

MERN Stack Assignment

Software Engineering Assignment

MODULE:

SE – Overview of IT Industry

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

MODULE:

SE – Fundamentals of Programming

Topics Covered

Basic Syntax

Data Structures

Variables

Operators

Basic Logic Program

1. Display This Information using printf
 - a. Your Name
 - b. Your Birth date
 - c. Your Age
 - d. Your Address
2. Write a program to make Simple calculator (to make addition, subtraction, multiplication, division and modulo)
3. WAP to Find Area And Circumference of Circle
4. Find Area of Square formula : $a = a^2$
5. Find Area of Cube formula : $a = 6a^2$
6. Find area of Triangle Formula : $A = 1/2 \times b \times h$
7. Find area of Rectangle Formula : $A = wl$
8. Find circumference of Rectangle formula : $C = 4 * a$
9. Find circumference of Triangle formula : $triangle = a + b + c$
10. find the area of a rectangular prism formula : $A=2(wl+hl+hw)$
11. Find circumference of square formula : $C = 4 * a$
12. Accept number of students from user. I need to give 5 apples to each student. How many apples are required?
13. Find character value from ascii
14. Find ascii value of given number
15. Convert school's name in abbreviated form
16. Convert country's name in abbreviate form
17. Calculate person's insurance premium based on salary

18. Calculate person's Annual salary
19. Calculate compound interest
20. Accept monthly salary from the user and deduct 10% insurance premium, 10% loan installment find out of remaining salary.
21. Accept 2 numbers from user and swap 2 numbers with using 3rd variable and without using 3rd variable

22. Calculate compound interest (Compound Interest formula:
 - a. Formula to calculate compound interest annually is given by:
Amount= $P(1 + R/100)t$
 - b. Compound Interest = Amount – P
23. WAP to calculate swap 2 numbers with using of multiplication and division.
24. Accept 5 employees name and salary and count average and total salary
25. Accept 5 expense from user and find average of expense
26. Convert temperature Fahrenheit to Celsius
27. Convert days into months
28. Convert years into days and months
29. Convert minutes into seconds and hours
30. WAP to convert years into days and days into years
31. Convert kilometers into meters
32. Accept 2 numbers and find out its sum check it size
33. C Program to Read Integer and Print First Three Powers (N^1, N^2, N^3)

Topics Covered

Control statements

Conditional Statements

Conditional Logic Programs:

1. Write a C program to accept two integers and check whether they are equal or not
2. Write a C program to read the value of an integer m and display the value of m is 1 when m is larger than 0, 0 when m is 0 and -1 when m is less than 0
3. WAP to check if the given year is a leap year or not.
4. WAP to make simple calculator (operation include Addition, Subtraction, Multiplication, Division, modulo) using conditional statement
5. Check Number Is Positive or Negative
6. Find the Character Is Vowel or Not
7. Accept marks from user and check pass or fail
8. WAP to accept the height of a person in centimeters and categorize the person according to their height.
9. C Program to Check Uppercase or Lowercase or Digit or Special Character

10. WAP to check whether a number is negative, positive or zero.
11. WAP to find number is even or odd using ternary operator
12. WAP to find maximum number among 3 numbers using ternary operator
13. WAP to find minimum number among 3 numbers using ternary operator
14. WAP to find the largest of three numbers.
15. Write a C program to determine eligibility for admission to a professional course based on the following criteria
 Eligibility Criteria : Marks in Maths ≥ 65 and Marks in Phy ≥ 55 and Marks in Chem ≥ 50 and Total in all three subject ≥ 190 or Total in Maths and Physics ≥ 140 -----Input the marks obtained in Physics :65 Input the marks obtained in Chemistry :51 Input the marks obtained in Mathematics :72 Total marks of Maths, Physics and Chemistry : 188 Total marks of Maths and Physics : 137 The candidate is not eligible.
16. Write a C program to read temperature in centigrade and display a suitable message according to the temperature state below:
 Temp < 0 then Freezing weather
 Temp 0-10 then Very Cold weather
 Temp 10-20 then Cold weather
 Temp 20-30 then Normal in Temp
 Temp 30-40 then Its Hot
 Temp ≥ 40 then Its Very Hot
17. Write a C program to check whether a triangle can be formed with the given values for the angles.
18. Write a C program to calculate profit and loss on a transaction.
19. Write a program in C to calculate and print the electricity bill of a given customer. The customer ID, name, and unit consumed by the user should be captured from the keyboard to display the total amount to be paid to the customer. The charge are as follow :

Unit	Charge/unit
upto 350	@1.20
350 and above but less than 600	@1.50
600 and above but less than 800	@1.80
800 and above	@2.00

If bill exceeds Rs. 800 then a surcharge of 18% will be charged and the minimum bill should be of Rs. 256/-

20. Write a program in C to read any Month Number in integer and display the number of days for this month.

21. Write a C program to input basic salary of an employee and calculate its

Gross salary according to following:

Basic Salary <= 10000 : HRA = 20%, DA = 80%

Basic Salary <= 20000 : HRA = 25%, DA = 90%

Basic Salary > 20000 : HRA = 30%, DA = 95%\

22. WAP to input the week number and print week day.

23. Accept month number and display month name

24. Accept the input month number and print number of days in that month.

25. Write a C program to input electricity unit charges and calculate total

electricity bill according to the given condition:

