Web Engineering

Exercise 4

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Your website had a great success, but now you want to improve your skills in design better and more creative user interaction techniques.

Browsing the internet you find out an interesting jQuery plugin that allows user to interact the web page by simple moving the device, called tilt-and-tap1.

In order to learn how this plugin works you decide to create a simple gallery web page that can be browsed thanks to motion based interactions.

Exercise 4
Tasks

By tilting left or right the previous or the next picture of the gallery will be selected (changes the border property of the images).

By hold tap and tilt up / down the device the user will open / close a new gallery mode that will show the selected picture in a bigger format in the middle of the screen. Once this mode is active, if the user tilts left or right the selected picture will change as well as the image in the middle of the screen.

If the user tilts up and then down in less than an arbitrary threshold, additional information about the current selected picture will be showed in the page. The threshold can be arbitrary, with the only requirement that the interaction can be triggered without effort and, generally, not inadvertently. To hide this additional text the user has to tilt up and down again. Similar to the second task of this exercise, the text should change according to the current selected picture.

Exercise 4
Important Notes

Note: As a starting point, you will get the HTML and the CSS of the gallery web site.
The first picture selected is the first picture of the list (starting from the left) and we define it
 selected because its border is bigger and red (it has the class "selected").
The div "touch" is the div where the bigger image should be placed with class.
The image inserted should have the class ".centerimg".
The paragraph "info" is the tag where the information of the picture should be placed.

**Moreover, the div "touch" is where the touch event previously mentioned has to be performed
to avoid potential conflicts with default browser behavior.**

In addition to these resources, you will get also a starting JavaScript code with
a map that associates each picture to the additional information to show to the user when
the interaction is complete.

Note that Tilt-and-Tap is **optimized** for Chrome on Android devices.
However by changing the set of thresholds you can still use it on Apple products.

Moreover, As we could not test every possible combination of devices and browsers, we advise you to follow the following steps to start with the development
- Try the demos of the plugin here 8 (with any browsers)
      a. If it works, you can use the plugin for the exercise without changing anything
- If the demo did **not** work properly:
      a. Go to this 9 page with your device
b. If the interval is equal to 0, your browser/device does not support motion events. Otherwise, in the same page you can see a chart. Try some tilting gestures and use the peak values you see as thresholds.

If you have any problems do not hesitate to contact me

Exercise 4 Schedule

Introduction
Ex. 4

| 16th April |

| 23th April |

**Assessment
Ex. 4**

| **12:15 – 1p.m.** | **IFW A 36**

| 1:15 – 2 p.m. | **IFW A 32.1**