

# Fundamentals of html & css

Page & Site Structure

Templating & Deployment

Style & Design

# Fundamentals of html & css

## Lab-1 Editing HTML



```
index.html
1 <html>
2 <head>
3   <title>Starbuzz Coffee</title>
4 </head>
5 <body>
6   <h1>Starbuzz Coffee Beverages</h1>
7
8   <h2>House Blend, $1.49</h2>
9   <p>A smooth, mild blend of coffees from Mexico, Bolivia and Guatemala.</p>
10
11  <h2>Mocha Cafe Latte, $2.35</h2>
12  <p>Espresso, steamed milk and chocolate syrup.</p>
13
14  <h2>Cappuccino, $1.89</h2>
15  <p>A mixture of espresso, steamed milk and foam.</p>
16
17  <h2>Chai Tea, $1.85</h2>
18  <p>A spicy drink made with black tea, spices, milk and honey.</p>
19 </body>
20 </html>
21
22
```

This lab will firstly introduce you to the tools we will use during the web development module and secondly introduce you to creating, editing, saving and displaying a web page.

## Lab-1 HTML Structure



### Welcome to the App Bundle Store

This store brings you great app bundles week after week. We select the best power user apps from a broad range of the highest quality apps from the best publishers, at great prices.

Whether you are interested in gaming or graphics design, software development or media production - we have the bundles for you. Each app bundle is designed to compliment the others, delivering you an exciting take on a scene.

#### Favourites

- Hype by Tumblr
- Webstorm by Idea
- Sublime by sublimeltd.com
- Desktop Utility by Sweet Productions

The labs are where you will do the real learning in this module. In Lab0-01 you will become familiar with the editor Sublime. We will then use this editor to create a simple multi-page web site containing a small variety of text, images and links. In this lab we will explore some of the basic features of CSS, including colours, font and interesting techniques for setting styles across entire sections of a page.

## Lab-2 CSS Intro



```
<!DOCTYPE HTML>
<html>
  <head>
    <title>APP Stores</title>
    <link type="text/css" rel="stylesheet" href="style.css" media="screen" />
  </head>
  <body>
    <h1>Scene: Apps, Movies, Music, Books</h1>
    <ul>
      <li><a href="apps.html">Apps</a></li>
      <li><a href="music.html">Music</a></li>
      <li><a href="movies.html">Movies</a></li>
    </ul>
    <div class="main_panel">
      <h2>New Games</h2>
      <ul>
        <li>Clear All</li>
        <li>Google Box</li>
        <li>Squink</li>
      </ul>
    </div>
  </body>
</html>
```

In this lab we will begin a new project which will have CSS stylesheet from the beginning. We will explore some of the basic features of CSS, including colours, font and interesting techniques for setting styles across entire sections of a page.

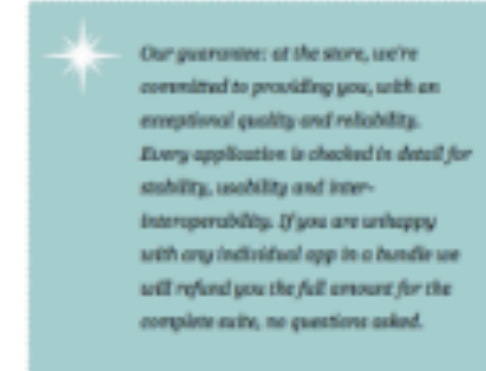
## Lab-3a Layout



### Welcome to the App Bundle Store

This store brings you great app bundles week after week. We select the best power user apps from a broad range of suppliers and combine them into great deals. These are the highest quality apps from the best publishers, at great prices.

Whether you are interested in gaming or graphics design, software development or media production - we have the bundle for you. Each app bundle is designed to compliment the others, delivering you an exciting take on a scene.



We roll over the bundles on a weekly basis, so be sure to check back regularly for bundle that suits your tastes. If you don't see application bundles that suit your interests - please let us know! We are always interested in combining new and interesting bundles and will strive to figure out your needs and match them to current or upcoming offerings.

