

Uka Tarsadia University

M.C.A (5th Semester)/MSc(CA) (3rd Semester)

040010503/040020302: Content Management Systems

Objectives: To provide knowledge of dynamic scripting language, open source web application development framework and to explore the use of open source web-based content management system with customization.

Course Outcomes:

Upon completion of the course students shall be able to

- CO1 : Determine the importance of open source web based development.
- CO2 : Design, develop and implement dynamic website using PHP MySQL.
- CO3 : Design, develop and implement a full featured web application using open source framework CodeIgniter.
- CO4 : Improve PHP coding productivity.
- CO5 : Set up CMS web application using Joomla.
- CO6 : Create customized templates, plugins and modules in Joomla.

Unit	Sub Unit	No. of Lecture(s)	Topics	Reference Chapter /Additional Reading	Planned Teaching Methodology	Evaluation Parameters
1	Dynamic Scripting Language -- PHP					
	1.1	1	Introduction to PHP, Operators and Variables, Control Structures and Looping	CR#1, CR#2	Presentation and Demonstration	Quiz 1

	1.2	1	Array and String	CR#3 93 to 120		
	1.3	2	Functions	CR#3 82 43 104, CR #9, CR#4		
	1.4	1	File Uploading and Object Oriented Features	CR#5 187 to 191 , CR#8 307 to 312		
	1.5	3	Working with MySQL	CR#10		
	1.6	2	Session Management	CR#11		
2	MVC in CodeIgniter					
	2.1	1	CodeIgniter: Introduction, Features of CodeIgniter, Application Flow Chart		Discussion/ Chalk and Talk	
	2.2, 2.3	1	Creating Static Pages in CodeIgniter, CodeIgniter URLs	[UG]/tutorial/static_pages.html [UG]/general/urls.html	Presentation and Demonstration	
	2.4	2	Controller	[UG]/general/controllers.html		
	2.5	1	Views	[UG]/general/views.html	Presentation and Demonstration	
	2.6	2	Models	[UG]/general/models.h		

				tml		
3	Libraries, Routing and Error Handling in CodeIgniter					
	3.1	1	Helpers	[UG]/general/helpers.html	Presentation and Demonstration	
	3.2	1	Creating and Usage of Libraries	[UG]/general/libraries.html [UG]/general/creating-libraries.html		
	3.3	1	Creating and usage of Drivers	[UG]/user-guide/general/drivers.html [UG]/general/creating-drivers.html		
	3.4	1	URI Routing	[UG]/general/routing.html	Presentation and Demonstration	
	3.5	1	Error Handling	[UG]/general/errors.html		
	3.6	2	Profiling Application	[UG]/general/profiling.html		

4	Managing Content Using Joomla					
	4.1	1	Introduction – CMS and Joomla	JB#1	Discussion/ Chalk and Talk	
	4.2	1	Creating, Formatting and Displaying Content	JB#5 71-126	Presentatio n and Demonstrat ion	Unit Test 1
	4.3	2	Link, Page Break, Read More	JB#5 80, 87- 91		
	4.4	2	Menu Manager	JB#8 175- 228		
	4.5	2	Media Manager	JB#6 139- 144		
5	Users and Extensions of Joomla					
	5.1	1	Managing Users	JB#10	Presentatio n and Demonstrat ion	
	5.2	1	Module Manager	JB#17		
	5.3	2	Page layouts	JB#8 191- 224		
	5.4	2	Extensions	JB#22		
	5.5	2	Template Manager	JB#20		
6	Customization in Joomla					
	6.1	1	Creating Own Template	JB#20, 553- 566	Presentatio n and Demonstrat ion	Unit Test 2
	6.2	2	Working of Plugin	JB#21, 596- 602	Discussion/ Chalk and	

	6.3	1	Plugin Types	JB#19, 488-521	Talk	
	6.4	2	Creating Own Plugin	JB#21, 596-602	Presentation and Demonstration	
	6.5	2	Creating Own Module	JB#21, 583-593		

Course Objectives and Course Outcomes Mapping:

- To describe the importance of open source web based development: CO-1
- To provide basic knowledge of dynamic scripting language in association with open source database: CO1, CO2, CO4.
- To create awareness regarding open source web application development framework: CO3, CO4.
- To develop an in-depth understanding of the general processes used to set up CMS web application: CO5, CO6.
- To teach customization in CMS web application: CO6.

