MERN Assignment Questions

Week 1: Q.1 to Q.8

Week 2: Q.9 to Q.13

Week 3: Q.14 to Q.20

Week 4: Q.21 to Q.26

Week 5-6: Q.27 to Q.38

Week 7-8: Q.39 to Q.50

Note: For placement training batches after week-6 check for project implementation including Express-Mongodb-React

Javascript: (10 days)

Week 1:

- 1. Wap to print swapping of 2 no's using javascript.
- 2. Wap to reverse three digit number.
- 3. Calculate factorial of a Given number
- 4. Wap to check prime no or not
- 5. Wap to matrix multiplication
- 6. Program to find the simple interest using function with argument & With return type.
- 7. Wap to show list of functions of array in JS

8. Explain JS object in breif and implement an login to fetch following JS objects

emp_details=[{'eno':1001001,'enm':'amit','esal':10000},{'eno':1001002,'enm':'pankaj','esal':20000},{'eno':1001003,'enm':'ravi','esal':30000}]

Week 2:

- 9. Have a form with two check boxes: "Chocolate" and "Vanilla" and a "Check order" button. Have the button open an alert box that states either "You like chocolate", "You like Vanilla", "You like both chocolate and vanilla", or "PICK ONE!" if neither was checked. Uncheck all boxes after any of the alerts are cleared.
- 10. Display 3 images and a single form text area on the page. Have 3 different words display in the text area, depending on which image you click.

 Put the focus in the text area when the page has loaded.
- 11. Have a select list of ice cream flavors and a textbox. When you select a flavor, the textbox should display: "You picked [flavor chosen]."
- 12. Explain AJAX life cycle
- 13. Wap to generate an AJAX code to take response from a URL and display output on webpage

Node JS: (10 days)

Week 3:

- 14. Explain Blocking and Non Blocking functions with a examples in nodejs
- 16. Write a program to print Fibonacci Series using blocking function.
- 17. Write a program to check whether a number is Armstrong or not using non blocking function
- 18. Wap to create a funtional prototype in JS to take details of employee and print details

Details required : employee number, employee name, employee salary

- 18. Create custom module and upload on npm server
- 17. Create custom module calculate first number is divisible by second or not? and use in nodejs program
- 18. Read a file and count all word in file
- 19. Write to a program to save Academic Details(Name, Subject, Course) in file.
- 20. Write a program to send message from client to server with server port 8888.

Week 4:

21. Wap to create an http server listening at port 8081 and showing a messages for URL path

path message

/ this is routing for home page

/home this is routing for home page

/about this is routing for about page

/contact this is routing for contact page

/service this is routing for service page

22. Wap to create database connectivity code for Nodejs-mysql

Express JS: (15 days)

- 23. Explain MiddleWare function, its type in breif
- 24. Implement Q.21, in express and server port must be 3000
- 25. Generate an express app by express generator tool
- 26. Create an application with employee registration form containing following fields Employee_name, Employee_username, Employee_password, Employee_address,Employee_city, Employee_gender, Employee_hobbies insert details to MYSQL DATABASE and containing all JS form validations

Week 5:

27. Create an grid to show all registration records, and implement edit and delete operation in that grid

- 28. Implement login for above registration records and implement session in app for state management (User tracking & State management)
- 29. Implement file uploading in express including ,database implementation
- 30. In Q26 implement email sending, for email sending

MongoDB: (7 days)

- 31. Write difference between Mysql and Mongodb
- 32. Create a document name **mean**
- 33. Create collection to store user details like(id, login, firstname, lastname, gender, state, city, emailid, contactno).
- 34. Create Employee collection with (empid,name,depart,salary,age)

Week 6:

- 35. Explain 10 operator variable with query
- 36. Write 5 aggregate function in mongodb
- 37. Write a command to fetch all user record
- 38. Write a command to mean document backup and restore

ReactJS: (18 days)

Week 7-8

39. Write difference between Reactis and Angular cli 40. Create an react app and explain **index.js** file in breif 41. Implement following by using **ES6** i. Wap to print swapping of 2 no's ii. Wap to reverse three digit number. iii. Calculate factorial of a Given number iv. Wap to check prime no or not v. Wap to matrix multiplication vi. Program to find the simple interest using function with argument & With return type. vii. Create a program to generate class in ES6 to take employee details like empid, empnm, empsal and to show them vii. WAP to justify multilevel inheritance in ES6 viii. WAP to justify hybrid inheritance in ES6, justify interface in ES6

42. Wap to create an react routing to load different component in UI

path	message
/	this is routing for home page(home component)
/home	this is routing for home page(home component)
/about	this is routing for about page((about component))
/contact	this is routing for contact page(contact component)
/service	this is routing for service page(service component)
43. Explain state & its types?	
44. Explain props with example?	
45. Create an state to display current date and time on 'service' component loaded in Q.42	
46. Create an http service to call web service and display output on component	
URL: https://api.myjson.com/bins/ms2y6	
47. Explain with an example one way and two way binding.	
48. Create an MERN app containing	
React UI	
Express Backend	
MongoDB Database	

49. Create an application with employee registration form containing following fields

Employee_name, Employee_username, Employee_password, Employee_address, Employee_city, Employee_gender, Employee_hobbies insert details to database using Express and mongodb

- 50. Create an grid to show all registration records , and implement edit and delete operation in that grid
- 51. Implement login for above registration records
- 52. Implement React validation in application