For first 50 units Rs. 0.50/unit

For next 100 units Rs. 0.75/unit

For next 100 units Rs. 1.20/unit

For unit above 250 Rs. 1.50/unit

An additional surcharge of 20% is added to the bill

26. WAP to show

i. Monday to Sunday using switch case

ii. Vowel or Consonant using switch case

Topics Covered

Looping Statements

Conditional Statements

1. WAP to print 972 to 897 using for loop

2. WAP to accept 5 numbers from user and display all numbers

3. WAP to take 10 no. Input from user find out below values

a. How many Even numbers are there

b. How many odd numbers are there

c. Sum of even numbers

d. Sum of odd numbers

4. WAP to print table up to given numbers

5. WAP to print factorial of given number
6. WAP to print Fibonacci series up to given numbers
7. WAP to print number in reverse order e.g.: number = 64728 ---> reverse = 82746
8. Write a program to find out the max from given number (E.g., No: -1562 Max number is 6)
9. Write a program make a summation of given number (E.g., 1523 Ans: -11)
10. Write a program you have to make a summation of first and last Digit. (E.g., 1234 Ans: -5)
11. Accept 5 names from user at run time.
12. Program of Armstrong Number in C Using For Loop & While Loop
13. calculate the Factorial of a Given Number using while loop
14. Accept 5 numbers from user and find those numbers factorials
15. Calculate sum of 10 numbers using of while loop
16. Calculate the Sum of Natural Numbers Using the While Loop
17. Calculate 5 numbers from user and calculate number of even and odd using of while loop
18. Write a C Program to Print the Multiplication Table of N
 - i. E.g. $5 * 1 = 5$
 - ii. $5 * 2 = 10$
 1. .
 2. .
 - iii. $5 * 10 = 50$

19. Patterns:

1	A	*	*
1 0	B C	* * *	* *
1 0 1	D E F	* * * * *	* * *
1 0 1 0	G H I J	* * * * * *	* * * *
1 0 1 0 1	K L M N O	* * * * * * * *	* * * * *
1	A	*	*
2 3	A B	* *	*
4 5 6	A B C	* *	*
7 8 9 10	A B C D	*	
11 12 13 14 15	A B C D E		

20. WAP program to print below output using for loop

01 02 03 04 05 06 07 08 09 10

11 12 13 14 15 16 17 18 19 20

.

.

21. 42 43 44 45 46 47 48 49 50

22. Accept 3 numbers from user using while loop and check each numbers palindrome

23. C Program to Reverse a Number Using FOR Loop

Series Program:

24. $1 + 2 + 3 + 4 + 5 + \dots + n$

25. $(1*1) + (2*2) + (3*3) + (4*4) + (5*5) + \dots + (n*n)$

26. $(1) + (1+2) + (1+2+3) + (1+2+3+4) + \dots + (1+2+3+4+\dots+n)$

27. $1/2 - 2/3 + 3/4 - 4/5 + 5/6 \dots \dots \dots n$

28. 1 2 3 6 9 18 27 54...

Topics Covered

Function

Array

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

6. WAP to make addition, Subtraction and multiplication of two matrix using 2-D Array
7. WAP Find out length of string without using inbuilt function
8. WAP to reverse a string and check that the string is palindrome or not
Write a program of structure employee that provides the following
 - a. information -print and display empno, empname, address andage
 - b. Write a program of structure for five employee that provides the following information -print and display empno, empname, address andage
9. WAP to show difference between Structure and Union.
10. WAP to perform Palindrome number using for loop and function
11. WAP to accept 5 numbers from user and display in reverse order using for loop and array
12. WAP to accept 5 students name and store it in array
13. WAP to accept 5 numbers from user and check entered number is even or odd using of array
14. Perform 2D matrix array
15. Store 5 numbers in array and sort it in ascending order
16. Accept 5 numbers from user and perform sum of array
17. WAP to show difference between Structure and Union.

Topics Covered

String

1. Write a program in C to find the length of a string without using library functions.
2. Write a program in C to separate individual characters from a string.
3. Write a program in C to print individual characters of a string in reverse order
4. Write a program in C to count the total number of words in a string.
5. Write a program in C to compare two strings without using string library functions.
6. Write a program in C to count the total number of alphabets, digits and special characters in a string.
7. Write a program in C to copy one string to another string.
8. Write a program in C to count the total number of vowels or consonants in a string.
9. Write a program in C to find the maximum number of characters in a string.

10. Write a program in C to extract a substring from a given string
11. Write a program in C to read a sentence and replace lowercase characters with uppercase and vice versa.
12. Write a program in C to find the number of times a given word 'is' appears in the given string.
13. Write a program in C to remove characters from a string except alphabets.
14. Write a program in C to combine two strings manually
15. Write a program in C to find the largest and smallest words in a string.

MODULE:

OOPS Concept

Topics Covered

Basic Concepts of OOP

1. WAP to print “Hello World” using C++
2. What is OOP? List OOP concepts
3. What is the difference between OOP and POP?

Topics Covered

Basic Concepts of OOP

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

Member Functions

- To assign values
- To deposited an amount
- To withdraw an amount after checking balance
- To display name and balance

4. Write a C++ program to implement a class called Circle that has private member variables for radius. Include member functions to calculate the circle's area and circumference.
5. Write a C++ program to create a class called Rectangle that has private member variables for length and width. Implement member functions to calculate the rectangle's area and perimeter.
6. Write a C++ program to create a class called Person that has private member variables for name, age and country. Implement member functions to set and get the values of these variables.

Topics Covered

Constructor

Destructor

Encapsulation

Abstraction

1. Write a program to find the multiplication values and the cubic values using inline function
2. Write a program of Addition, Subtraction, Division, Multiplication using constructor.
3. Write a C++ program to create a class called Car that has private member variables for company, model, and year. Implement member functions to get and set these variables.
4. Write a C++ program to implement a class called Bank Account that has private member variables for account number and balance. Include member functions to deposit and withdraw money from the account.
5. Write a C++ program to create a class called Triangle that has private member variables for the lengths of its three sides. Implement member functions to determine if the triangle is equilateral, isosceles, or scalene.
6. Write a C++ program to implement a class called Employee that has private member variables for name, employee ID, and salary. Include member functions to calculate and set salary based on employee performance. Using of constructor
7. Write a C++ program to implement a class called Date that has private member variables for day, month, and year. Include member functions to set and get these variables, as well as to validate if the date is valid.
8. Write a C++ program to implement a class called Student that has private member variables for name, class, roll number, and marks. Include member functions to calculate the grade based on the marks and display the student's information. Accept address from each student implement using of aggregation