Course Units and Course Outcomes Mapping:

Unit No.	Unit	Course outcome					
		CO1	CO2	CO3	CO4	CO5	CO6
1	Dynamic Scripting Language – PHP	✓	✓				
2	MVC in CodeIgniter	✓		✓	✓		

3	Libraries, Routing and Error Handling in CodeIgniter	✓		✓	✓		
4	Managing Content Using Joomla	✓				✓	
5	Users and Extensions of Joomla	✓				✓	
6	Customization in Joomla	✓					✓

Course Outcome and Program Outcome Mapping:

	CO1	CO2	CO3	CO4	CO5	CO6
PO1	✓	✓				✓
PO2		✓	✓	✓	✓	✓
PO3						
PO4				✓	✓	
PO5			✓			✓
PO6		✓	✓	✓	✓	✓

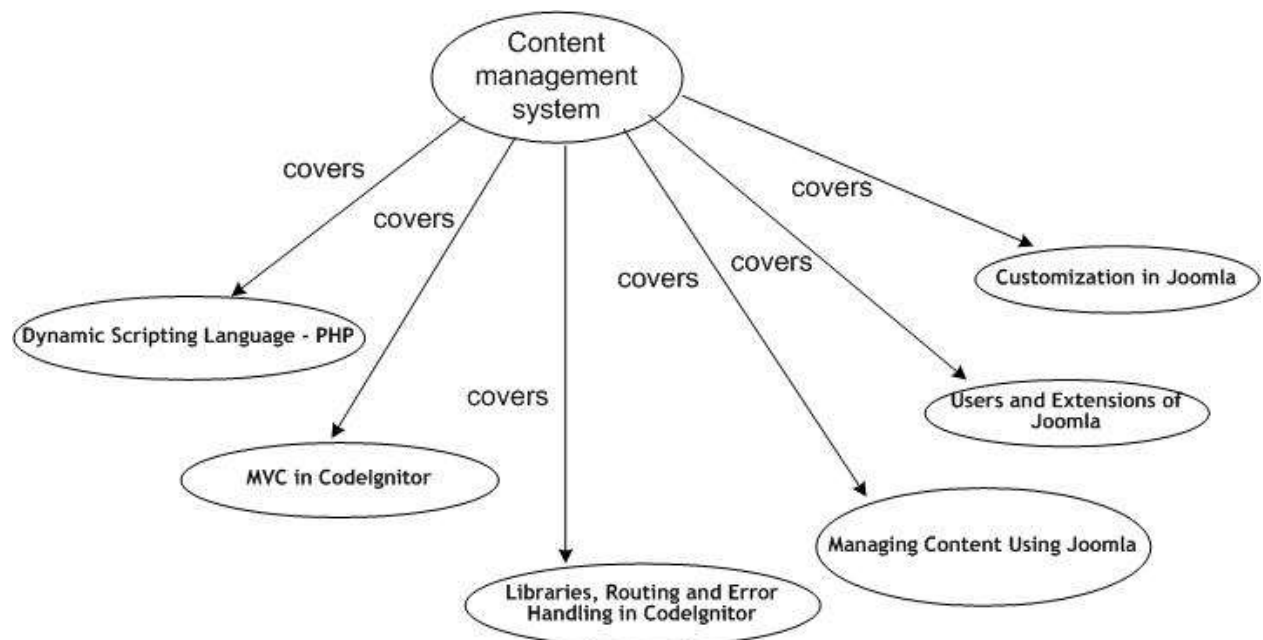
Activities/Practicum:

The following activities shall be carried out by the students.

