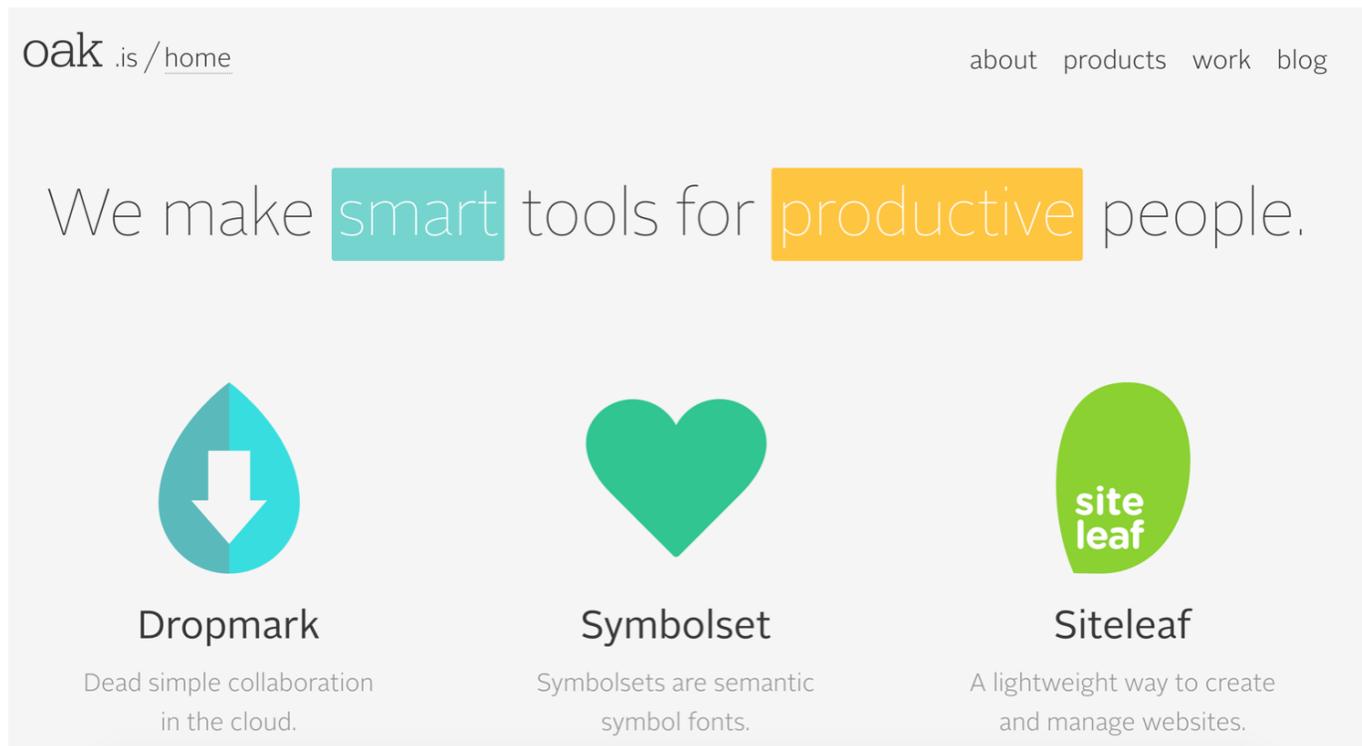


Lab 6
CSC 2053 - Platform Based Computing
Grading: 30 points
Due Date: Oct 27th, 2017

Description:

In this lab we will reinforce the basics of HTML and CSS. We will also be setting up our raspberry pis for use as a web development platform.

Part 1 - Recreate this webpage. Use an external CSS stylesheet.



Here are some details.

Font: Helvetica

Width: 1024px

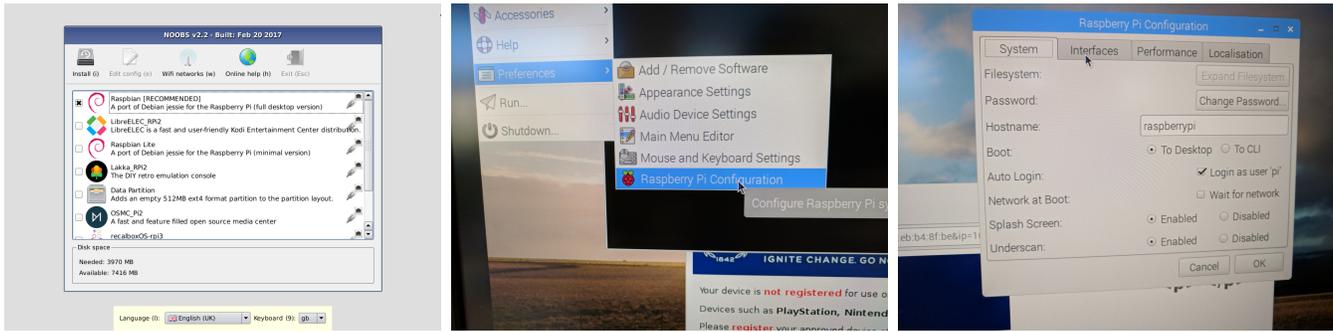
Background-color: #F5F5F5

Green color: #7AD4CE

Orange color: #FDC44F

You can download the dropmark, leaf symbol, and heart icon from the website. Use the `img src` attribute to show the svg file. I would partition the page into div's and use widths and floats to layout the page.

Part 2 - Setup your Raspberry Pis. NOOBs should come preinstalled. We will boot up the Pis and install Raspbian.



After Raspbian has been installed, open up the configuration settings and change your password. You should also enable SSH under Interfaces.

Now we will setup the pi for the Villanova U wifi. This is a bit complex due to the security of the wifi. Open up a terminal and type the following.

```
echo -n yourvillanovapassword | iconv -t utf16le | openssl md4
```

The result will be a hash file of letters and numbers. Save this hash to your clipboard. You can type "clear" in the terminal to erase your password from the screen. Next in the terminal type,

```
sudo leafpad
```

This will open up a notepad with sudo privileges i.e. administrator privileges. Open up the file located in /etc/wpa_supplicant/wpa_supplicant.conf and add the following to the file.

```
network={
    ssid="VUMobile"
    key_mgmt=WPA-EAP
    eap=TTLS
    identity="yourvillanovausername"
    password=hash:xxxxxxxxxxxxxxxx
    phase2="auth=MSCHAPv2"
}
```

where the password hash is the letters and numbers from above.

```
reboot
```

and the raspberry pi should connect to the wifi. Type,

```
ifconfig wlan0
```

and make note of the inet addr. This is your IP address. WRITE THIS DOWN. Verify you can connect to your Raspberry Pi via your computer by the ssh command.

```
ssh -l pi youripaddress
```

Rubric:

(15 points) Part 1 HTML and CSS correctly implemented.

(15 points) Part 1 take screenshot and upload to blackboard.

Deliverables: Submit HTML, CSS, and Screenshots to blackboard.