

Web Technology

Managing a Website

Revision - Design

Overview

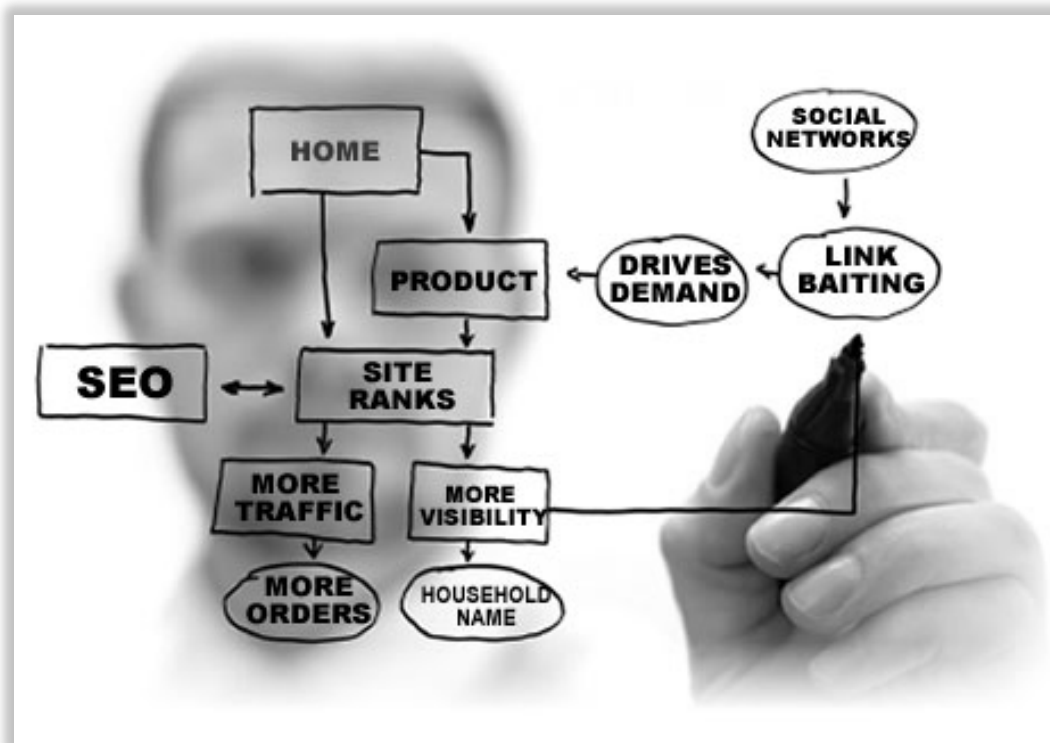
- Marketing
- Revision
 - Exam Structure
 - Multiple Choice Questions
 - Masters Essay Question

Question

Which of these will have no influence on a site's search engine ranking?

1. Relevant set of keywords used throughout the site
2. Use of header tags
3. Links from external sites
4. A comprehensive list of meta-keywords

Marketing



Email Marketing

- Entice visitors to sign up to a newsletter.
- High chance of users returning with very little effort.
- Do:
 - Use your company's name in the title
 - Communicate a benefit/ promotion (e.g. "25% off football boots")
 - Be descriptive so they know what is in the email
- Don't:
 - Pretend the email is about something else (e.g. "You are a winner")
 - Use a false sense of urgency ("Important email!")
 - Shout using CAPITALS use punctuation such as ! or \$, they are used by ISPs to identify spam

Pay-per-click Marketing

- PPC is the favoured advertising model of most search engines (including Google, Yahoo and Microsoft).
- As the name suggests advertisers only pay when someone clicks on one of their adverts.
- Solid, predictable way of generating traffic.
- Google uses a Quality Score to determine which adverts to display.

Affiliate Marketing

- Affiliates are third-party websites that capture traffic and send it your way for a small cut.
- They acquire internet traffic using PPC, SEO and other methods. These visitors are “tagged” and referred to your site.
- If a sale is made, you will be pay a pre-agreed percentage, typically 10 percent or similar, to the affiliate.

