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16CS551

Fifth Semester B.E. Semester End Examination, Dec./Jan. 2019-20

ADVANCED WEB PROGRAMMING

Time: 3 Hours

Max. Marks: 100

Instructions: 1. Answer one full question from each unit.
2. Draw the diagrams wherever necessary.

			L	CO	PO	M
		UNIT - I				
1	a.	List out difference between frames and hidden frames	(1)	(1)	(1)	(04)
	b.	Explain HTTP responses along with status codes	(2)	(1)	(1)	(06)
	c.	Write a short note on i)Google Suggest ii)Gmail iii)Google Maps iv) Yahoo News v) Bitflux Blog	(2)	(1)	(1)	(10)
		OR				
2	a.	List and Explain any six principles of Ajax.	(2)	(1)	(1)	(06)
	b.	Describe with the diagram the advantages and disadvantages of XHR.	(2)	(1)	(1)	(04)
	c.	Define Design patterns. Explain predictive fetch pattern and submission throttling pattern.	(2)	(1)	(1)	(10)
		UNIT – II	L	CO	PO	M
3	a.	List the benefits of full stack development.	(1)	(1)	(1)	(05)
	b.	Explain with the diagram one-way data binding and two-way data binding.	(2)	(1)	(1)	(10)
	c.	Write a short note on hardware architecture for MEAN stack development.	(3)	(1)	(1)	(05)
		OR				
4	a.	Compare relational databases and document databases.	(2)	(1)	(1)	(05)
	b.	Explain with the diagram MEAN stack architecture. Also explain the purpose of each technology in MEAN stack.	(2)	(1)	(1)	(10)
	c.	List and explain rapid prototype development stages of MEAN stack architecture.	(2)	(1)	(1)	(05)
		UNIT - III	L	CO	PO	M
5	a.	Explain request response flow of MVC architecture.	(2)	(1)	(1)	(05)
	b.	The *add_review* page must contain a form with name, rating and review fields which the user will fill in and submit for a particular location. The appropriate error handling mechanism must be added for the submission of the form. Write the code for add_review.jade and design the appropriate desktop and mobile screen layouts for the same.	(5)	(2)	(3)	(10)
	c.	Explain how you test routes and controllers.	(2)	(1)	(1)	(05)

		OR					
6	a.	Illustrate defining of package.json file.	(4)	(1)	(1)	(05)
	b.	Explain the steps involved in pushing the site live using Git.	(2)	(1)	(1)	(05)
	c.	Write the code for complete database connection file using mongoose	(3)	(2)	(3)	(10)
			L	**CO**	**PO**	**M**
		UNIT - IV				
7	a.	Differentiate between good API and bad API and List down the various HTTP status codes.	(2)	(3)	(1)	(10)
	b.	Explain DELETE method to remove data from MongoDB.	(2)	(3)	(1)	(10)
		OR				
8	a.	Define REST API and its rules. Explain how REST API processes HTTP requests.	(2)	(3)	(1)	(05)
	b.	Explain how to update an existing subdocument in MongoDB	(2)	(3)	(1)	(05)
	c.	Explain i) Validating at the application level with NODE and Express ii) Validating with browser with jQuery	(2)	(03)	(1)	(10)
			L	**CO**	**PO**	**M**
		UNIT -V				
9	a.	Describe how to add angular to Express application	(2)	(1)	(1)	(05)
	b.	Write a short note on one-way password encryption using hashes and salts.	(2)	(1)	(1)	(05)
	c.	Explain the Full MEAN stack approach for authentication	(2)	(3)	(1)	(10)
		OR				
10	a.	Explain how to make HTTP requests from angular to an API	(2)	(3)	(1)	(10)
	b.	Elaborate on how do you improve browser performance	(2)	(1)	(1)	(10)

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Fifth Semester B.E. Fast Track Semester End Examination, July/August 2019
ADVANCED WEB PROGRMMING

Time: 3 Hours

Max. Marks: 100

Instructions: 1. *Unit I and Unit II are compulsory.*
2. *Answer any one full question from each of the remaining units.*

