        color: white !important;\
        z-index: '+zindex+';\
        word-wrap: no-wrap;\
    ');
    div.attr('class','clip-image-overlay')
        .html('<a href="#" data-image-id="'+fancyrImageCount+'" data-
image-src="'+imageSrc+'" class="fancyr-clip-image">Clip image</a>')
        .offset(image.offset())
        .show();

    image.attr('data-image-id', fancyrImageCount);

    var a = fancy("a",div);
    a.attr('style','\
        position: absolute !important;\
        margin: 5px !important;\
        width: 74px !important;\
        text-align: center !important;\
        color: white !important;\
        font-family: \"Helvetica Neue\",Helvetica,Arial,sans-serif !
important;\
        font-size: 14px !important;\
        font-weight: normal !important;\
        font-style: normal !important;\
        line-height: 18px !important;\
        letter-spacing: normal !important;\
        padding: 4px 8px !important;\
        background-color: #D03737 !important;\
background-image: -webkit-linear-gradient(top,transparent,rgba(0, 0,
0, 0.05)) !important;\
        background-image: -moz-linear-gradient(top,transparent,rgba(0,
0, 0, 0.05)) !important;\

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        background-image: linear-gradient(top,#EE5F5B,#BD362F) !
important;\
        background-repeat: repeat-x !important;\
        border-color: rgba(0, 0, 0, 0.1) rgba(0, 0, 0, 0.1) rgba(0, 0,
0, 0.25) !important;\
        border-radius: 3px !important;\
        text-shadow: 0 -1px 0 rgba(0, 0, 0, 0.25) !important;\
        box-shadow: inset 0 1px 0 rgba(255, 255, 255, 0.8),0 1px 1px
rgba(0, 0, 0, 0.25) !important;\
        text-decoration: none !important;\
    ');

    fancyrImageCount += 1;
}
});
}

```

```

function setImagesClickHandler() {
    fancy('div.clip-image-overlay').die("click").live('click',
function() {
var imageSrc = fancy(this).children('a[data-image-src]').attr('data-
image-src');
    fancy.pm({
        target: getfancyrWindow(),
        url: domain+"/yourx",
        type: "clip-image",
        data: {imageSrc:imageSrc}
    });
    return false;
});
}

```

```

function removeImagesOverlay() {
    fancy('div.clip-image-overlay').each(function(){
        var div = fancy(this);
        var imageId = fancy('a[data-image-id]',this).attr('data-image-
id');
        fancy("img[data-image-id=" + imageId + "]").removeAttr('data-
image-id');
        div.remove();
    });
}

```

```

function updateImagesOverlay() {
    fancy('div.clip-image-overlay').each(function(){

```



[illegible]