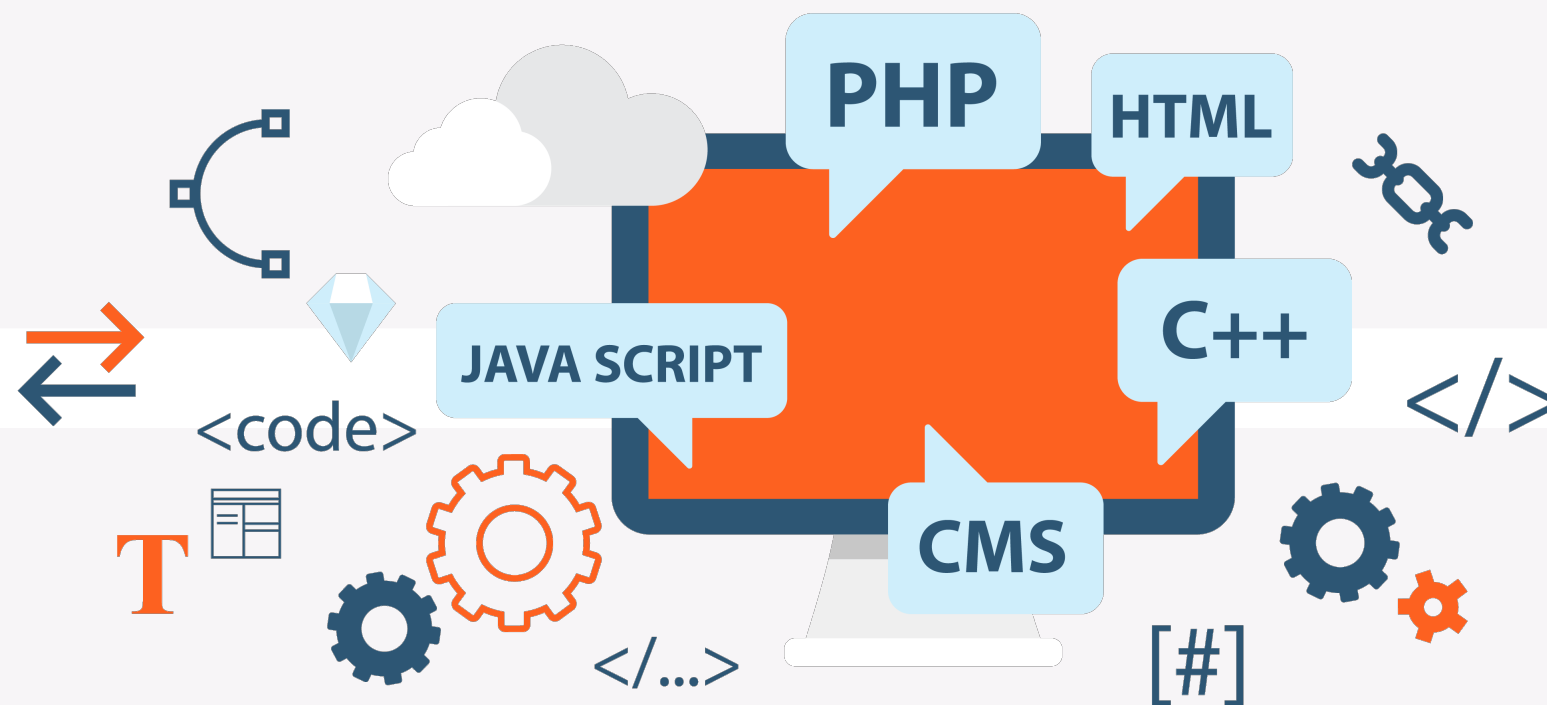


INFO3602

Web Programming & Technologies II



Introduction to Content Management Systems



Outline

- What is digital content?
- What is a Content Management System (CMS)?
- What types of CMS platforms exist?
- What are the components of a CMS?
- What are some examples of CMSs?
- What are some of its features?
- Why are CMSs used?

What is Digital Content?

“**Content** is information: the sum of **fresh**, **readable**, **relevant**, and **useful** information for a reader on your site. And as with anything in the digital world, it has to **look good** too, in an easily digestible way.”

What are some goals of using Digital Content?

There are four outcomes to strongly consider:

To **entertain** – this will have a strong emotional appeal to an audience, making it very shareable.

To **educate** – this will allow for a wide reach especially for those who might not be in the know about products or services just yet. Again, this is often very shareable.

