

Full Stack assignment



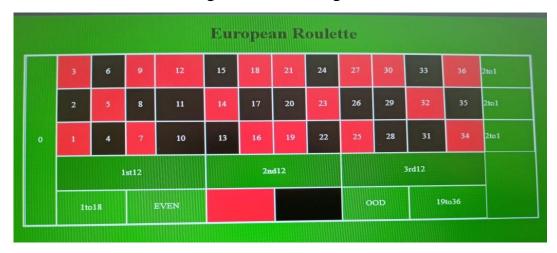
Software Engineering Assignment

MODULE: 1 (SDLC)

- What is software? What is software engineering?
- Explain types of software
- What is SDLC? Explain each phase of SDLC
- What is DFD? Create a DFD diagram on Flipkart
- What is Flow chart? Create a flowchart to make addition of two numbers
- What is Use case Diagram? Create a use-case on bill payment on paytm.

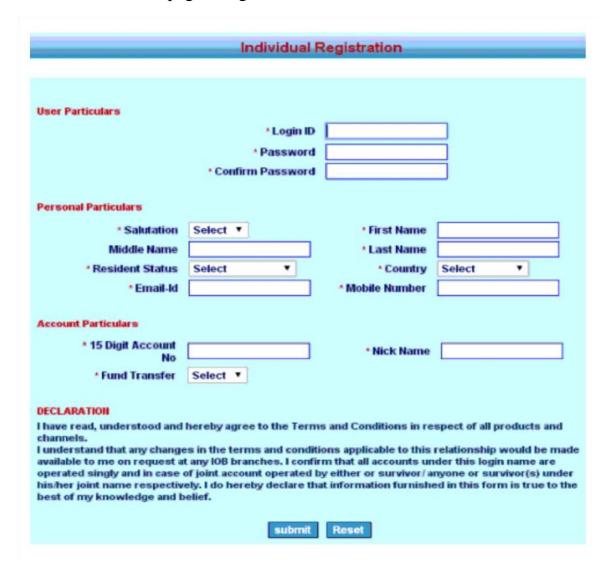
MODULE: 2 (HTML)

- Define the terms: Website, Webpage, Web browser, Web server, HTML, CSS
- Create a webpage to show "This is my first HTML page"
- Display top 10 IT companies list in html webpage
- Create a dropdown list
- Create a Table Of college Management system using row span & col span.
- Create below table using HTML table tags





- Create Registration form using HTML, CSS
- In how many ways can a CSS be integrated as a web page?
- Create simple three pages using External CSS, Internal CSS, and Inline CSS.
- Create below page using HTML CSS



- Create link-pseudo classes using external css, to format links on the pages.
- Create a dynamic pseudo class using HTML, CSS



MODULE: 3.1 (C Language Fundamental)

- Display This Information using printf
 - 1. Your Name
 - 2. Your Birth date
 - 3. Your Age
 - 4. Your Address
- Write a program to make Simple calculator (to make addition, subtraction, multiplication, division and modulo)
- WAP to find area of circle, rectangle and triangle
- WAP to find simple interest
- WAP to check if the given year is a leap year or not.
- WAP to convert years into days and days into years

MODULE: 3.2 (C Language Programing with C)

- WAP to make simple calculator (operation include Addition, Subtraction, Multiplication, Division, modulo)
- WAP to swap two numbers without using third variable
- WAP to find number is even or odd using ternary operator
- WAP to show
 - 1. Monday to Sunday using switch case
 - 2. Vowel or Consonant using switch case
- Looping programs:
 - 1. WAP to print 972 to 897 using for loop
 - 2. WAP to take 10 no. Input from user and find out \dots
 - 3. How many Even numbers are there
 - 4. How many odd numbers are there
 - 5. Sum of even numbers
 - 6. Sum of odd numbers WAP to print table up to given numbers



- WAP to print factorial of given number
- WAP to print Fibonacci series up to given numbers
- WAP to print number in reverse order e.g.: number = 64728 ---> reverse = 82746
- Write a program to find out the max from given number (E.g., No: -1562 Max number is 6)
- Write a program make a summation of given number (E.g., 1523 Ans: -11)
- Write a program you have to make a summation of first and last Digit. (E.g., 1234 Ans: -5)

Patterns:

1	A *	*
10	B C * * *	* *
101	D E F * * * * *	* * *
1010	G H I J * * * * * *	* * * * *
10101	K L M N O ** * * * * *	* * * * * * *
		* * * * *
		* * * *
1	A	* * * *
2 3	A B	* * *
4 5 6	A B C	* *
7 8 9 10	ABCD	*
11 12 13 14 15	ABCDE	