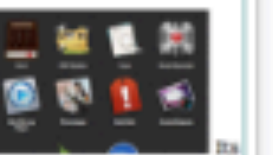
Now that you've an idea of what we do, why not call into our store? We have create some [detailed store lists](#) to get you here in record time. Come and join us anytime.

#### What's Apps we Like

In this lab we will work towards developing a site with a more ambitious use of CSS. In particular, the box model will be used to achieve a more professional user experience.

#### Weekly Specials

##### Mac Supercharge Bundle



It's been a long time since the last free Mac bundle that big. StackSocial just published its so called Mac Freebie Bundle 2.0 which contains 10 apps worth \$519. Most of them are about design and have not been part of bundles before. ★★★★★

#### Freebie



Stacksocial just published its so called Free OndaSoft Mac Tool Bundle, which contains apps from OndaSoft. The bundle worth \$146 will be probably available only a couple of days so you'd better



# Templating & Deployment

## Lab-4b Case Study



Explore a web site that embodies many of the techniques we have explored so far. In the lab the web is evolved from unstyled content to a reasonably elegant and clean design - using semantic html element where appropriate.

## Lab-5a Harp & Surge



### Deploy anything in six keystrokes

There's only six keystrokes between you and deployment: Type surge and hit enter in your project directory to get it online immediately.

```
└─ $ npm install --global surge
└─ $ surge
    project: path/to/my-project
    domain: my-project.surge.sh
    upload: [*****]
    Success! Published and running at my-project.surge.sh
```

Install software tools to serve a web site locally and also to deploy the web site to a public web server.

## Lab-5b Templating



```
└─ harp.json
└─ public
  └─ assets
  └─ ..
  └─ includes
    └─ _curriculum.ejs
    └─ _footer.ejs
    └─ _header.ejs
    └─ _sponsors.ejs
    └─ _summary.ejs
  └─ index.ejs
  └─ strands
    └─ _layout.ejs
    └─ data.ejs
    └─ devices.ejs
    └─ maths.ejs
    └─ networks.ejs
    └─ programming.ejs
    └─ project.ejs
  └─ style.css
```

Rebuild the IoT web site from the last lab using templating. This version of the site will aim to significantly reduce the content the author has to manage by reusing 'templates' containing common sections.

# Style & Design

## Lab-6a Semantic UI

Department of Computing & Mathematics  
BSc (Hons) the internet of Things

BACHELOR OF SCIENCE (HONOURS)  
APPLIED COMPUTING IN THE INTERNET OF THINGS  
Program your World!  
An exciting new level 8 Honours degree for 2015. Combine Programming and Electronics and learn how to code cool devices, play the world. Be part of the new wave of

<b>Programming</b> Learn a broad range of programming and problem solving skills, including exciting new platforms, software tools and languages. Use these skills to build apps for mobile, cloud and device based IoT applications. Evolve a portfolio of fascinating applications.	<b>Data Science</b> At the heart of many IoT applications is data: measurements, events, alarms and other information that must be relayed, stored and ultimately turned into knowledge. Learn the fundamentals of modern approaches to data in this strand.	<b>Devices</b> The 'Things' we connect to are often physical devices. These can range from simple temperature sensors to sophisticated control systems like traffic lights or cameras. Connecting to and interacting with the physical world is the subject of this strand.
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Rebuild the iot web site using semantic-ui