To **persuade** – This is slightly more emotionally charged; content that gradually changes the mind of the consumer (I say consumer as persuasive content will often be used in a product sense).

To **convert** – Content that is more often than not rational rather than emotional as you will need a decision-making brain when considering what a conversion piece has to offer you

Exercise



Click on the following link to load the Google form:

<https://forms.gle/gQP8YP4h93osHxAe9>

A list of examples of digital content is presented.

1. Tick off the examples that you are not familiar with.
2. Do a quick search and define at least 3 that are new to you.

Content Management Systems

A content management system (CMS) is a software application or set of related programs that are used to **create** and **manage** digital content.

There are used for two main purposes:

1. **Enterprise content management** (ECM)
2. **Web content management** (WCM).

Enterprise Content Management

Enterprise content management (ECM) is a set of defined processes, strategies and tools that allow a business to effectively:

- ▶ **obtain, organize, store** and **deliver**
- ▶ critical **information**
- ▶ to its employees, business stakeholders and customers

Web Content Management

Web content management (WCM) involves providing an organization with a way to **manage** digital information on a website through **creating** and **maintaining** content **without prior knowledge** of web programming or markup languages.

CMS Components

Content Management Application (CMA)

Content Delivery Application (CDA)

Two Major CMS Components

CMS Components



Content Management Application (CMA)

Content Delivery Application (CDA)

Two Major CMS Components

The **CMA** is a graphical user interface (GUI) that allows the user to control the **design**, **creation**, **modification** and **removal** of content from a website without needing to know anything about HTML.

☰

Manage

★

Shortcuts

👤

sunita

📄

Content

▼

🏗️

Structure

▼

🔍

Appearance

🧩

Extend

🔧

Configuration

▼

👥

People

📊

Reports

▼

❓

Help

⬆️

🔥

sunitarai

Home

Search

🔍

Tools

[Add content](#)

📡

Welcome to sunitarai

No front page content has been created yet.

[Add content](#)

CMA #1

SystemUsersMenusContentComponentsExtensionsHelp

Control Panel

CONTENT

New ArticleArticlesCategoriesMedia

STRUCTURE

Menu(s)Modules

USERS

Users

CONFIGURATION

GlobalTemplatesLanguage(s)

EXTENSIONS

Install Extensions

MAINTENANCE

Joomla is up to date.
All extensions are up to date.

You have post-installation messages

There are important post-installation messages that require your attention.
This information area won't appear when you have hidden all the messages.

Read Messages

LOGGED-IN USERS

Super User Administration

2017-05-12 07:11

POPULAR ARTICLES

0Hello article

2017-05-09 11:41

RECENTLY ADDED ARTICLES

✓Hello article

Super User

2017-05-09 11:41

CMA #2

12

WordPress Dashboard interface showing the "Welcome to WordPress!" message and various widgets.

Dashboard

Howdy, Test

Screen Options Help

Welcome to WordPress!
We've assembled some links to get you started:

Get Started

[Customize Your Site](#)
or, [change your theme completely](#)

Next Steps

- [Write your first blog post](#)
- [Add an About page](#)
- [View your site](#)

More Actions

- [Manage widgets or menus](#)
- [Turn comments on or off](#)
- [Learn more about getting started](#)

At a Glance

- [1 Post](#)
- [1 Page](#)
- [1 Comment](#)

WordPress 3.8-RC1-src running [Twenty Fourteen](#) theme.
[Search Engines Discouraged](#)

Quick Draft

WordPress News

[WordPress 3.8 RC1](#) December 4, 2013
We're entering the quiet but busy part of a release, whittling down issues to bring you all of the new features you're excited about with the stability you expect from WordPress. There are just a few days from the "code freeze" for our 3.8 release, which includes a number of exciting enhancements, so the focus [...]

[WPTavern: Discover Which WordPress Plugins A Site Has Installed With Plugin Checker](#)

[WPTavern: This Week On WPWeekly: Scott Basgaard](#)

[WPTavern: WordSesh Recap: Global WordPress Event Pulls 3,000 Unique Viewers From 85 Countries](#)


Popular Plugin: [Contact Form \(Install\)](#)

Activity

Recently Published

Nov 25th, 4:04 pm [Hello world!](#)

Comments

 From [Mr WordPress](#) on [Hello world!](#) #
Hi, this is a comment. To delete a comment, just log in and view the post's comments. There you will have ...