MODULE: 3.3 (File Handling and Debugging)

- Write a program to find out the max number from given array using function
- WAP of Addition, Subtraction, Multiplication and Division using Switch case.(Must Be Menu Driven)
- WAP to find reverse of string using recursion
- WAP to find factorial using recursion
- WAP to take two Array input from user and sort them in ascending or descending order as per user's choice



- WAP to make addition, Subtraction and multiplication of two matrix using 2-D Array
- WAP Find out length of string without using inbuilt function
- WAP to reverse a string and check that the string is palindrome or not
- Write a program of structure employee that provides the following information -print and display empno, empname, address and age
- Write a program of structure for five employee that provides the following information -print and display empno, empname, address and age
- WAP to show difference between Structure and Union.

MODULE: 4.1 (C++ Basic)

- WAP to print "Hello World" using C++
- What is OOP? List OOP concepts
- What is the difference between OOP and POP?

MODULE: 4.2 (Programing with C++)

- WAP to create simple calculator using class
- Define a class to represent a bank account. Include the following members:
 - 1. Data Member:
 - -Name of the depositor
 - -Account Number
 - -Type of Account
 - -Balance amount in the account



2. Member Functions

- -To assign values
- -To deposited an amount
- -To withdraw an amount after checking balance
- -To display name and balance
- Write a program to find the multiplication values and the cubic values using inline function
- Write a program of Addition, Subtraction, Division, Multiplication using constructor.
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- Assume a class cricketer is declared. Declare a derived class batsman from cricketer. Data member of batsman. Total runs, Average runs and best performance. Member functions input data, calculate average runs, Display data. (Single Inheritance)
- Create a class person having members name and age. Derive a class student having member percentage. Derive another class teacher having member salary. Write necessary member function to initialize, read and write data. Write also Main function (Multiple Inheritance)
- Assume that the test results of a batch of students are stored in three different classes. Class Students are storing the roll number. Class Test stores the marks obtained in two subjects and class result contains the total marks obtained in the test. The class result can inherit the details of the marks obtained in the test and roll number of students. (Multilevel Inheritance)
- Write a program to Mathematic operation like Addition, Subtraction, Multiplication, Division Of two number using different parameters and Function Overloading
- Write a Program of Two 1D Matrix Addition using Operator Overloading
- Write a program to concatenate the two strings using Operator Overloading



- Write a program to calculate the area of circle, rectangle and triangle using Function Overloading
- ➤ Rectangle: Area * breadth
- ➤ Triangle: ½ *Area* breadth
- ➤ Circle: Pi * Area *Area
- Write a program to swap the two numbers using friend function without using third variable
- Write a program to find the max number from given two numbers using friend function

MODULE: 4.2 (C, C++ Templates)

- Write a program of to swap the two values using templates
- Write a program of to sort the array using templates.

MODULE: 5 (Database)

- What do you understand By Database
- What is Normalization?
- What is Difference between DBMS and RDBMS?
- What is MF Cod Rule of RDBMS Systems?
- What do you understand By Data Redundancy?
- What is DDL Interpreter?
- What is DML Compiler in SQL?
- What is SQL Key Constraints writing an Example of SQL Key Constraints
- What is save Point? How to create a save Point write a Query?
- What is trigger and how to create a Trigger in SQL?



Task

1. Create Table Name: Student and Exam

Primary Key		Student	Foreign Ke	Exam		
Rollno	Name	Branch	Rollno	S_code	Marks	P_code
1	Jay	Computer Science	1	CS11	50	CS
2	Suhani	Electronic and Com	1	CS12	60	CS
3	Kriti	Electronic and Com	2	EC101	66	EC
-	Term	Dietronie and com	2	EC102	70	EC
			3	EC101	45	EC
			3	EC102	50	EC

2. Create table given below

First Name	Last Name	Address	City	Age
Mickey	Mouse	123 Fantasy Way	Anaheim	73
Bat	Man	321 Cavern Ave	Gotham	54
Wonder	Woman	987 Truth Way	Paradise	39
Donald	Duck	555 Quack Street	Mallard	65
Bugs	Bunny	567 Carrot Street	Rascal	58
Wiley	Coyote	999 Acme Way	Canyon	61
Cat	Woman	234 Purrfect Street	Hairball	32
Tweety	Bird	543	Itotltaw	28