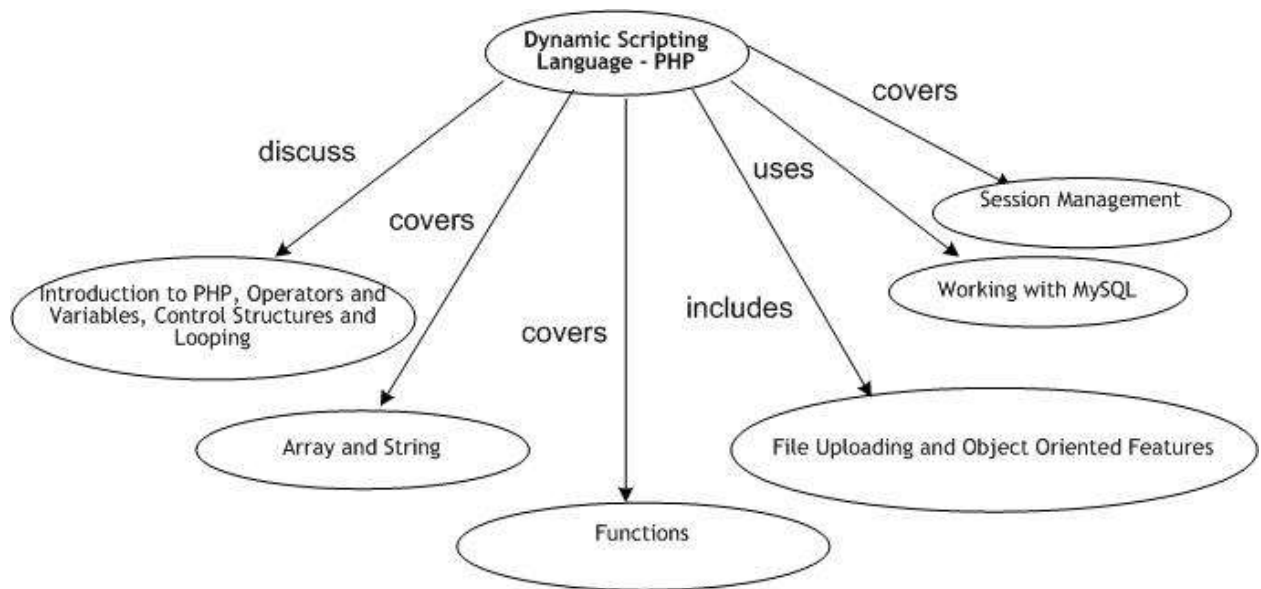
- ❖ Installation of LAMP/WAMP, Joomla and CodeIgniter.
- ❖ Learning reference classes of CodeIgniter.

The following activities shall be carried out by the teacher.