			L	CO	PO	M
		UNIT – I (compulsory)				
1	a.	Compare classic web applications model with Ajax web application model.	(2)	(1)	(1)	(05)
	b.	Explain how do you handle multiple browser implementations in Ajax with Example.	(2)	(1)	(1)	(05)
	c.	Define Deign Patterns. Explain Predictive fetch pattern and submission throttling pattern.	(2)	(1)	(1)	(10)
		UNIT – II (compulsory)				
2	a.	Explain with the diagram one way data binding and two way data binding	(2)	(1)	(1)	(10)
	b.	Which is the better approach: single threaded web server or multi threaded web server? Justify your answer	(4)	(1)	(1)	(05)
	c.	Compare integrated approach and API approach of data integration into node.js	(2)	(1)	(1)	(05)
		UNIT - III	L	CO	PO	M
3	a.	The primary aim for the homepage is to display a list of locations. Each location will need to have a name, an address, the distance away, users' ratings and a facilities list. We will also want to add a header to the page, and some text to put the list in the context, so that the users know what they are looking at when they first visit. Design a desktop and mobile screen layouts for the given scenario.	(5)	(2)	(3)	(10)
	b.	Explain request-response flow of a basic MVC architecture.	(2)	(1)	(1)	(05)
	c.	Explain how you test controllers and routes	(2)	(1)	(1)	(05)
		OR				
4	a.	Explain with diagram the key interactions and processes that Express goes through when responding to the request for the default landing page.	(2)	(1)	(1)	(10)
	b.	Explain the usage of jade templates. Also explain the index.jade and layout.jade template files with sample code	(2)	(1)	(1)	(10)
		UNIT - IV	L	CO	PO	M
5	a.	Explain most popular HTTP status codes and how they might be used when sending responses to an API request.	(2)	(3)	(1)	(10)
	b.	Explain POST methods for adding data to MongoDB	(2)	(3)	(1)	(10)
		OR				
6	a.	i)Creating a new document in MongoDB ii)Creating new subdocuments in MongoDB	(2)	(1)	(1)	(10)

Note: L (Level), CO (Course Outcome), PO (Programme Outcome), M (Marks)

				L	CO	PO	M
	b.	Explain the methods to protect data integrity with data validation.		(2)	(1)	(1)	(10)
		UNIT - V					
7	a.	Explain different methods of getting data from an API		(2)	(1)	(1)	(10)
	b.	Explain full MEAN stack approach for authentication		(2)	(1)	(1)	(10)
		OR					
8	a.	Explain the steps to add services to single page applications.		(2)	(1)	(1)	(05)
	b.	Write a note on one way password encryption with hashes and salts		(2)	(1)	(1)	(05)
	c.	Elaborate how do you improve browsers performance		(2)	(1)	(1)	(10)

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16CS551

Fifth Semester B.E. Makeup Examination, January 2019

ADVANCED WEB PROGRAMMING

Time: 3 Hours

Max. Marks: 100

Instructions: 1. *Unit-I and Unit-II are compulsory*
2. *Answer any one full question from each of the remaining units.*

UNIT - I

			L	CO	PO	M
1	a.	Compare classic web application model with Ajax web application model.	(2)	(1)	(1)	(05)
	b.	Define Design Patterns. Explain submission throttling design pattern with diagram.	(2)	(1)	(1)	(05)
	c.	Write a code to implement Google Suggest like feature using Ajax and PHP.	(3)	(1)	(3)	(10)

UNIT – II

			L	CO	PO	M
2	a.	Which is better approach: single threaded web server or multithreaded web server? Justify your answer with proper reasoning.	(4)	(1)	(1)	(05)
	b.	Explain with diagram MEAN stack architecture. Also explain the purpose of each technology in MEAN stack.	(2)	(1)	(1)	(10)
	c.	What is the difference between development hardware and production hardware? Recommend suitable hardware architecture for the following scenarios. a. An application with low amounts of traffic. b. For Platform as a service c. Growing traffic d. Overloading traffic or thousands of requests per second.	(5)	(1)	(3)	(05)

UNIT - III

			L	CO	PO	M
3	a.	The primary aim for the homepage is to display a list of locations. Each location will need to have a name, an address, the distance away, users' ratings, and a facilities list. We'll also want to add a header to the page, and some text to put the list in context, so that users know what they're looking at when they first visit. Design a Desktop and mobile screen layouts for the given scenario.	(5)	(2)	(3)	(10)
	b.	Explain request–response flow of a basic MVC architecture.	(2)	(1)	(1)	(05)
	c.	Explain how you handle complex and repeating data.	(2)	(1)	(1)	(05)