[All](#) | [Pending \(0\)](#) | [Approved](#) | [Spam \(0\)](#) | [Trash \(0\)](#)

CMA #3

CMS Components

Content Management Application (CMA)

Content Delivery Application (CDA)

Two Major CMS Components

The **CDA** component provides the **back-end services** that support management and **delivery** of the content once it has been created in the CMA.

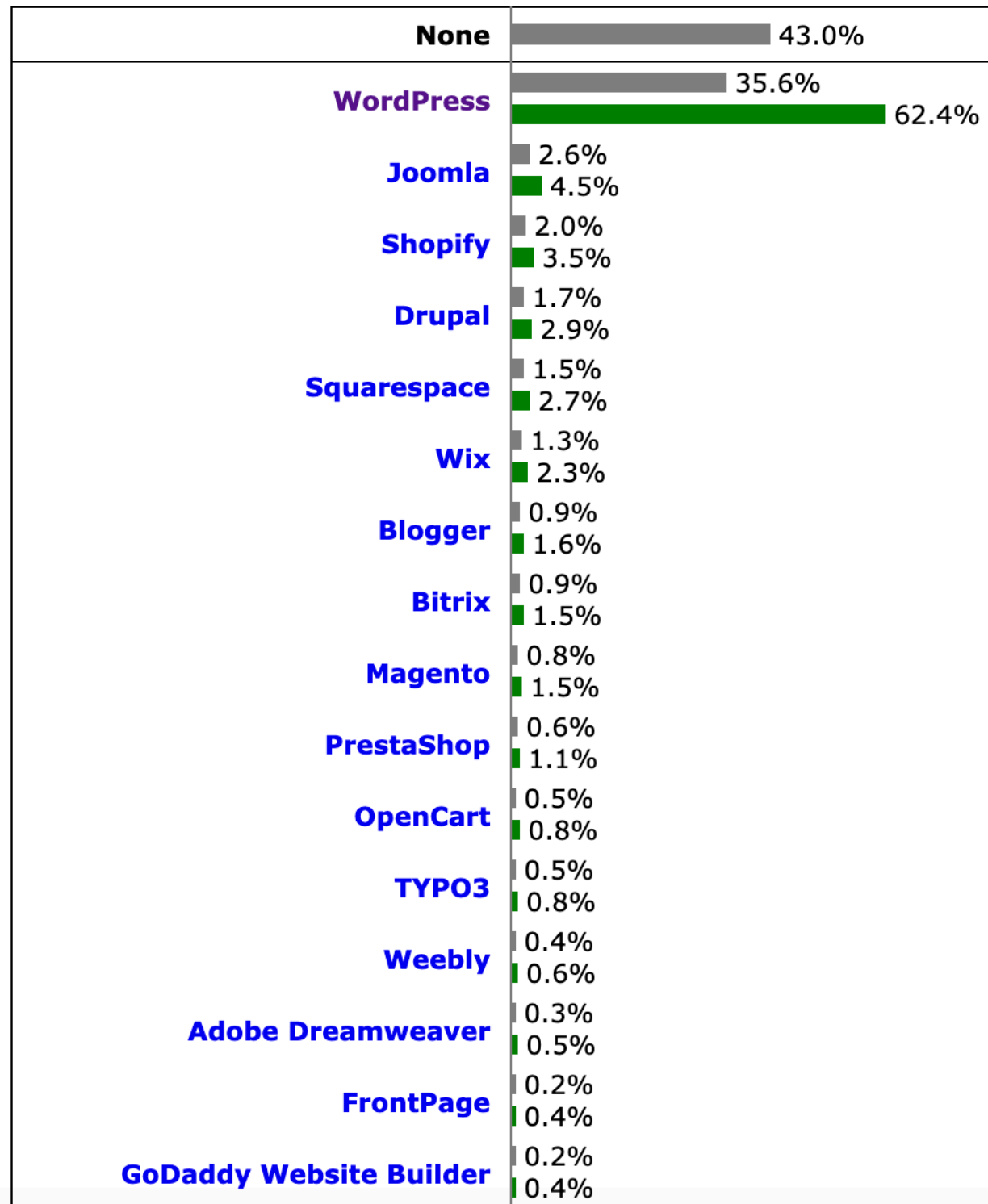
Exercise



List the name of the CMS for each icon.



W3Techs provides information about the usage of various types of technologies on the web.



This diagram shows the percentages of websites using various content management systems.

“43% of the websites use none of the content management systems monitored.

WordPress is used by 35.6% of all the websites,

that is a content management system market share of 62.4%.”

BuiltWith® is a website profiler, lead generation, competitive analysis and business intelligence tool providing technology adoption, ecommerce data and usage analytics for the internet.