## Lab-6b Semantic UI

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<b>Programming</b> Learn a broad range of programming and problem solving skills, including exciting new platforms, software tools and languages. Use these skills to build apps for mobile, cloud and device-based IoT applications. Evolve a portfolio of fascinating applications.	<b>Data Science</b> At the heart of many IoT applications is data: measurements, events, alarms and other information that must be relayed, stored and ultimately turned into knowledge. Learn the fundamentals of modern approaches to data in this strand.	<b>Devices</b> The 'Things' we connect to are often physical devices. These can range from simple temperature sensors to sophisticated control systems like traffic lights or cameras. Connecting to and interacting with the physical world is the subject of this strand.
<b>Networks</b> This strand will explore modern networks and their topology. Be able to configure, network and manage all computers in computer systems from simple computers to single board board computers, tablets and full workstations.	<b>Project</b> Building exciting IoT projects is every semester of the programme. Your projects will combine skills acquired from the other strands and enable you to build a comprehensive, compelling portfolio of IoT applications and services.	<b>Mathematics</b> Introduce foundation concepts for many of the more applied concepts in the other strands. Learn mathematics techniques in a modern context and apply core principles in real or interesting ways.

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TSSG      ctrg      AUTOMATIC CONTROL GROUP

Continue to enhance the IoT web site with additional Semantic-UI styles & Components

https://github.com/wit-computing/iot-web

wit-computing / iot-web Unwatch 1 Star 0 Fork 0


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[43 commits](#) [1 branch](#) [9 releases](#) [1 contributor](#)











































Branch: [master](#) [New pull request](#) [Create new file](#) [Upload files](#) [Find file](#) [Clone or download](#)

 [edeleastar](#) removed semantic and link to CDN hosted versions. Latest commit 6795681 on 8 Feb 2016











































 <a href="#">public</a>	removed semantic and link to CDN hosted versions.	a year ago
 <a href="#">.gitignore</a>	initial empty project	a year ago

Help people interested in this repository understand your project by adding a README. [Add a README](#)

s on Feb 8, 2016

<b>removed semantic and link to CDN hosted versions.</b> edeleastar committed on 8 Feb 2016	 6795681	
<b>stackable sections on the home page</b> edeleastar committed on 8 Feb 2016	 c4d366f	
<b>render banner image to edge of page</b> edeleastar committed on 8 Feb 2016	 b04c232	
<b>updated layout in data strand</b> edeleastar committed on 8 Feb 2016	 5502270	
<b>all strand pages now include grid model</b> edeleastar committed on 8 Feb 2016	 6419d01	
<b>programming page incorporates grid for main content</b> edeleastar committed on 8 Feb 2016	 4293fee	
<b>stacked segment experiments</b> edeleastar committed on 8 Feb 2016	 3291ae5	
<b>incorporate icons + simplify grid</b> edeleastar committed on 8 Feb 2016	 f3bf7a7	
<b>coloured sections in curriculum</b> edeleastar committed on 8 Feb 2016	 cc7c7ed	
<b>revised footer including icons</b> edeleastar committed on 8 Feb 2016	 9638f4a	
<b>spacing</b> edeleastar committed on 8 Feb 2016	 07678b1	
<b>final tidy up</b> edeleastar committed on 8 Feb 2016	 9324249	
<b>curriculum section transitioned to a grid section</b> edeleastar committed on 8 Feb 2016	 0b77615	
<b>upgraded sponsors section to use grid</b> edeleastar committed on 8 Feb 2016	 ecb973c	
<b>revised header on all strand pages</b> edeleastar committed on 8 Feb 2016	 3b641a4	
<b>revised head section to use grid and alignment</b> edeleastar committed on 8 Feb 2016	 fc53499	
<b>correct semantic.css path + introduce segment to all strand pages</b> edeleastar committed on 8 Feb 2016	 36ee06e	
<b>ui container for all strand pages</b> edeleastar committed on 8 Feb 2016	 10b827a	
<b>header, footer + sponsor segments</b> edeleastar committed on 8 Feb 2016	 1315ac3	
<b>ui container for main pages</b> edeleastar committed on 8 Feb 2016	 62754c4	
<b>include semantic.css, remove old hand coded styles.</b> edeleastar committed on 8 Feb 2016	 a136fc0	