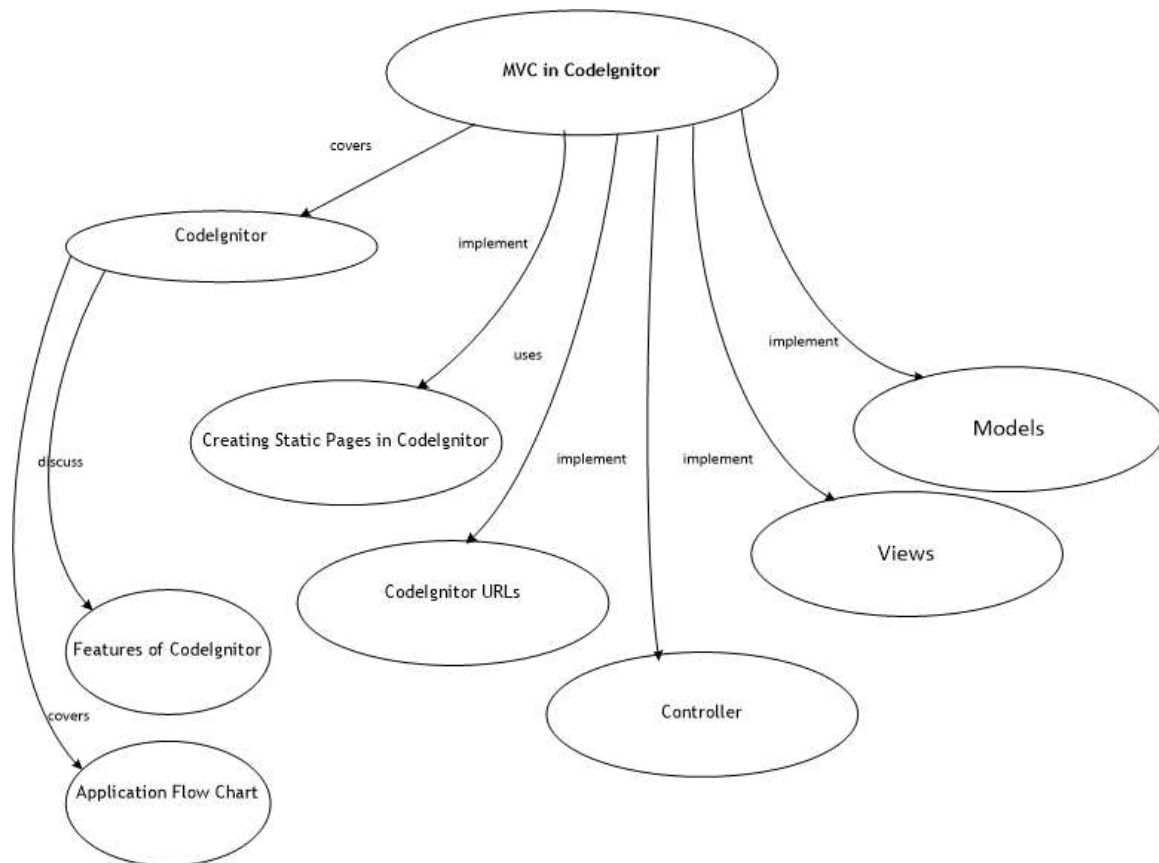
- ❖ Demonstrate open source CMS tool WordPress.
- ❖ Demonstrate open source web application framework Zend.

Concept Map:

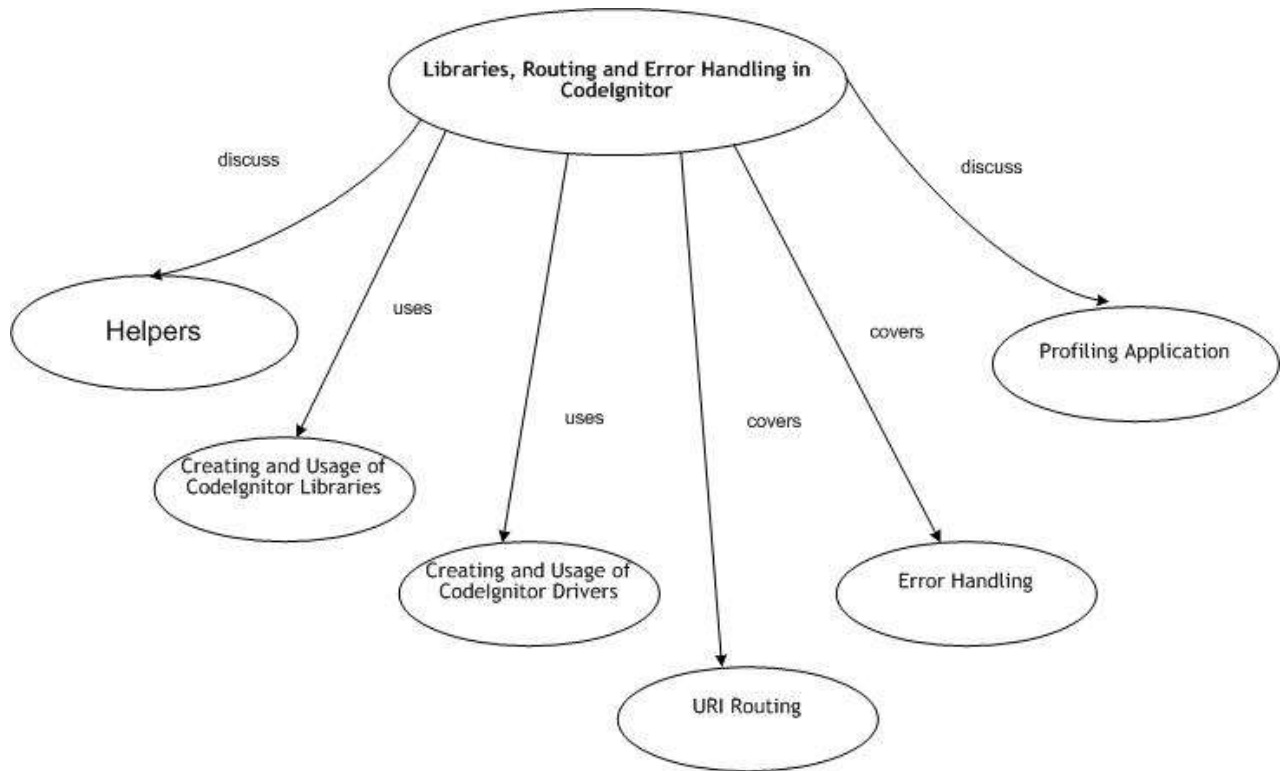
Unit-1



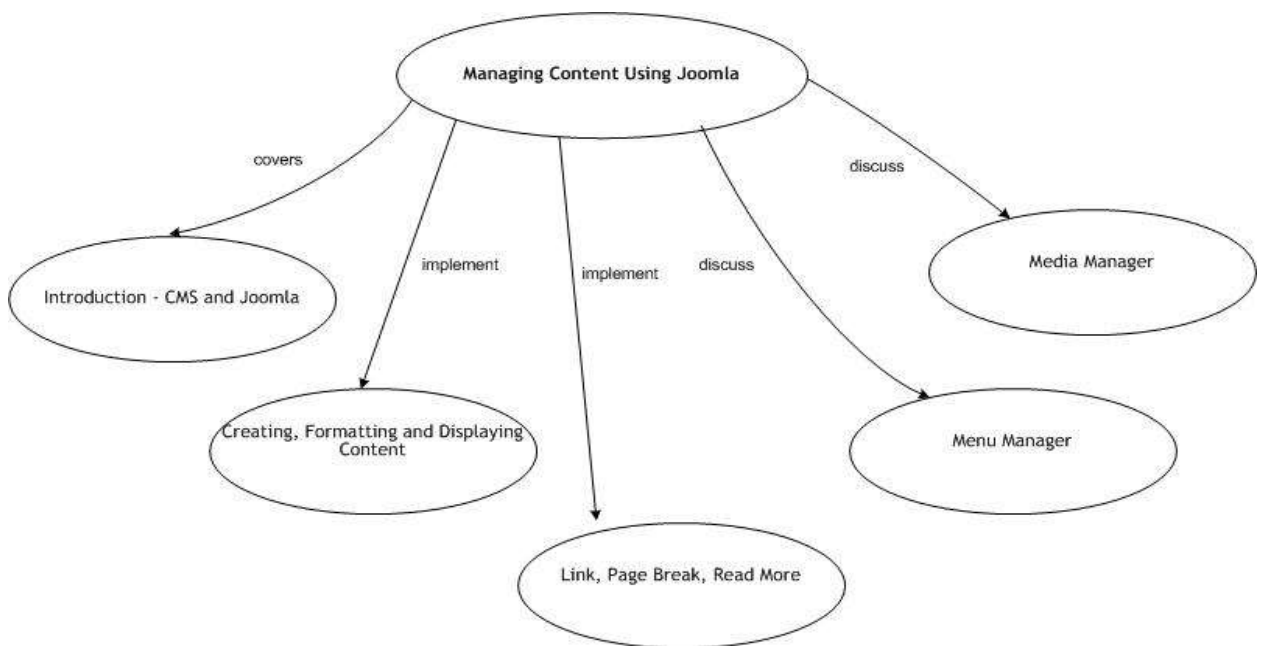