Topics Covered

Inheritance

Polymorphism

1. 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)
2. Write a C++ Program to find Area of Rectangle using inheritance
3. 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)
4. Write a C++ Program display Student Mark sheet using Multiple inheritance
5. 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)
6. Write a C++ Program to show access to Private Public and Protected using Inheritance
7. Write a C++ Program to illustrates the use of Constructors in multilevel inheritance
8. Write a program to Mathematic operation like Addition, Subtraction, Multiplication, Division Of two number using different parameters and Function Overloading
9. Write a Program of Two 1D Matrix Addition using Operator Overloading
10. Write a program to concatenate the two strings using Operator Overloading
11. Write a program to calculate the area of circle, rectangle and triangle using Function Overloading

 Rectangle: $\text{Area} * \text{breadth}$
 Triangle: $\frac{1}{2} * \text{Area} * \text{breadth}$
 Circle: $\pi * \text{Area} * \text{Area}$

12. Write a program to swap the two numbers using friend function without using third variable
13. Write a program to find the max number from given two numbers using friend function

- **Topics Covered**

Templates

1. Write a program of to swap the two values using template
2. Write a program of to sort the array using templates

MODULE: (Database)

- **Topics Covered**

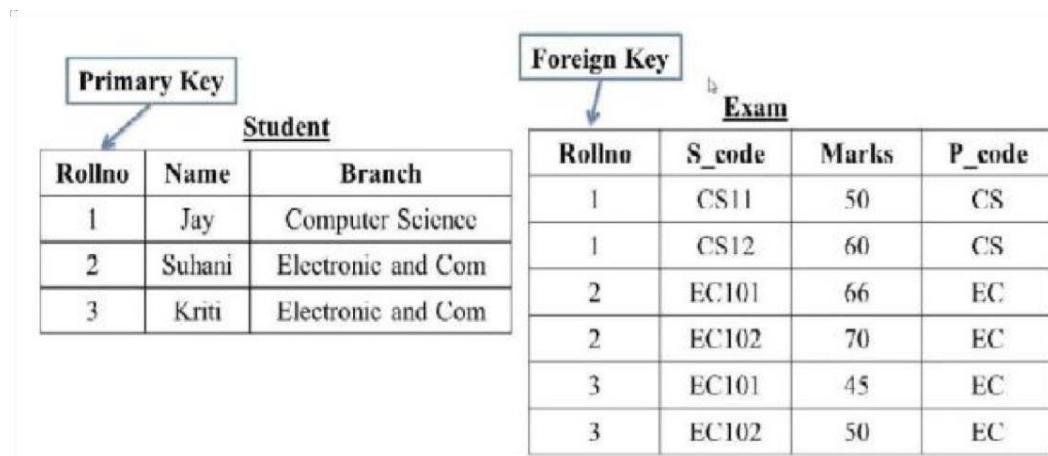
Basics of Database

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

Topics Covered

SQL Queries

1. Create Table Name : Student and Exam



2. Create table given below: Employee and IncentiveTable

Employee_id	First_name	Last_name	Salary	Joining_date	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

Name: Employee

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

3. Get First_Name from employee table using Tom name “Employee Name”.
4. Get FIRST_NAME, Joining Date, and Salary from employee table.
5. Get all employee details from the employee table order by First_Name

Ascending and Salary descending?

6. Get employee details from employee table whose first name contains 'J'.
7. Get department wise maximum salary from employee table order by
8. salaryascending?
9. Select first_name, incentive amount from employee and incentives table forthose employees who have incentives and incentive amount greater than 3000
10. Create After Insert trigger on Employee table which insert records in viewtable
11. Create table given below: Salesperson and Customer

TABLE-1

TABLE NAME- SALSEPERSON

(PK)SNo	SNAME	CITY	COMM
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

12. Retrieve the below data from above table

13. All Customer name whose rating is more than 100.
14. Names and cities of all salespeople in London with commission above 0.12
15. All salespeople either in Barcelona or in London
16. All salespeople with commission between 0.10 and 0.12. (Boundary valuesshould be excluded).
17. All customers excluding those with rating <= 100 unless they are locatedinRome
18. Write a SQL statement that displays all the information about all salespeople

salesman_id	name	city	commission
5001	James Hoog	New York	0.15
5002	Nail Knite	Paris	0.13
5005	Pit Alex	London	0.11
5006	Mc Lyon	Paris	0.14
5007	Paul Adam	Rome	0.13
5003	Lauson Hen	San Jose	0.12

19. From the following table, write a SQL query to find orders that are delivered by a salesperson with ID. 5001. Return ord_no, ord_date, purch_amt.

Sample table: orders

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.5	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.5	2012-08-17	3009	5003
70007	948.5	2012-09-10	3005	5002
70005	2400.6	2012-07-27	3007	5001
70008	5760	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.4	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75.29	2012-08-17	3003	5007
70013	3045.6	2012-04-25	3002	5001

20. From the following table, write a SQL query to select a range of products whose price is in the range Rs.200 to Rs.600. Begin and end values are included. Return pro_id, pro_name, pro_price, and pro_com.

Sample table: item_mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

21. From the following table, write a SQL query to calculate the average price for a manufacturer code of 16. Return avg.

Sample table: item_mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

22. From the following table, write a SQL query to display the pro_name as 'Item Name' and pro_priceas 'Price in Rs.'

Sample table: item_mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

23. From the following table, write a SQL query to find the items whose prices are higher than or equal to \$250. Order the result by product price in descending, then product name in ascending. Return pro_name and pro_price.

Sample table: item_mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

24. From the following table, write a SQL query to calculate average price of the items for each company. Return average price and companycode.

Sample table: item_mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12



Node JS Assignments

Module - : Node - Web Development with Node

Q1. What is Express.js?

Q2 .Create localhost server using express.

Q3 . Create basic “Hello world” app using node and express.

Q4. Create weather app.

i. Use Hbs.

ii. Get country, state, city using api

iii. Get weather data by city Q5. Create world clock

app.

Module - : Node - Node with Mongodb

Q1. What is MongoDB.

Q2. What is difference between mongo DB and SQL Q3. Create database for online shopping app.