Social Media

An easy (and free) way to generate traffic.

Convince users to “Like” your website on Facebook or follow your Twitter account.

- Everyone will see when you post or tweet an update.
- Works similarly to email-marketing but far easier and less time-consuming to do!

Analysing Traffic

- It is crucial to determine WHERE your traffic came from
 - Which site linked to yours?
 - Which individual page linked to yours?
 - Are any of your Per-Per-Click ads generating appropriate traffic?
- Also crucial to determine what users are doing on your website.
- Numerous tools available but the most mainstream is Google Analytics.

Revenues



Ways in which to profit:

Adverts

- Displaying ads on your website from other companies.
- Promoting other services or sites.

Advanced functionality

- Pay for more tools

Premium content

Adverts

Various Types:

- Display Ads
 - Pay-per-click (PPC)
 - Pay-per-face (PPC)
- Contextualised Ads
- Popups

Most common sizes:

- 300x250, 160x600, 728x90

Charging for Content

- Multiple types of user accounts
- Free accounts provided limited functionality and/or content
- Subscriptions
 - Multiple types/costs
 - “Unlocking” access to different/additional functionalities and/or content

Question

Which of the following are advertisements not useful for?

1. Promoting a website
2. Generating revenue
3. Increasing search ranking
4. Increasing visitor numbers

Revision

Exam Structure

CS1522

- Date, time, location:
 - CHECK MyTimetable
- 75 multiple choice questions
- Computer based

CS5548, CS5574

- Date, time, location:
 - CHECK MyTimetable
- 25 multiple choice questions
- Essay questions
 - 3 short answer questions
 - 3 long answer questions
- Computer based

1) Which of the following is not part of the assessment phase of the website-development cycle

- A. Investigate client and competitors
- B. Investigate the market
- C. Defining the information architecture
- D. Evaluating existing websites

2) Which of the following are the components of usability?

- A. Functionality, style, content, readability
- B. Learnability, efficiency, memorability, errors, satisfaction
- C. Reliability, relevance, timeliness
- D. Efficiency, functionality, relevance, distinctive, correctness

3) Which of the following are all trends in modern web design?

- A. CSS, HTML 5, jQuery, php
- B. Linux, Apache, MySQL, php
- C. HTML 5, javascript, small images
- D. Flat design, high definition media, hamburger menus

4) Which of the following is not true about CSS?

- A. CSS is processed by the server
- B. Multiple styles can overlap
- C. It is typically defined in a separate file from the HTML
- D. CSS can be used to define how the content of the webpage is laid out

5) Which of the following pieces of CSS affects the element with id="title"?

- A. `.title{ ... }`
- B. `#title{ ... }`
- C. `$title{ ... }`
- D. `title{ ... }`

6) Where is the correct place for an embedded stylesheet?

- A. In the HTML tag using the style attribute
- B. In a separate linked file
- C. Between the <title> </title> tags
- D. Between the <head> </head> tags

7) According to the following CSS,
what is the font size of all elements
with class="header"

```
h1{font-size:12px;}  
.header{font-size:14pt;}  
#header{font-size:10pt;}
```

- A. 12px
- B. 14pt
- C. 10pt
- D. The browser default

8) Regarding divs, the margin is:

- A. The free space outside of the border
- B. The free space between the border and the content
- C. The visible line around the div (when set to width greater than 0)
- D. The sum of the free spaces outside of the border and between the border and content

9) Which of the following retrieves the href of the first link in a document

- A. `var url = document.getElementById("a").children[0].href;`
- B. `var url = document.getElementById("a")[0].href;`
- C. `var url = document.getElementsByTagName("a")[0].href;`
- D. `var url = document.['a'][0].href;`

10) What of the following jQuery effects makes an element visible or not visible depending on the element's current visibility?

- A. .animate()
- B. .fadeOut()
- C. .slide()
- D. .toggle()

11) Which of the following is not true about the social graph?

- A. Multiple graphs existing about any individual
- B. Each website has a holistic, true representation of their users
- C. Social networks can make assumptions about their users by reasoning with their social graph
- D. Social networks use social graphs to make money

12) Which of these is a feature of virtual hosting?