OR

4	a.	Explain the key interactions and processes that Express goes through when responding to the request for the default landing page.	(2)	(1)	(1)	(05)
	b.	Explain the steps in hosting an application on Heroku	(2)	(1)	(1)	(10)
	c.	Explain how do you setup controllers	(2)	(1)	(1)	(05)

Note: L (Level), CO (Course Outcome), PO (Programme Outcome), M (Marks)

UNIT - IV

			L	CO	PO	M
5	a.	A good API always returns a response and shouldn't leave you hanging. Justify this statement	(4)	(3)	(1)	(05)
	b.	Recommend suitable request method for the following actions with proper justification a. Create a new location b. Read list of locations c. Read specific location d. Update a specific location e. Delete a specific location	(5)	(3)	(3)	(10)
	c.	Explain Request Methods for REST APIs.	(2)	(3)	(1)	(05)

OR

6	a.	Explain i) Creating new documents in MongoDB ii) Creating new subdocuments in MongoDB	(2)	(1)	(1)	(10)
	b.	Explain i) Using Mongoose to update a document in MongoDB ii) Updating an existing subdocument in MongoDB	(2)	(1)	(1)	(10)

UNIT -V

			L	CO	PO	M
7	a.	Explain how do your ensure forms work as expected.	(2)	(1)	(1)	(10)
	b.	Write a note on $scope.$apply().	(2)	(1)	(1)	(05)
	c.	Explain the steps to add services to single page applications	(2)	(1)	(1)	(05)

OR

8	a.	Explain how do you secure relevant API end-points	(2)	(1)	(1)	(10)
	b.	Explain traditional server-based application approach for authentication.	(2)	(1)	(1)	(10)

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15CS561/16CS551

Fifth Semester B.E. Semester End Examination, Dec/Jan 2018-19

ADVANCED WEB PROGRAMMING

Time: 3 Hours

Max. Marks: 100

Instructions: 1. *Unit-I and Unit-II are compulsory*
2. *Answer any one full question from each of the remaining units.*

UNIT - I

			L	CO	PO	M
1	a.	List and explain any five basic principles of ajax.	(02)	(01)	(01)	(05)
	b.	Explain how do you handle multiple browser implementations in Ajax with examples	(02)	(01)	(01)	(05)
	c.	Explain with example fallback patterns. Write an Ajax code to fetch content from text file and display it on the webpage.	(03)	(01)	(03)	(10)

UNIT – II

			L	CO	PO	M
2	a.	Explain the benefits of full stack development.	(02)	(01)	(01)	(05)
	b.	Compare integrated approach and API approach of data integration into node.js.	(02)	(01)	(01)	(05)
	c.	What is the difference between development hardware and production hardware? Recommend suitable hardware architecture for the following scenarios. Justify your recommendations a. An application with low amounts of traffic. b. For Platform as a service c. Growing traffic d. Overloading traffic or thousands of requests per second.	(05)	(01)	(03)	(10)

UNIT - III

			L	CO	PO	M
3	a.	The primary aim for the homepage is to display a list of locations. Each location will need to have a name, an address, the distance away, users' ratings, and a facilities list. We'll also want to add a header to the page, and some text to put the list in context, so that users know what they're looking at when they first visit. Design a Desktop and mobile screen layouts for the given scenario.	(05)	(02)	(03)	(10)
	b.	Explain the need for Bootstrap. Explain breakpoints that Bootstrap targets for different types of devices.	(02)	(02)	(01)	(05)
	c.	Explain how you test controllers and routes.	(02)	(01)	(01)	(05)

OR

4	a.	Explain the usage of jade templates. Also explain the index.jade and layout.jade template files with sample code.	(02)	(01)	(01)	(10)
	b.	Explain how a relational database and document database store repeating information relating to a parent element.	(02)	(01)	(01)	(05)
	c.	Explain how the application and database talk to each other through models.	(02)	(01)	(01)	(05)

Note: L (Level), CO (Course Outcome), PO (Programme Outcome), M (Marks)