Q4. Create Require collections for online shopping app and documents.

i. User

ii. Product category

iii. Product

iv. Order

v. Review

Q5. Write command to show all data from product collections and sort in ascending order. Q6. Update product price for particular product.

Q7. Write command to delete particular document and collection.



Module - : Structuring REST API

Q1. Create Rest API (get, post, delete, put, patch) for Task management.

Q2. Create Rest API (get, post, delete, put, patch) for online shopping application.

Module - : Node - [API Authentication & Security]

Q1. What is Middleware in Express.js? Q2. What is json web tokens?

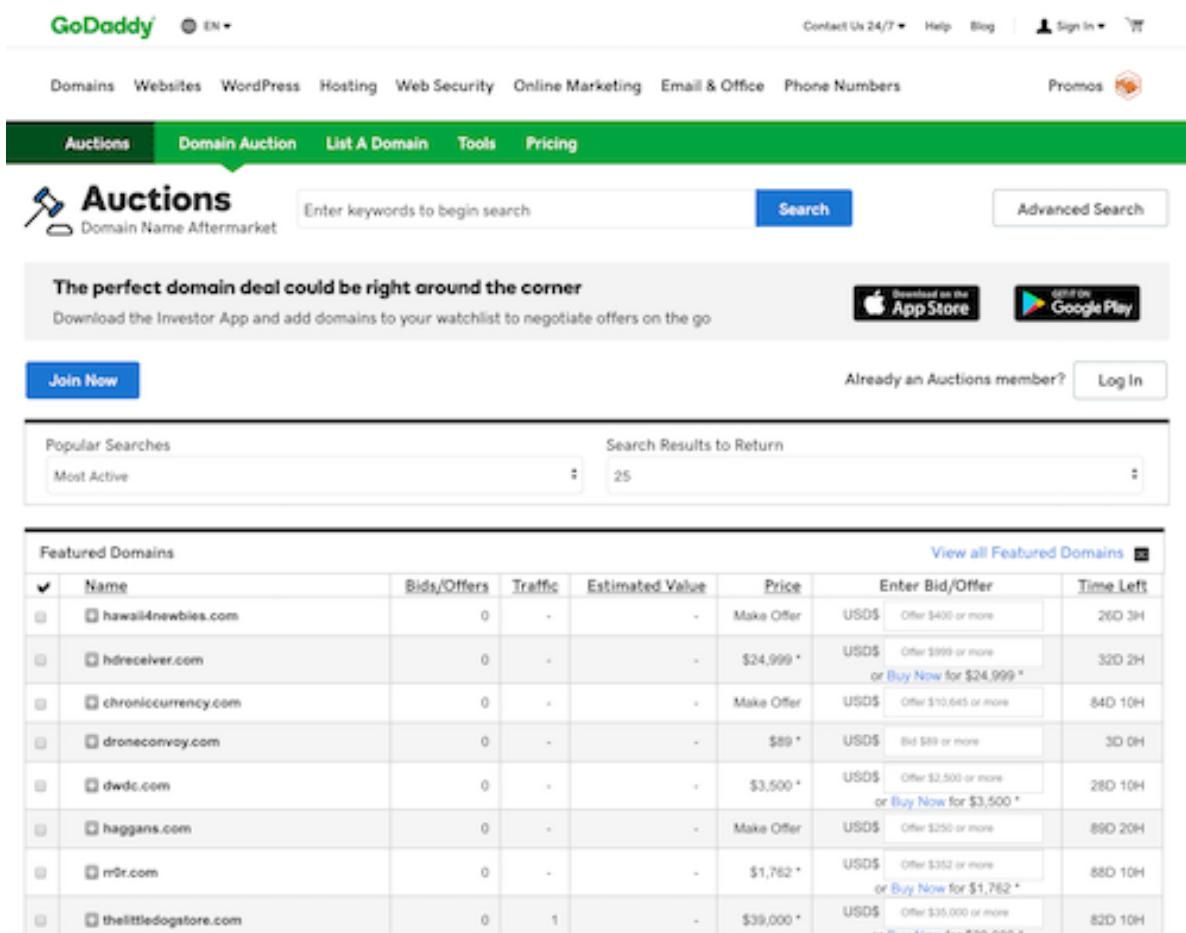
Q3. What is different between encryption and hashing. Q4. Create CRUD Application.

- i. Create session management (login & logout)
- ii. Generate token while registration and login
- iii. Create logout from one device.
- iv. Create logout from all device.

Front end Development

Module – WD - HTML

1) How to purchase domain ?