- A. Multiple websites run on the same server, sharing resources
- B. One website is hosted per server
- C. Multiple websites run independently on the same server, each with their own dedicated resources
- D. Users cannot install new software unless it is web-based

13) In the build up to launching a new website, it is important to:

- A. Keep it a secret
- B. Ensure everything is working, even if it means delaying the launch
- C. Stockpile content ready for future publishing
- D. Make it difficult for user's to contact you

Essay Question (Masters)

A UK based supermarket is evaluating options for hosting their new website which allows users to browse products and do their grocery shopping online. The site will only be available to people in the UK, and they expect to experience varying levels of demand throughout the week. For example, they expect to experience low demand during weekday mornings, afternoons, and throughout the night, but surges in demand during the evening when people return home from work; they also expect a constant, medium level of demand over the weekend.

As their webmaster, you are tasked with determining the appropriate hosting method for their website. Justify your decision by describing the commonly used available options, the advantages and disadvantages of each option, and why your chosen method is more appropriate than others.

Shared Hosting

- Many sites reside on one Web server connected to the Internet.
- Advantages:
 - Each site sits on it's own partition or section on the server, to keep it separate from other sites.
 - An inexpensive way to host a Website.
 - Often comes with easy-to-use control panel software for interacting with the server.
- Usually heavily restricted on resources
 - e.g. Bandwidth, HD space, RAM, etc.
 - If a different user is heavy on resources, that may affect the performance of your website.
 - Rarely have direct access (SSH) to the server.
 - Often no HTTPS since it requires a unique IP.

Dedicated Hosting

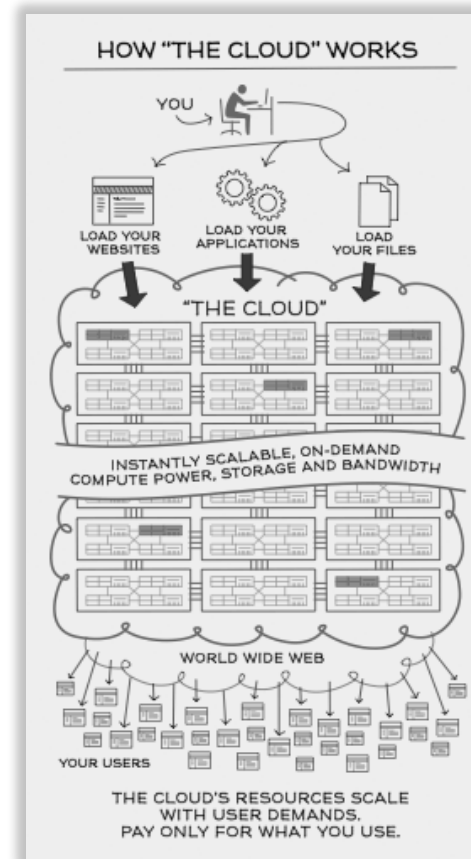
- Users pay for an entire server and have full control over it.
- Advantages:
 - Free to install any software they like.
 - Have full access to the server's resources. Not sharing CPU and RAM with others.
 - Can choose a particular server spec that suits their needs.
- Disadvantages:
 - Usually, all software required to running a website must be installed by the user.
 - Time consuming to setup and maintain.
 - Usually requires a server administrator with experience.

Virtual Hosting

- Bridges the gap between shared and dedicated hosting.
- The same computer can run multiple websites in a “Virtual Instance”.
 - Each instance can have it’s own operating system completely independent of other OS’ on the server.
 - Each instance has it’s own dedicated resources (i.e. a set amount of RAM, bandwidth, etc) that other instances can’t use.
 - Cheaper than fully dedicated servers.
- Runs on virtualization software.

Cloud Hosting

- Your Website runs on the “Cloud”, granting access to huge amounts of resources when required.
- The next step from virtual hosting.
- Users “pay as you go”:
 - More bandwidth, CPU, etc during a busy period.
 - Less during a quiet period.



the end