3. Create table given below: Employee and Incentive

Table Name: Employee

Employee_i d	First_name	Last_name	Salary	Joining_dat e	Department
1	John	Abraham	1000000	01-JAN-13 12.00.00 AM	Banking
2	Michael	Clarke	800000	01-JAN-13 12.00.00 AM	Insurance
3	Roy	Thomas	700000	01-FEB-13 12.00.00 AM	Banking
4	Tom	Jose	600000	01-FEB-13 12.00.00 AM	Insurance
5	Jerry	Pinto	650000	01-FEB-13 12.00.00 AM	Insurance
6	Philip	Mathew	750000	01-JAN-13 12.00.00 AM	Services
7	TestName1	123	650000	01-JAN-13 12.00.00 AM	Services
8	TestName2	Lname%	600000	01-FEB-13 12.00.00 AM	Insurance

Table Name: Incentive

Employee_ref_id	Incentive_date	Incentive_amount
1	01-FEB-13	5000
2	01-FEB-13	3000
3	01-FEB-13	4000
1	01-JAN-13	4500
2	01-JAN-13	3500

- a) Get First_Name from employee table using Tom name "Employee Name".
- b) Get FIRST_NAME, Joining Date, and Salary from employee table.



- c) Get all employee details from the employee table order by First_Name Ascending and Salary descending?
- d) Get employee details from employee table whose first name contains 'J'.
- e) Get department wise maximum salary from employee table order by salary ascending?
- f) Select first_name, incentive amount from employee and incentives table for those employees who have incentives and incentive amount greater than 3000
- g) Create After Insert trigger on Employee table which insert records in view table

4. Create table given below: Salesperson and Customer

TABLE-1

TABLE NAME- SALSEPERSON

(PK)SNo	SNAME	CITY	СОММ
1001	Peel	London	.12
1002	Serres	San Jose	.13
1004	Motika	London	.11
1007	Rafkin	Barcelona	.15
1003	Axelrod	New York	.1

TABLE-2

TABLE NAME- CUSTOMER

(PK)CNM.	CNAME	CITY	RATING	(FK)SNo
201	Hoffman	London	100	1001
202	Giovanne	Roe	200	1003
203	Liu	San Jose	300	1002
204	Grass	Barcelona	100	1002
206	Clemens	London	300	1007
207	Pereira	Roe	100	1004

Retrieve the below data from above table

- a) All orders for more than \$1000.
- b) Names and cities of all salespeople in London with commission above 0.12
- c) All salespeople either in Barcelona or in London



- d) All salespeople with commission between 0.10 and 0.12. (Boundary values should be excluded).
- e) All customers excluding those with rating <= 100 unless they are located in Rome



Web Designing Assignment

Term-1

Module (HTML) -1

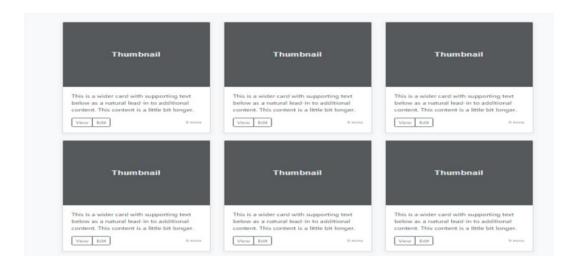
- Are the HTML tags and elements the same thing?
- What are tags and attributes in HTML?
- What are void elements in HTML?
- What are HTML Entities?
- What are different types of lists in HTML?
- What is the 'class' attribute in HTML?
- What is the difference between the 'id' attribute and the 'class' attribute of HTML elements?
- What are the various formatting tags in HTML?
- How is Cell Padding different from Cell Spacing?
- How can we club two or more rows or columns into a single row or column in an HTML table?
- What is the difference between a block-level element and an inline element?
- How to create a Hyperlink in HTML?
- What is the use of an iframe tag?
- What is the use of a span tag? Explain with example?
- How to insert a picture into a background image of a web page?
- How are active links different from normal links?
- What are the different tags to separate sections of text?
- What is SVG?
- What is difference between HTML and XHTML?
- What are logical and physical tags in HTML?



Module (CSS and CSS 3) -2

- What are the benefits of using CSS?
- What are the disadvantages of CSS?
- What is the difference between CSS2 and CSS3?
- Name a few CSS style components
- What do you understand by CSS opacity?
- How can the background color of an element be changed?
- How can image repetition of the backup be controlled?
- What is the use of the background-position property?
- Which property controls the image scroll in the background?
- Why should background and color be used as separate properties?
- How to center block elements using CSS1?
- How to maintain the CSS specifications?
- What are the ways to integrate CSS as a web page?
- What is embedded style sheets?
- What are the external style sheets?
- What are the advantages and disadvantages of using external style sheets?
- What is the meaning of the CSS selector?
- What are the media types allowed by CSS?
- What is the rule set?
- Create Layouts





Module (HTML5) - 3

- What are the new tags added in HTML5?
- How to embed audio and video in a webpage?
- Semantic element in HTML5?
- Canvas and SVG tags

Module (JAVASCRIPT BASIC & DOM) – 4

- What is JavaScript?
- What is the use of isNaN function?
- What is negative Infinity?