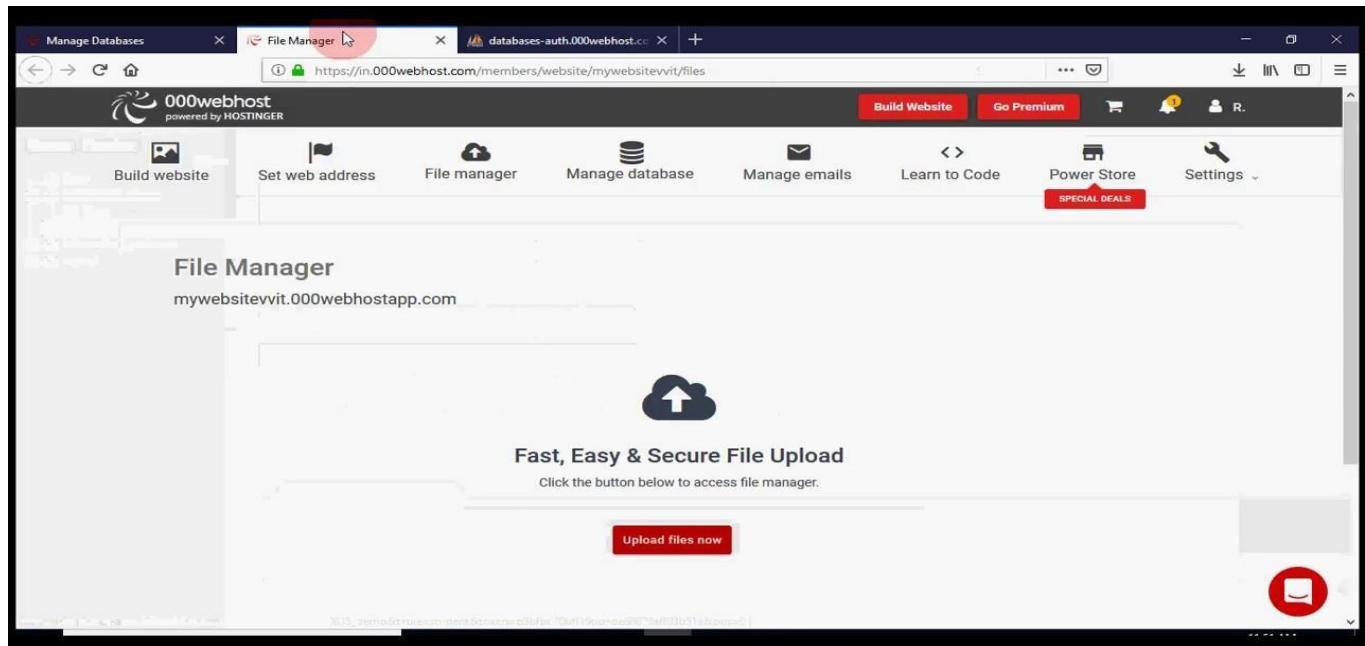
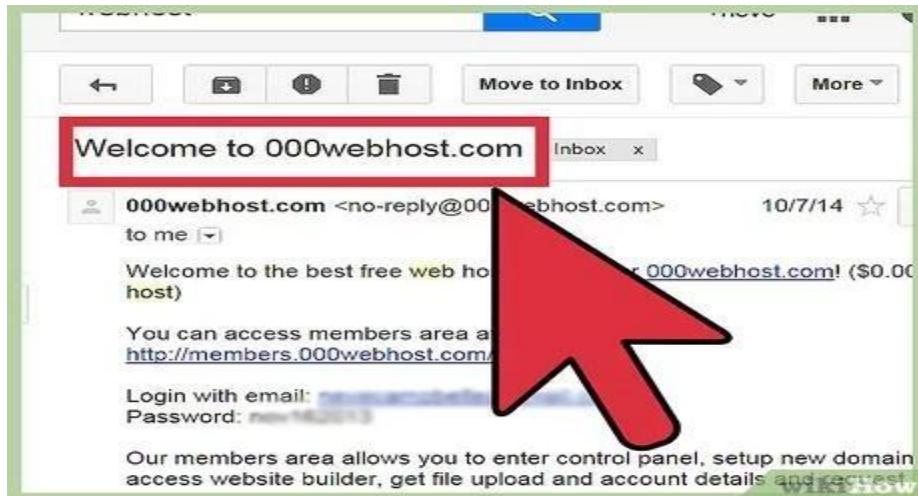


The screenshot shows the GoDaddy Auctions homepage. At the top, there's a navigation bar with links for Domains, Websites, WordPress, Hosting, Web Security, Online Marketing, Email & Office, Phone Numbers, Promos, and a sign-in link. Below the navigation is a green header bar with tabs for Auctions, Domain Auction, List A Domain, Tools, and Pricing. The main content area features a search bar with the placeholder "Enter keywords to begin search" and a "Search" button. To the left of the search bar is a "Auctions" section with a hammer icon and the text "Domain Name Aftermarket". Below the search bar, there's a promotional message: "The perfect domain deal could be right around the corner. Download the Investor App and add domains to your watchlist to negotiate offers on the go." Buttons for "Download on the App Store" and "Get it on Google Play" are shown. On the far left, a "Join Now" button is visible. On the right, there are links for "Already an Auctions member?" and "Log In". The main content area displays a table titled "Featured Domains" with columns for Name, Bids/Offers, Traffic, Estimated Value, Price, Enter Bid/Offer, and Time Left. The table lists several domains with their respective details.

Featured Domains							
	Name	Bids/Offers	Traffic	Estimated Value	Price	Enter Bid/Offer	Time Left
✓	hawaii4newbies.com	0	-	-	Make Offer USD\$ Offer \$400 or more	26D 3H	
✓	hdreceiver.com	0	-	-	USD\$ Offer \$999 or more or Buy Now for \$24,999 *	32D 2H	
✓	chronocurrency.com	0	-	-	Make Offer USD\$ Offer \$10,645 or more	84D 10H	
✓	droneconvoy.com	0	-	-	\$89 * USD\$ Bid \$89 or more	3D 0H	
✓	dwdc.com	0	-	-	\$3,500 * USD\$ Offer \$2,500 or more or Buy Now for \$3,500 *	28D 10H	
✓	haggans.com	0	-	-	Make Offer USD\$ Offer \$250 or more	89D 20H	
✓	mr0r.com	0	-	-	\$1,762 * USD\$ Offer \$352 or more or Buy Now for \$1,762 *	88D 10H	
✓	thelittledogstore.com	0	1	-	\$39,000 * USD\$ Offer \$35,000 or more	82D 10H	