Unit-2



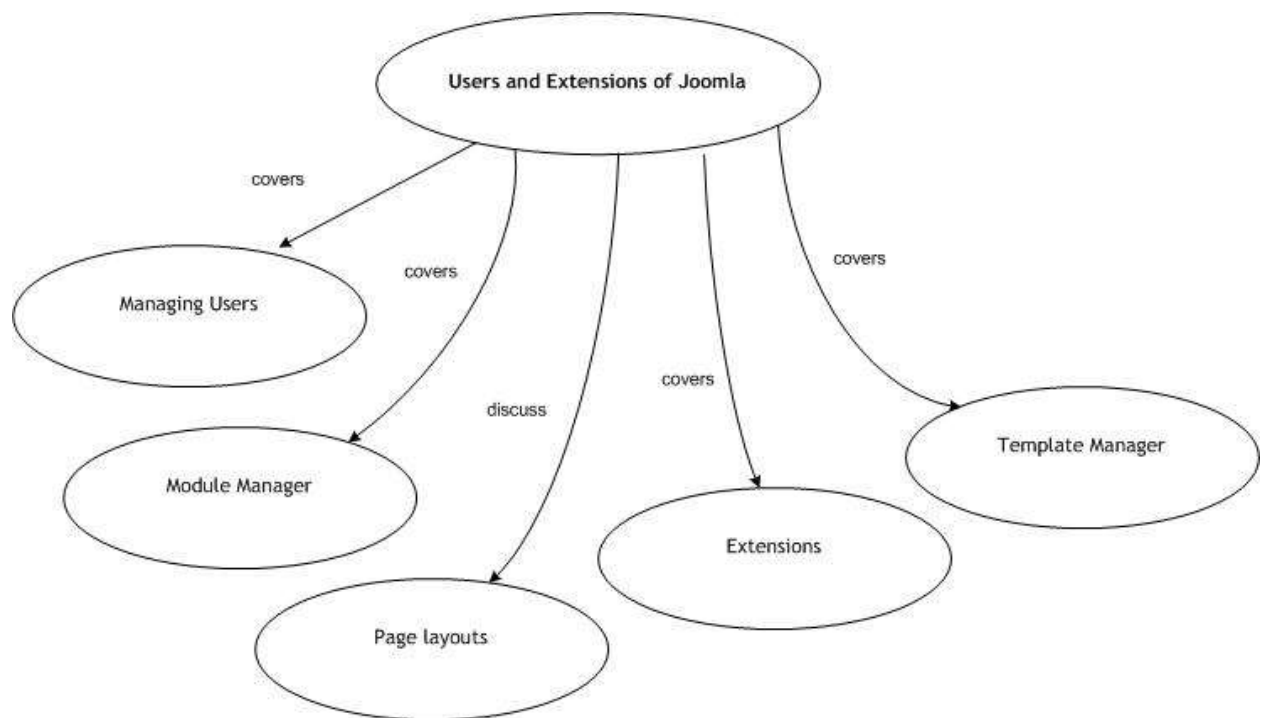
Unit-3



Unit-4



Unit-5



Unit-6