- Which company developed JavaScript?
- What are undeclared and undefined variables?
- Write the code for adding new elements dynamically?
- What is the difference between ViewState and SessionState?
- What is === operator?
- How can the style/class of an element be changed?
- How to read and write a file using JavaScript?
- What are all the looping structures in JavaScript?
- How can you convert the string of any base to an integer in JavaScript?
- What is the function of the delete operator?
- What are all the types of Pop up boxes available in JavaScript?
- What is the use of Void (0)?
- How can a page be forced to load another page in JavaScript?
- What are the disadvantages of using innerHTML in JavaScript?

<u>Module (JQuery Basic, Effects & Advanced) – 5</u>

- What is jQuery?
- How to Apply CSS Using JQuery, How to Add Class and Remove Class in Jquery, JQuery Animation?
- How to create slider with animation?

Module (Bootstrap Basic & Advanced) – 6

- What are the advantages of Bootstrap?
- What is a Bootstrap Container, and how does it work?



- What are the default Bootstrap text settings?
- What do you know about the Bootstrap Grid System?
- What is the difference between Bootstrap 4 and Bootstrap 5
- What is a Button Group, and what is the class for a basic Button Group?
- How can you use Bootstrap to make thumbnails?
- In Bootstrap 4, what is flexbox?
- How can one create an alert in Bootstrap?
- What is a bootstrap card and how would you create one?





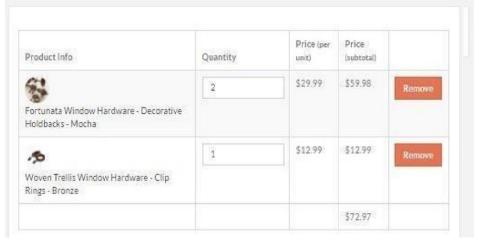
React Js Assignments

Module -1

HTML-CSS Login Registration page

Module – 2 Advance JavaScript

Calculate subtotal price of quantity in JavaScript?



- What is JavaScript Output method?
- How to used JavaScript Output method?
- How to used JavaScript Events to do all examples?

Module - 3 ReactJs

- What is React Js?
- What is NPM in React Js?
- · What is Role of Node Js in react Js?
- · What is CLI command In React Js?
- What is Components in React Js?
- What is Header and Content Components in React Js?
- How to install React Js on Windows, linux Operating System?

 In How to install NPM and How to check version of NPM?



- How to check version of React Js?
- How to change in components of React Js?
- How to Create a List View in React Js?



Create Increment decrement state change by button click?



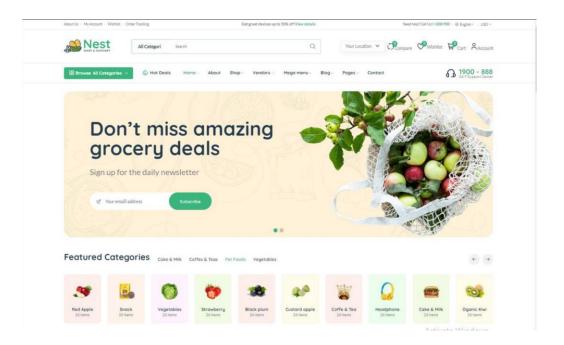
Module - 4 Lists and Hooks

Explain Life cycle in Class Component and functional component with Hooks

Module-5) React - Styling & Advance React

Create Shopping site home page with Styled - component





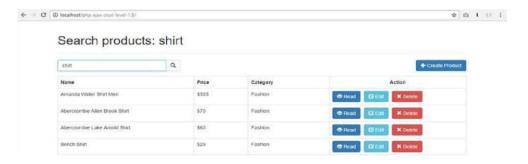
Module 6) React Router

• Create React app with modules and lazy loading (Admin-user module with child router and outlet)

Module-7) React - Applying Redux

- What is Redux?
- What is Redux Thunk used for?
- What is Pure Component? When to use Pure Component over Component?
- What is the second argument that can optionally be passed tosetState and what is its purpose?
- Create a Table and Search data from table using React Js?