Data on CMS Usage Distribution in the Top 1 Million Sites

Top In CMS Usage Distribution in the Top 1 Million Sites

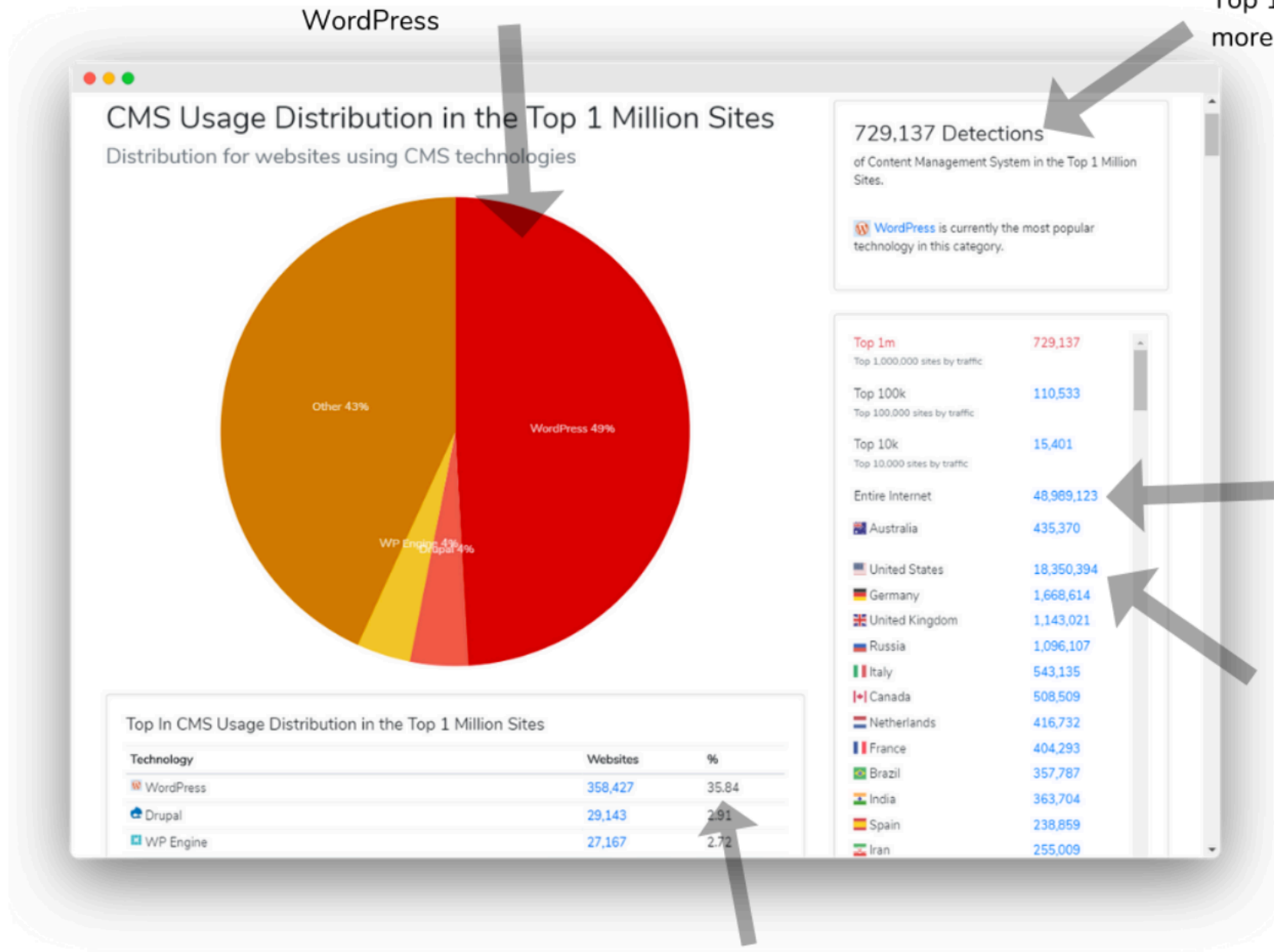
Technology	Websites	%
 WordPress	356,858	35.57
 Drupal	28,321	2.76
 WP Engine	27,002	2.65
 CPanel	21,115	2.09
 Google Search Appliance	18,320	1.76
 Joomla!	17,018	1.62
 Squarespace	11,568	1.12
 Blogger	10,364	1.03
 Unbounce	8,769	0.86
 Wix	7,768	0.77

49% WordPress

Out of all of the sites we found using a CMS, 49% or nearly half were using WordPress

729,137 Detections

We detected a CMS 729,137 times in the Top 1m site. A single website might have more than 1 CMS system.