ts on Oct 26, 2015

<b>semantic elements in all strands</b> edeleastar committed on 26 Oct 2015	 f028f86	
<b>semantic elements introduced</b> edeleastar committed on 26 Oct 2015	 5d7f11e	
<b>adjust font href to include protocol for static loading</b> edeleastar committed on 26 Oct 2015	 12164c8	
<b>use OpenSans on all pages</b> edeleastar committed on 25 Oct 2015	 ddf45b1	
<b>switch home page to Open Sans web font</b> edeleastar committed on 25 Oct 2015	 acf8484	
<b>adjust margin of summary</b> edeleastar committed on 25 Oct 2015	 5193eaa	
<b>restructure home page to use rules: including banner background + 2 c...</b> ... edeleastar committed on 25 Oct 2015	 33c083c	
<b>introduce new layout rules to rearrange home page</b> edeleastar committed on 25 Oct 2015	 41a1839	
<b>footer image sizing</b> edeleastar committed on 25 Oct 2015	 eeec760	
<b>modules images height rules</b> edeleastar committed on 25 Oct 2015	 888f6cb	
<b>styling main images in strands</b> edeleastar committed on 25 Oct 2015	 01ebf8a	
<b>header + footer classes introduced</b> edeleastar committed on 25 Oct 2015	 f5c7680	
<b>header and footer styles + index changes</b> edeleastar committed on 25 Oct 2015	 d84c2b9	
<b>first version of style.css - margin auto for body</b> edeleastar committed on 25 Oct 2015	 f7acabd	
<b>strand header + footer + image repositioning</b> edeleastar committed on 25 Oct 2015	 45e0181	
<b>links to strands from index</b> edeleastar committed on 25 Oct 2015	 20f2f83	
<b>all strand pages</b> edeleastar committed on 25 Oct 2015	 7bb6c7	
<b>image assets for all strands</b> edeleastar committed on 25 Oct 2015	 1b64b99	
<b>home page image assets + image elements</b> edeleastar committed on 25 Oct 2015	 54cb4ab	
<b>home page textual content</b> edeleastar committed on 25 Oct 2015	 2d562ec	
<b>initial empty project</b> edeleastar committed on 25 Oct 2015	 bd7c807	

## Lab-4b Case Study



Explore a web site that embodies many of the techniques we have explored so far. In the lab the web is evolved from unstyled content to a reasonably elegant and clean design - using semantic html element where appropriate.

s on Oct 25, 2015

### first version of style.css - margin auto for body

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f7acabd



### strand header + footer + image repositioning

edelestar committed on 25 Oct 2015



45e0181



### links to strands from index

edelestar committed on 25 Oct 2015



20f2f83



### all strand pages

edelestar committed on 25 Oct 2015



7bbb6c7



### image assets for all strands

edelestar committed on 25 Oct 2015



1b64b99



### home page image assets + image elements

edelestar committed on 25 Oct 2015



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### home page textual content

edelestar committed on 25 Oct 2015



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## Lab-4b Case Study



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ts on Oct 26, 2015

### semantic elements in all strands

edeleastar committed on 26 Oct 2015



f028f86



### semantic elements introduced

edeleastar committed on 26 Oct 2015



5d7f11e



### adjust font href to include protocol for static loading

edeleastar committed on 26 Oct 2015



12164c8



### use OpenSans on all pages

edeleastar committed on 25 Oct 2015



ddf45b1



### switch home page to Open Sans web font

edeleastar committed on 25 Oct 2015



acf8484



### adjust margin of summary

edeleastar committed on 25 Oct 2015



5193eaa



### restructure home page to use rules: including banner background + 2 c...

...

edeleastar committed on 25 Oct 2015



33c083c



### introduce new layout rules to rearrange home page

edeleastar committed on 25 Oct 2015



41a1839



### footer image sizing

edeleastar committed on 25 Oct 2015



eeec760



### modules images height rules

edeleastar committed on 25 Oct 2015



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### styling main images in strands

edeleastar committed on 25 Oct 2015



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f5c7680



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**bd7c807**

## Lab-6a Semantic UI



Department of Computing &  
Mathematics



BSc (Hons) the Internet of Things



### Programming

Learn a broad range of programming and problem solving skills, including exciting new platforms, software tools and languages. Use these skills to build apps for mobile, cloud and device based IoT applications. Evolve a portfolio of fascinating applications.