Create Login registration with CRUD Application using API (Redux)



PHP Assignment

MODULE – 3(Core PHP)

- Write a PHP program to enter marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer, calculate percentage and grade by if else write a PHP program for find "Thursday" in week using switch Function.
- Write a PHP program to check Leap years between 1901 to 2016 Using nested if.
- Write a PHP program to find the largest of three numbers using ternary Operator.
- Write a program in PHP to print Fibonacci series. 0, 1, 1, 2, 3, 5, 8, 13, 21,
 34
- Write a program to find whether a number is Armstrong or not ☐ Write a program to print the below format :

• Write a program for this Pattern:

*

*



• What will be the values of \$a and \$b after the code below is executed? Explain your answer.

```
$a = '1';
$b = &$a;
$b = "2$b";
```

- How can you tell if a number is even or odd without using any Condition or loop?
- How can you declare the array (all type) in PHP? Explain with example
 Covert a JSON string to array.
- Write program to remove duplicate values from array
- Get random values from array
- Write a PHP script which decodes the following JSON string.
- Use a for loop to total the contents of an integer array called numbers which has five elements. Store the result in an integer called total.
- Declare a Multi Dimensioned array of floats called balances having Three rows and five columns.



MODULE – 4(Advance PHP)

OOPS

- What Is Object Oriented Programming?
- What Are Properties Of Object Oriented Systems?
- What Is Difference Between Class And Interface?
- What Is Overloading?
- What Is T_PAAMAYIM_NEKUDOTAYIM (Scope Resolution Operator (::) with Example
- What are the differences between abstract classes and interfaces?
- Define Constructor and Destructor?
- How to Load Classes in PHP?
- How to Call Parent Constructor?
- Are Parent Constructor Called Implicitly When Create An ObjectOf Class?
- What Happen, If Constructor Is Defined As Private Or Protected?
- What are PHP Magic Methods/Functions? List them □ Write program for Static Keyword in PHP?
- Create multiple Traits and use it in to a single class?
- Write PHP Script of Object Iteration?
- Use of The \$this keyword



- Consider the exercise 11 and add a edit link near delete link e.g. Clicking up on edit button a particular row should be open in editing mode e.g. on the Particular row there should be filled text box with data and on the option column there should be a confirm button clicking upon it arrow should be updated.
- Create Hotel Room Booking System User can book room by 3 ways
 Full day
 Half day
 Custom
- If user select for the full day than user only have selection for the checking checkout date
- If user select Half day than user have option of date and slot option(like user want to book room for first half Morning (8AM to 6PM) if user select for second halfit"s for evening (7PM to Morning 7AM)). Do proper validation like if user can book only available slot. (have touse jQuery -> Ajax, validation, Json passing).

Jquery

- a) What is jQuery?
- b) How are JavaScript and jQuery different?
- c) Which is the starting point of code execution in jQuery?
- d) Document Load Vs Window. Load() jQuery
- e) What is the difference between prop and attr?
- f) Explain Difference Between JQuery And JavaScript?
- g) How We Can Select The Specified Element From The ListOf Elements In ?
- h) In Design Change The Color Of Even Elements To "green"And Change The Color Of Odd Elements To "blue" Color? Give An Example Code?



- i) How We Can Implement Animation Effects In Jquery?
- j) Apply jQuery validation using library.
- k) Create custom dynamic function for require field validator.
- 1) Get state data by country selection (Ajax).
- m) Image uploading with preview.

MODULE – 5(Web Services)

- Create API for Registration & Login Page.
- Create Web Service for your MVC Project.
- Create API for Image Uploading.

MODULE – 7(Laravel)

- Create Following Routes.(for frontend side application)
 - a) Home page
 - b) About us
 - c) Contact us
 - d) Gallery
 - e) Registration
 - f) Login
- How to pass Multiple Variable in route?
- How to pass variable which can be null in Route?
- Create custom auto using middleware.
- Generate Resource Controller for employee.
- In Employee Controller's action Call Middleware.
- How to remove route caching?



Create Custom Macro For search User

Practical

1. Create Photo Gallery for above route.

Note: upload files from admin side. Show all the images in user side

2. Download admin panel for employee management and convert it in Laravel blades.

MODULE – 8(Migration)

- How to do config database in laravel
- Call MySQLi Store Procedure from Laravel.
- Apply Curd Operation through Query Builder for Employee Management
- Create All Migration for Employee management

MODULE – 9, 10(Forms, Controls)

- Explain ORM
- Do Curd using Eloquent Query
- Explain Eloquent Relationships
- What is Eager Loading and lazy loading?
- Do Session for Employee Management System.

Practical

a) Do pagination for Employee Management System



- b) If New User Registered Put Notification on admin side in Employee Management c) Write code for sending email
- d) Create application for blog.

title_			
content_			