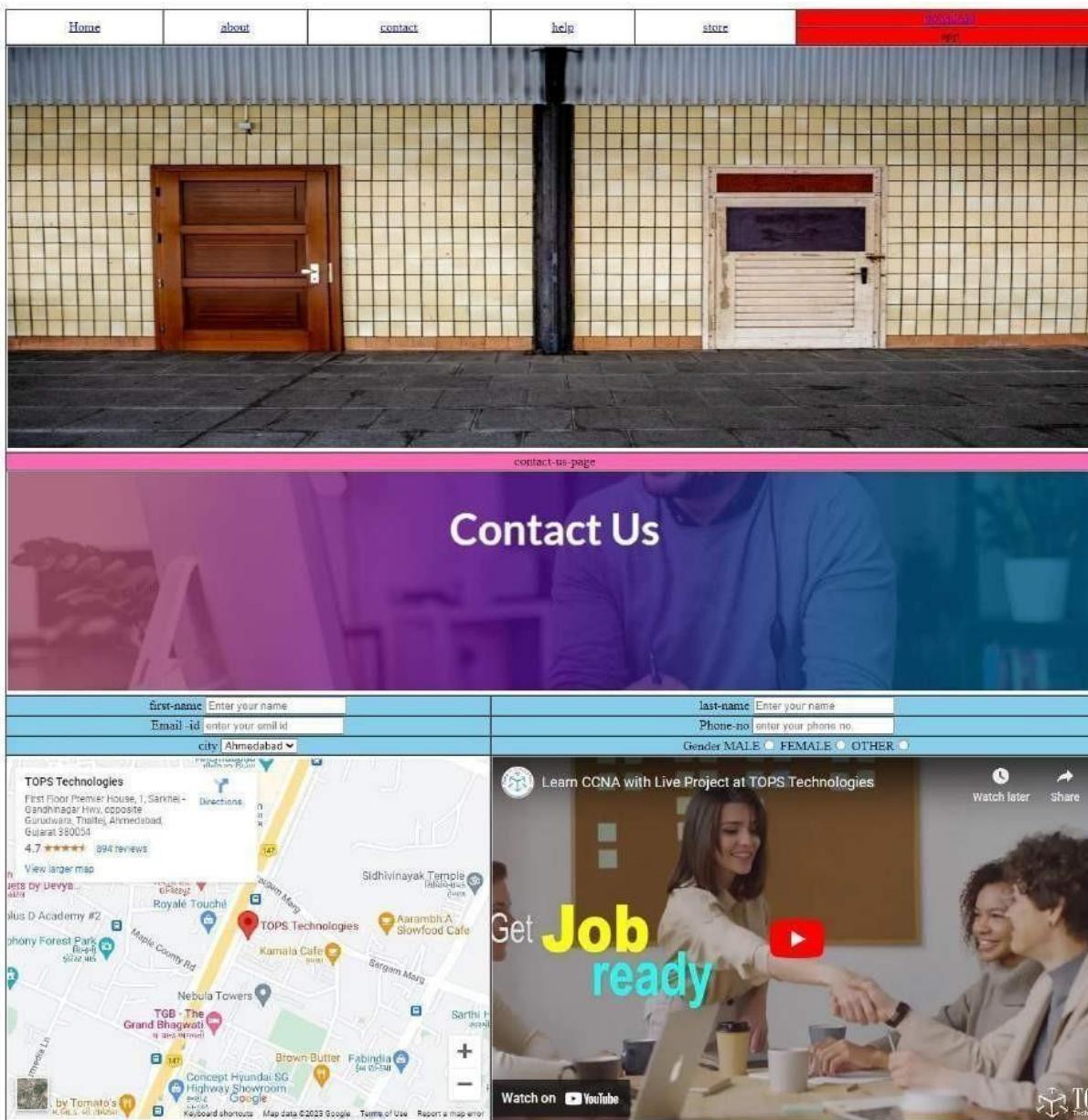
2) Upload one page on server using Free server hosting [000webhost.com]



3) of student management system

4) Upload your code in Github using command.

- Create below example using HTML .



- Create employee registration webpage using HTML form objects



Employee Registration Form

Mr. Mrs. Ms.

First Name

Last Name

Mail Address1

Mail Address2

City

State

 Gujarat ▾

Zip

Upload Photo

 No file selected.

E-Mail

Mobile

 +91

Languages known

 Gujarati Hindi English Marathi Optional

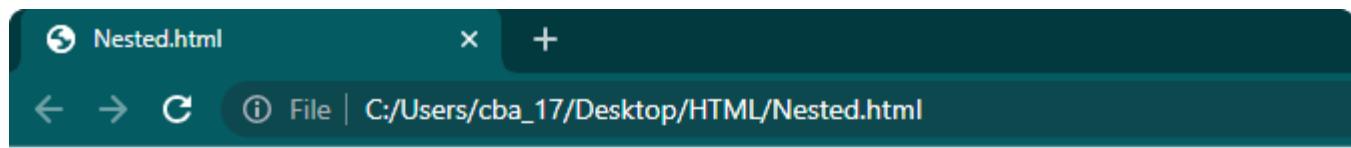
Additional Information

- Create webpage using list tags of HTML

Learning Web Development

- I. Background Skills
 - A. Unix Commands
 - B. Vim Text Editor
- II. HTML
 - A. Minimal Page
 - B. Headings
 - C. Tags
 - D. Lists
 - i. Unordered
 - ii. Ordered
 - iii. Definition
 - iv. Nested
 - E. Links
 - i. Absolute
 - ii. Relative
 - F. Images
- III. CSS
 - A. Anatomy
 - B. Basic Selectors
 - i. Element
 - ii. Class
 - iii. ID
 - iv. Group
 - C. The DOM
 - D. Advanced Selectors
 - E. Box Model
- IV. Programming
 - A. Python
 - B. JavaScript
- V. Database
 - A. Flat File
 - B. Relational

- create this using nested table



Device	Brand	Specifications	
		Model	Storage
Smartphone	Apple	iPhone 12 Pro	256GB
		iPhone SE	128GB
Laptop	HP	15.6" Display	
Tablet	Samsung	10.5" Display	

- create layout using html table

Invoice #9876543210		15 September 2020	
Pay to: Acme Billing Co. 123 Main St. Cityville, NA 12345		Customer: John Smith 321 Willow Way Southeast Northwestershire, MA 54321	
Name / Description	Qty.	@	Cost
Paperclips	2000	0.02	20.00
Staples (box)	200	2.00	200.00
Subtotal		220.00	
Tax	9%	19.80	
Grand Total		239.80	

- creating form using table

Registration

Personal Details

Full Name <input type="text" value="Enter your name"/>	Father Name <input type="text" value="Enter father name"/>	Mother Name <input type="text" value="Enter mother name"/>
Date of Birth <input type="text" value="Enter your DOB"/>	Full Name <input type="text" value="Enter aadhar number"/>	Email <input type="text" value="Enter your email"/>
Mobile Number <input type="text" value="Enter mobile number"/>	Gender <input type="text" value="Enter your gender"/>	Address <input type="text" value="Enter your Address"/>

