

Tilting Google Maps

Tatsuhiko Miyagawa
miyagawa@gmail.com

Six Apart, Ltd. / Shibuya Perl Mongers
YAPC::Europe 2006 Birmingham, UK

(Live Demo)

Cool! Isn't it?

How can you do that?



ウェブ [イメージ](#) [ニュース](#) [マップ](#) [グループ](#) [more »](#)

thinkpad shockmgr

Google 検索

[検索オプション](#)

[表示設定](#)

☒ ウェブ全体から検索 ☐ 日本語のページを検索

ウェブ

thinkpad shockmgr の検索

[subtechグループ - Bulknews::Subtech - Plagger + ThinkPad ShockMgr](#)

Plagger + ThinkPad ShockMgr 23:49 このエントリーを含むブックマーク. というわけ で、
Push::Move - MacBookが動かされるのを検知してPlaggerのjobが走るPlugin のThinkPad 版。
動画う p した。 <http://www.youtube.com/watch?v=Mxr5WWk01Yo> ...

subtech.g.hatena.ne.jp/miyagawa/20060613/1150210188 - 19k - [キャッシュ](#) - [関連ページ](#)

[subtechグループ - Bulknews::Subtech - ThinkPad Saber](#)

ThinkPad Saber 05:13 このエントリーを含むブックマーク. というわけで MacSaber の
ThinkPad 版。アイコン募集。

http://bulknews.typepad.com/blog/2006/06/turn_your_think.html. [コメント]. < Plagger +

ThinkPad ShockMgr ...

subtech.g.hatena.ne.jp/miyagawa/20060614/1150229586 - 17k - [キャッシュ](#) - [関連ページ](#)

Found 2 examples:
One in C++
Another in Ruby

In C++

```
if( !DeviceIoControl( hFile, 0x733fc, NULL, 0, // via IOCTL(0x733fc)
                     (void *)&AccelerometerData, 0x24, &ulRead, NULL))
    throw "Failed to DeviceIoControl";
X = AccelerometerData.x0 + OffsetX;
Y = AccelerometerData.y0 + OffsetY;
```

In Ruby

```
device = Device.new '\\\\.\ShockMgr'  
device.open  
values = device.io(command, result_size).unpack("x4s*")  
cx = values[3]  
cy = values[2]
```


Ported to Perl

```
use Win32API::File;
my $file = createFile("//./ShockMgr", "r ke")
    or die "Can't get ShockMgr device";
DeviceIoControl($file, 0x733fc, [], 0, my($buf), 0x24, my($bytes),
[]);
my @data = unpack "x4s*", $buf;
```

(Demo of iemover)

iemover.pl (1/3)

```
use Time::HiRes qw(sleep);
use Win32::API;
use Win32API::File qw(:ALL);
use Win32::OLE;

sub get_pos {
    my $file = createFile("../ShockMgr", "r ke")
        or die "Can't get ShockMgr device";
    DeviceIoControl($file, 0x733fc, [], 0, my($buf), 0x24,
        my($bytes), []);
    my @data = unpack "x4s*", $buf;
    return @data;
}
```

iemover.pl (2/3)

```
my @pos = get_pos;  
my($base_x, $base_y) = @pos[3, 2];  
  
my $app = "InternetExplorer.Application";  
my $ie = Win32::OLE->GetActiveObject($app)  
        || Win32::OLE->new($app);  
$ie->{Visible} = "TRUE";  
$ie->GoHome();  
1 while $ie->Busy;
```

iemover.pl (3/3)

```
while (my @pos = get_pos) {  
    my $ax = ($pos[1] - $base_x) / 30;  
    my $ay = ($pos[0] - $base_y) / 30;  
  
    move_window($ie, $ax, $ay);  
}
```

Integrate with Google Maps

Possibly hard: Google Maps API is JavaScript

JavaScript
<-> Win32 Perl
Is that possible?

Active X™



Microsoft®

gmaps.html (1/2)

```
<script language="JavaScript">
function load() {
    if (GBrowserIsCompatible()) {
        map = new GMap2(document.getElementById("map"));
        map.addControl(new GLargeMapControl());
        map.addControl(new GMapTypeControl());

        if (debug)
            document.getElementById('log').style.visibility = 'visible';

        GEvent.addListener(map, "dragstart", function() { dragging = 1 });
        GEvent.addListener(map, "dragend", function() {
            var center = map.getCenter();
            x = center.x;
            y = center.y;
            dragging = 0;
        });
        ...
        map.setCenter(new GLatLng(y, x), 14);
        base = get_pos(1).split(/,/);
    }
}</script>
```

gmaps.html (2/2)

```
<script language="PerlScript">
  use Win32API::File qw(:ALL);

  sub get_pos {
    my $base = shift;
    my $file = createFile("../ShockMgr", "r ke")
      or die "Can't get ShockMgr device";
    DeviceIoControl($file, 0x733fc, [], 0,
      my($buf), 0x24, my($bytes), []);
    my @data = unpack "x4s*", $buf;
    return join ",", ($base ? @data[3, 2] : @data[1, 0]);
  }
</script>
```

<http://svn.bulknews.net/repos/public/gmaps-thinkpad/>

Thank you