			L	CO	PO	M
		UNIT - IV				
5	a.	Explain the working of REST APIs with diagram	(02)	(03)	(01)	(05)
	b.	Recommend suitable request method for the following actions a.Create a new location b. Read list of locations c. Read specific location d. Update a specific location e. Delete a specific location	(05)	(03)	(03)	(05)
	c.	Explain most popular HTTP status codes and how they might be used when sending responses to an API request.	(02)	(03)	(01)	(10)
		OR				
6	a.	Explain i) Deleting documents in MongoDB ii) Dclcting a subdocument from MongoDB	(02)	(01)	(01)	(10)
	b.	Explain methods to protect data integrity with data validation.	(02)	(01)	(01)	(10)
			L	CO	PO	M
		UNIT -V				
7	a.	Explain various methods of getting data from an API.	(02)	(01)	(01)	(10)
	b.	Explain three different request loops associated with different approaches for routing requests in Single Page Applications	(02)	(01)	(01)	(10)
		OR				
8	a.	Explain steps involved in removing the reliance on server side application	(02)	(01)	(01)	(10)
	b.	Explain full MEAN stack approach for authentication	(02)	(01)	(01)	(10)

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15IS661

Sixth Semester B.E. Semester End Examination, May / June 2018

WEB APPLICATION DESIGN AND PROGRAMMING

Time: 3 Hours Max. Marks: 100

Instructions: 1. UNIT-I and UNIT-III are compulsory
2. Answer any one full question from remainin;

UNIT - I

1 a. Define Web. Describe domain name conversion with a neat diagram. **05 M**
(Level[1], CO[1], PO[1])

b. Explain MIME with its type specifications. **05 M**
(Level[2], CO[1], PO[1])

c. Outline the general form of HTTP request and response phase. **10 M**
(Level[2], CO[1], PO[1])

UNIT – II

2 a. Explain display of an image in XHTML document with an example. **04 M**
(Level[2], CO[2], PO[1])

b. Illustrate with an example the use of attributes rowspan, colspan, align, valign cellpadding and cellspacing in creation of a table. **10 M**
(Level[2], CO[2], PO[2])

c. Explain the following tags with an example for each. i). <a> ii). <form> iii). <dl> **06 M**
(Level[2], CO[2], PO[1])

OR

3 a. Create an XHTML document to demonstrate the nesting of ordered list. It includes aircraft types as General Aviation and Commercial Aviation. General Aviation has types as single engine air craft and dual engine aircraft. Single engine aircraft has types as trail wheel and tricycle. Dual engine aircraft has types as Wing mounted engines and push pull mounted engines. Commercial Aviation has types as Dual engine air craft and Tri engine aircraft. Dual engine aircraft has types as Wing engines and fuel usage mounted engines. Tri engine aircraft has types as third engine and fuel usage third engine. **10 M**
(Level[4], CO[2], PO[3])

b. Describe the following XHTML controls with an example for each **10 M**
i). checkbox
ii).radio button
iii).password box
iv). text area
v). submit button
(Level[2], CO[2], PO[1])

UNIT-III

4 a. Describe all selector forms with an example for each. **10 M**
(Level[2], CO[3], PO[1])

b. Create an XHTML document to illustrate the use of list property list-style-type with the tags <ul> and <ol>. **05 M**
(Level[4], CO[3], PO[3])

c. Summarize alignment of text using CSS with an example. **05 M**
(Level[2], CO[3],PO [1])

UNIT – IV

5 a. Explain the implicit type conversion and explicit type conversion in Javascript. **05 M**

(Level[2], CO[4], PO[1])

b. List and describe the string methods in Javascript. **06 M**

(Level[1], CO[4], PO[1])

c. Develop a web application using JavaScript that has an array of names which are in alphabetical order. It uses prompt to get names one at a time and inserts them into the existing array in alphabetical order. Then the new array is displayed. **09 M**

(Level[3], CO[4], PO[3])

OR

6 a. Explain the Date object and its methods in Javascript. **05 M**

(Level[2], CO[4], PO[1])

b. Describe Screen output and keyboard input in Javascript. **08 M**

(Level[1], CO[4], PO[2])

c. Explain Javascript array methods with an example for each. **07 M**

(Level[2], CO[4], PO[2])

UNIT –V

7 a. Describe the primitive types in PHP. **06 M**

(Level[2], CO[5], PO[1])

b. With a neat diagram explain logical internal structure of array in PHP. **06 M**

(Level[2], CO[5], PO[1])

c. Illustrate the PHP functions sort, asort and ksort with an example. **08 M**

(Level[2], CO[5], PO[2])

OR

8 a. Explain opening and closing of files in PHP. Describe File use indicators. **10 M**

(Level[2],CO[5],PO[1])

b. Explain session tracking in PHP with an example. **10 M**

(Level[2], CO[5], PO[1])