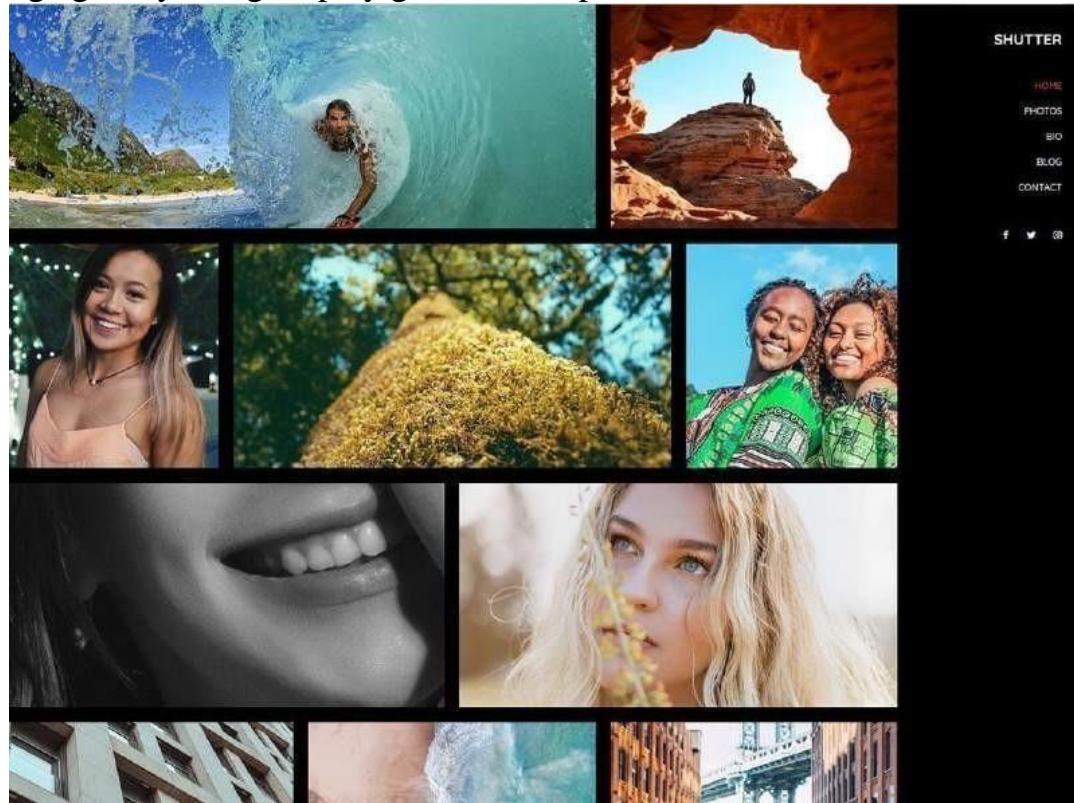
Other Details

Stream <input type="text" value="Enter your stream"/>	Previous Class <input type="text" value="Enter previous class"/>	Hobbies <input type="text" value="Enter your hobbies"/>
Account Number <input type="text" value="Enter account number"/>	Religion <input type="text" value="Enter your religion"/>	Category <input type="text" value="Enter your category"/>