35% WordPress

35% of the Top 1,000,000 sites are using WordPress

48,989,123

We detected nearly 49 million CMS' being used across the Entire Internet.

18,350,394

We detected 18 million CMS' being used in USA (this includes all .com/.net/.org sites).

CMS Features

Core functions are often considered to be:

- ▶ indexing
- ▶ search and retrieval
- ▶ format management
- ▶ revision control
- ▶ publishing.

Indexing, Search, Retrieval

Search indexes are used to define different sets of content to be searched, using the internal search of a website.

Intuitive indexing, search and retrieval features index all data for easy access through search functions and allow users to search by attributes such as publication dates, keywords or author.

Indexing

There are some cases where people want to discourage search engines from indexing their sites:

- ▶ Unfinished websites — at this stage of errors and trials, it's best not to have your website available to the public eyes.
- ▶ Restricted websites — if you plan to have an invite-only website, you do not want it to get listed on search engine results pages.
- ▶ Test accounts — web owners create a site duplicate for testing and trial purposes. Since these sites are not designed for the public, don't let it get indexed by search engines

Format Management

Format management facilitates turning scanned paper documents and legacy electronic documents into HTML or PDF documents.



Raw PDF



PDF optimised as web content

Revision Features

Revision features allow content to be updated and edited after initial publication. Revision control also tracks any changes made to files by individuals.

It prevents the risk of losing data and improves the editorial workflow.

WP-Sweep

Before you do any sweep, please [backup your database](#) first because any sweep done is irreversible.