### Data Science

At the heart of many IoT applications is data: measurements, events, alarms and other information that must be relayed, stored and ultimately turned into knowledge. Learn the fundamentals of modern approaches to data in this strand.

### Devices

The 'Things' we connect to are often physical devices. These can range from simple temperature sensors to sophisticated control systems like traffic lights or cameras. Connecting to and interacting with the physical world is the subject of this strand.

Rebuild the iot web site using semantic-ui

### final tidy up

edeleastar committed on 8 Feb 2016



9324249



### curriculum section transitioned to a grid section

edeleastar committed on 8 Feb 2016



0b77615



### upgraded sponsors section to use grid

edeleastar committed on 8 Feb 2016



ecb973c



### revised header on all strand pages

edeleastar committed on 8 Feb 2016



3b641a4



### revised head section to use grid and alignment

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62754c4



### include semantic.css, remove old hand coded styles.

edeleastar committed on 8 Feb 2016



a136fc0



## Lab-6b Semantic UI



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An exciting new level 3 Honours Degree for 2016. Combine Programming and Electronics and learn how to code and devices, phones and things. Be part of the next wave of Innovation in Computing.

### Programming

Learn a broad range of programming and problem solving skills, including writing new software, software tools and languages. Use these skills to build apps for mobile, cloud and device-based IoT applications, learn a portfolio of building applications.



### Data Science

At the heart of many IoT applications is data: measurements, events, errors and other information that must be stored, stored and ultimately turned into knowledge. Learn the fundamentals of modern approaches to data in this strand.



### Devices

Use "things" we connect to use when physical systems. These can range from simple temperature sensors to sophisticated control systems like traffic lights or cameras. Connecting to and controlling IoT: the physical world is the subject of this strand.



### Networks

This strand will explore modern networks and cloud computing. Be able to configure, network and manage all components of computer systems from simple routers to single board computers, tablets and IoT devices.



### Project

Building exciting IoT projects in every semester of the programme, your projects will combine skills acquired from the other strands and enable you to build a comprehensive an compelling portfolio of IoT applications and services.



### Mathematics

Introduce foundation concepts for many of the more applied concepts in the other strands. Learn mathematics techniques in a modern context and apply core principles in new or interesting ways.



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Continue to enhance the IoT web site with additional Semantic-UI styles & Components

removed semantic and link to CDN hosted versions.

edelestar committed on 8 Feb 2016

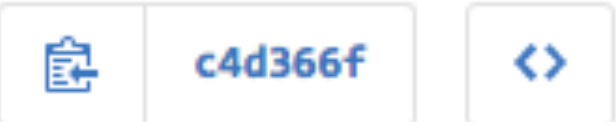


6795681



stackable sections on the home page

edelestar committed on 8 Feb 2016



c4d366f



render banner image to edge of page

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programming page incorporates grid for main content

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stacked segment experiments

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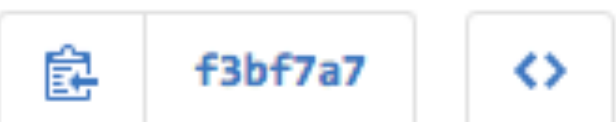


3291ae5



incorporate icons + simplify grid

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f3bf7a7



coloured sections in curriculum

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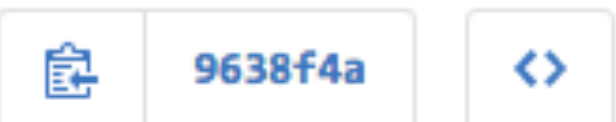


cc7c7ed



revised footer including icons

edelestar committed on 8 Feb 2016



9638f4a



spacing

edelestar committed on 8 Feb 2016



07678b1