For performance reasons, only 500 items will be shown if you click Details

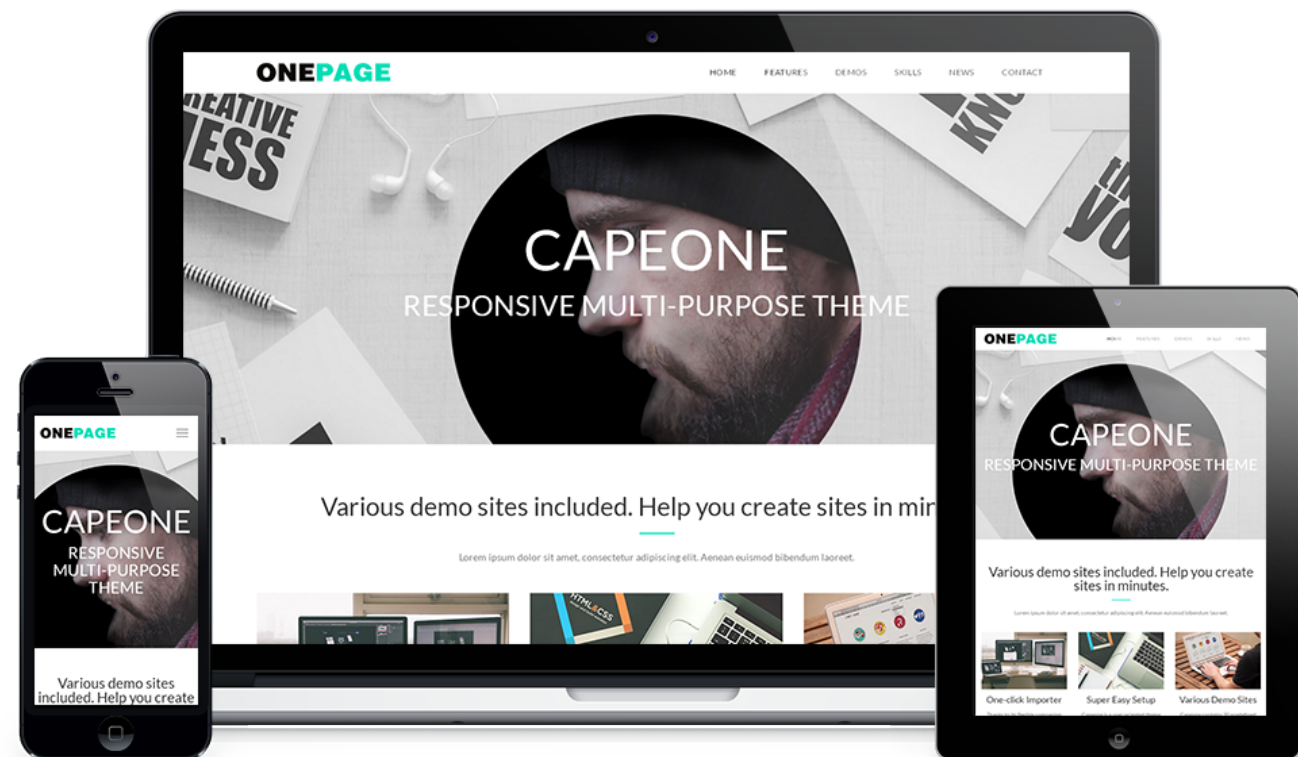
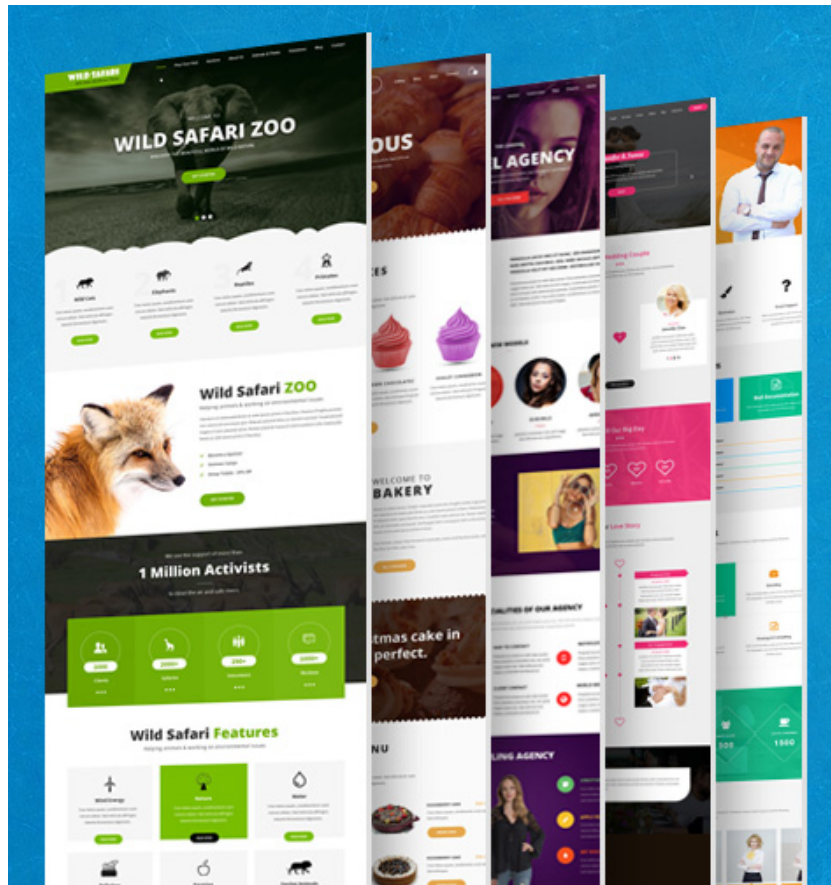
Post Sweep

There are a total of **222 Posts** and **464 Post Meta**.

Details	Count	% Of	Action
Revisions	9	4.05%	Sweep Details
Auto Drafts	2	0.9%	Sweep Details
Deleted Posts	0	0%	N/A
Orphaned Post Meta	0	0%	N/A
Duplicated Post Meta	0	0%	N/A
oEmbed Caches In Post Meta	0	0%	N/A

Publishing

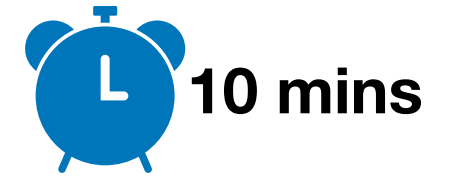
Publishing functionality allows individuals to use a template or a set of templates approved by the organization, as well as wizards and other tools to create or modify content.



Additional CMS Features

1. **SEO**-friendly URLs
2. Integrated and online **help**, including discussion boards
3. Group-based **permission systems**
4. Full template support and customizable **templates**
5. Easy wizard-based install and **versioning** procedures
6. **Admin** panel with multiple language support
7. **Content hierarchy** with unlimited depth and size
8. Minimal **server** requirements
9. Integrated **file managers**
10. Integrated **audit** logs

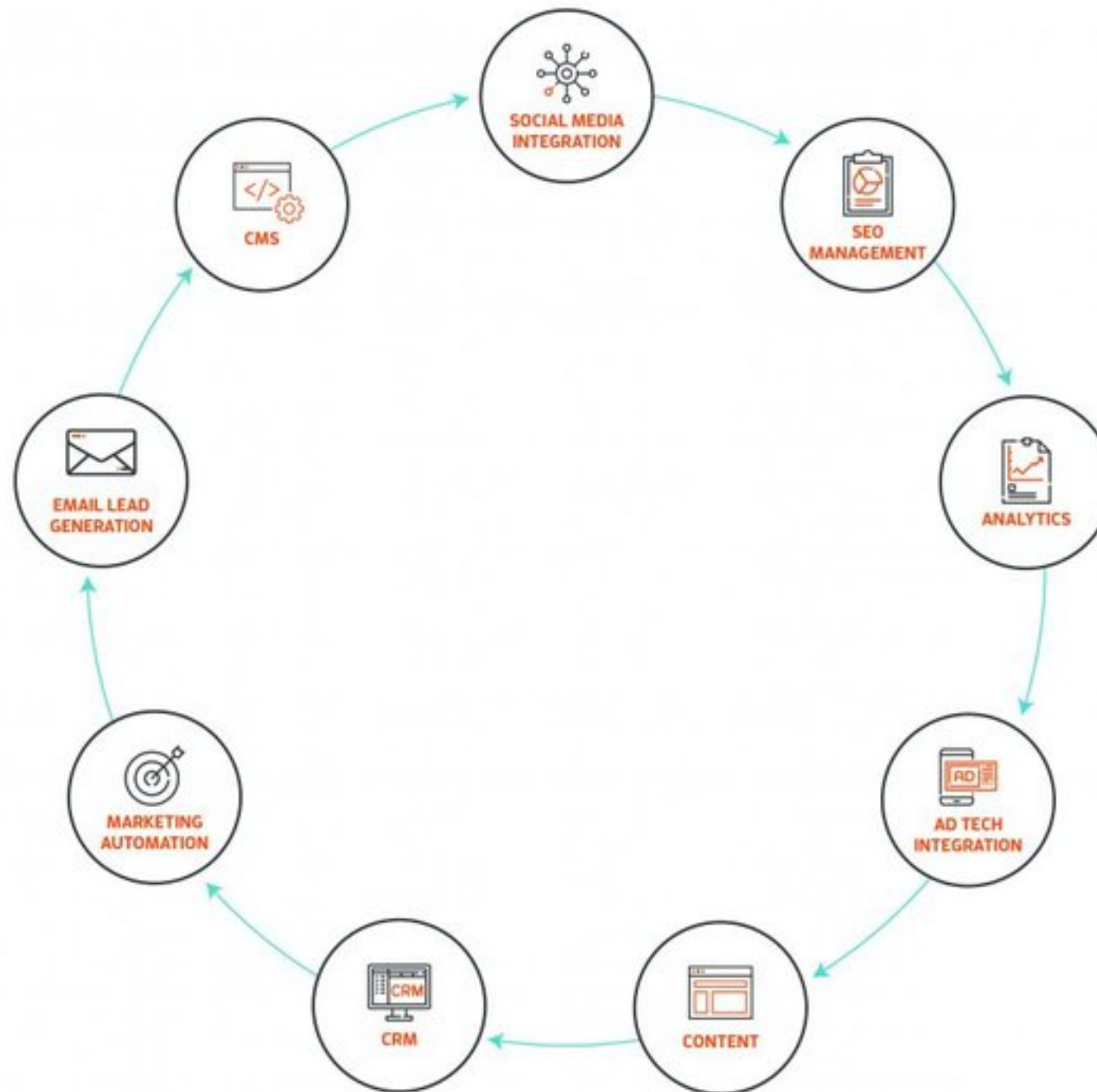
Exercise



In groups of 2-3, research one of the additional CMS features below and then post your findings on myElearning regarding: What does the feature do, and how the CMS achieves it.

1. **SEO**-friendly URLs
2. Integrated and online **help**, including discussion boards
3. Group-based **permission systems**
4. Full template support and customizable **templates**
5. Easy wizard-based install and **versioning** procedures
6. **Admin** panel with multiple language support
7. **Content hierarchy** with unlimited depth and size
8. Minimal **server** requirements
9. Integrated **file managers**
10. Integrated **audit** logs

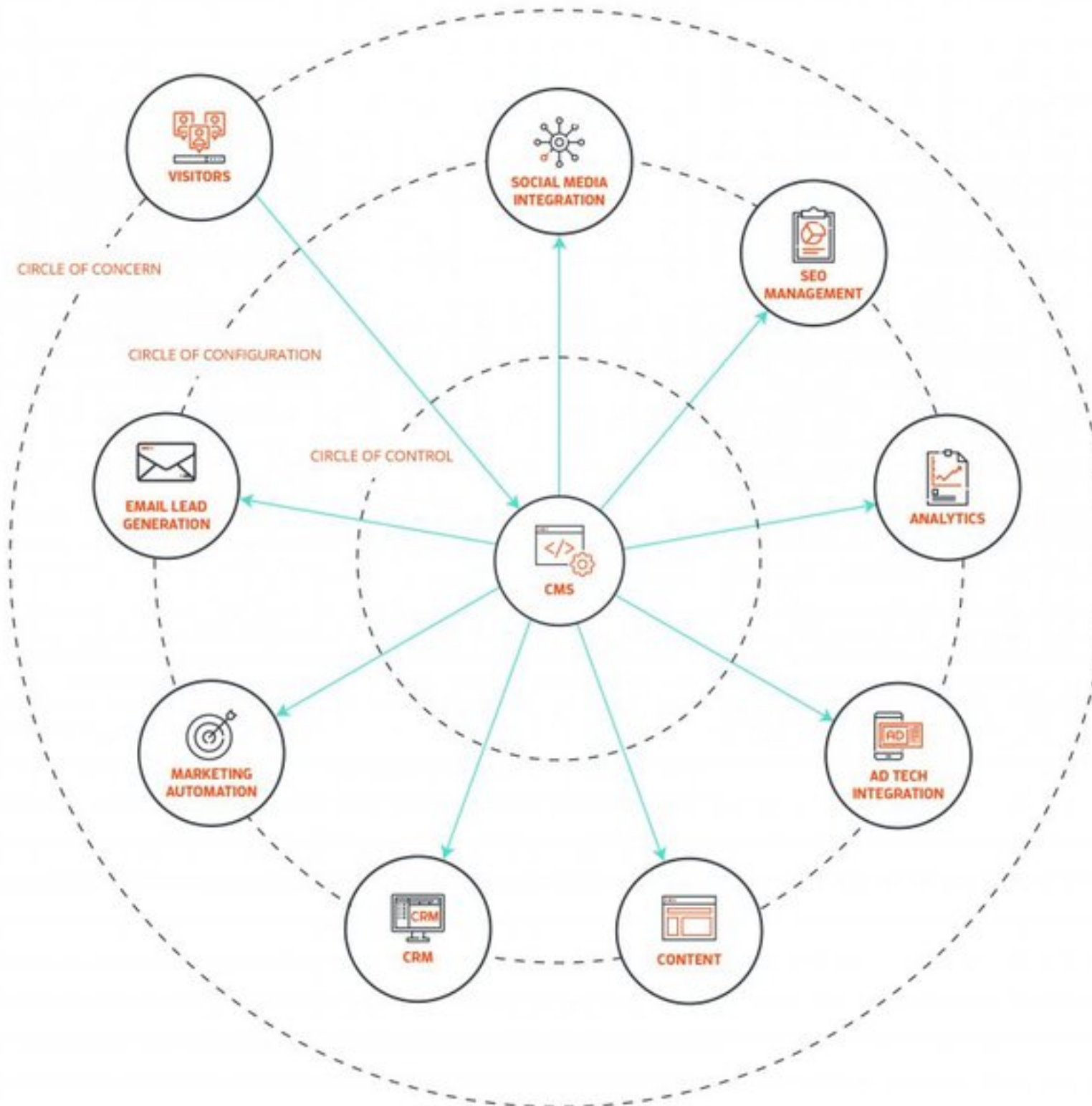
Marketing Stack: Model 1



Marketing Stack: Model 2



Marketing Stack: Model 3



Exercise



Read the article “History of Content Management Systems” and answer the quiz questions supplied

Reading and References

- CMS: <https://searchcontentmanagement.techtarget.com/definition/content-management-system-CMS>
- CMS comparison & images sourced from: <https://themegrill.com/blog/drupal-vs-wordpress-vs-joomla/>
- W3Techs Survey: https://w3techs.com/technologies/overview/content_management
- CMO: <https://www.npgroup.net/blog/cms-for-the-cmo-a-marketing-executive-s-guide-to-cms-solutions/>
- History of CMS: <https://www.contentstack.com/blog/all-about-headless/content-management-systems-history-and-headless-cms>