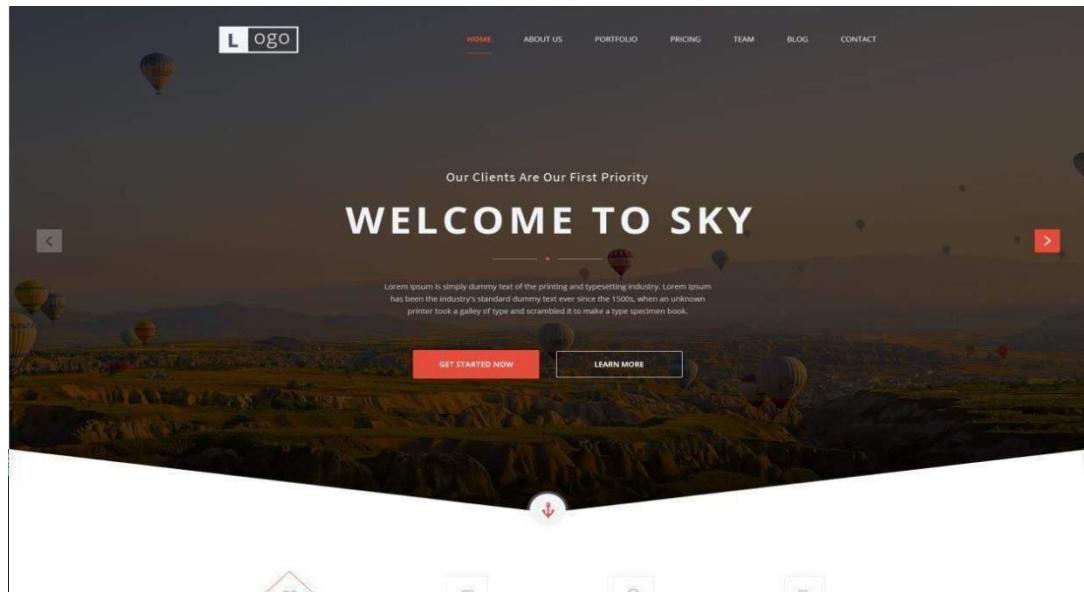
Submit

Module WD - CSS and CSS 3

- Create image gallery using display grid with responsive

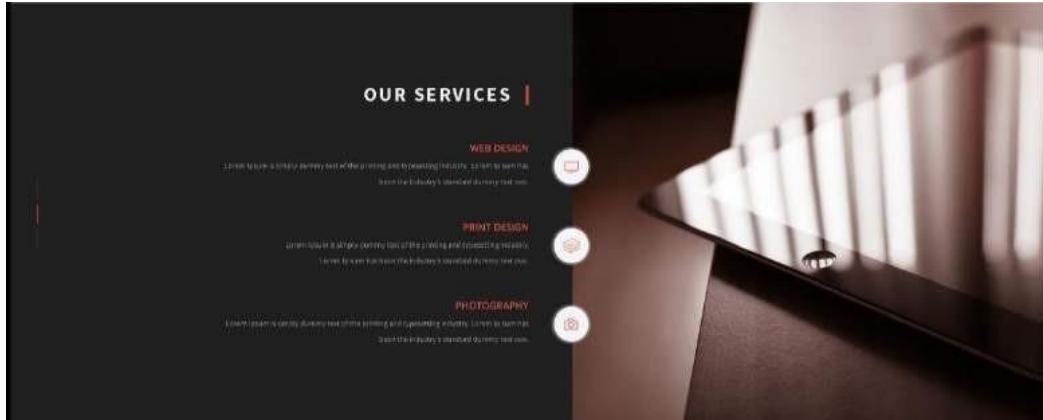


- Create below example with the help of clip path





- Multiple background one side bg-color other side contain image as bg

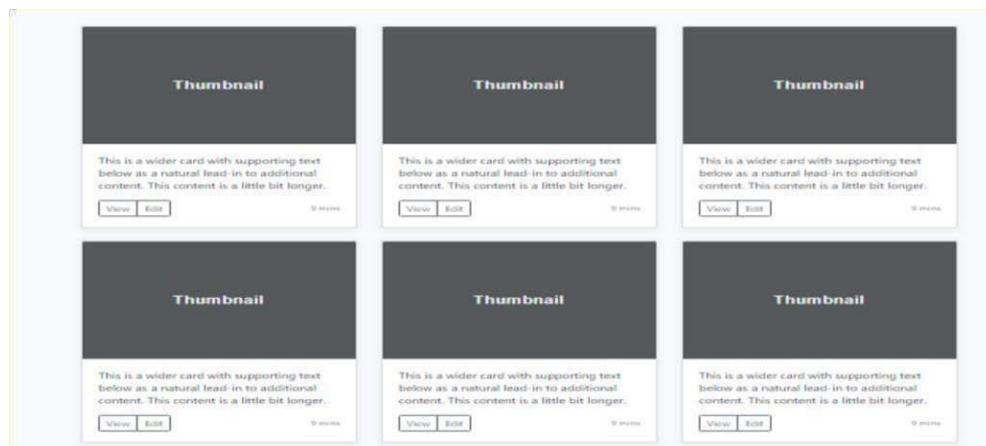


- Create below example using css waves generator (<https://getwaves.io/>)





- Create Layouts
-





layout using html and css include media query

DESKTOP

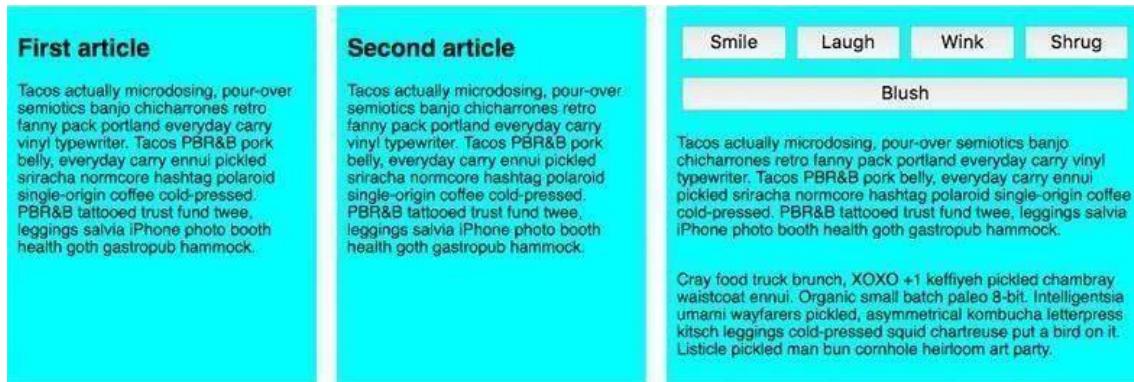


MOBILE

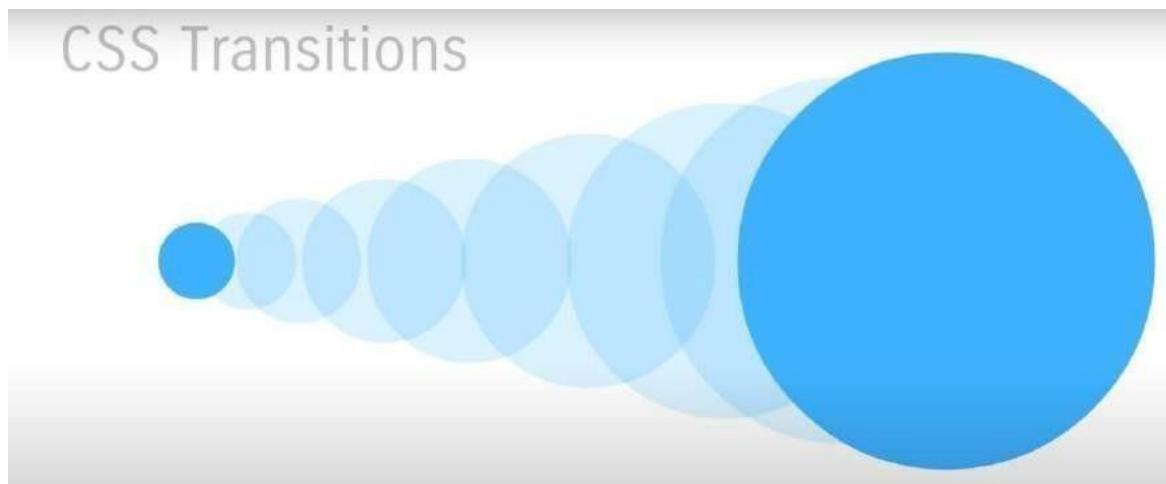
TABLET



create this using flex



- create this using transitions



- create this using css



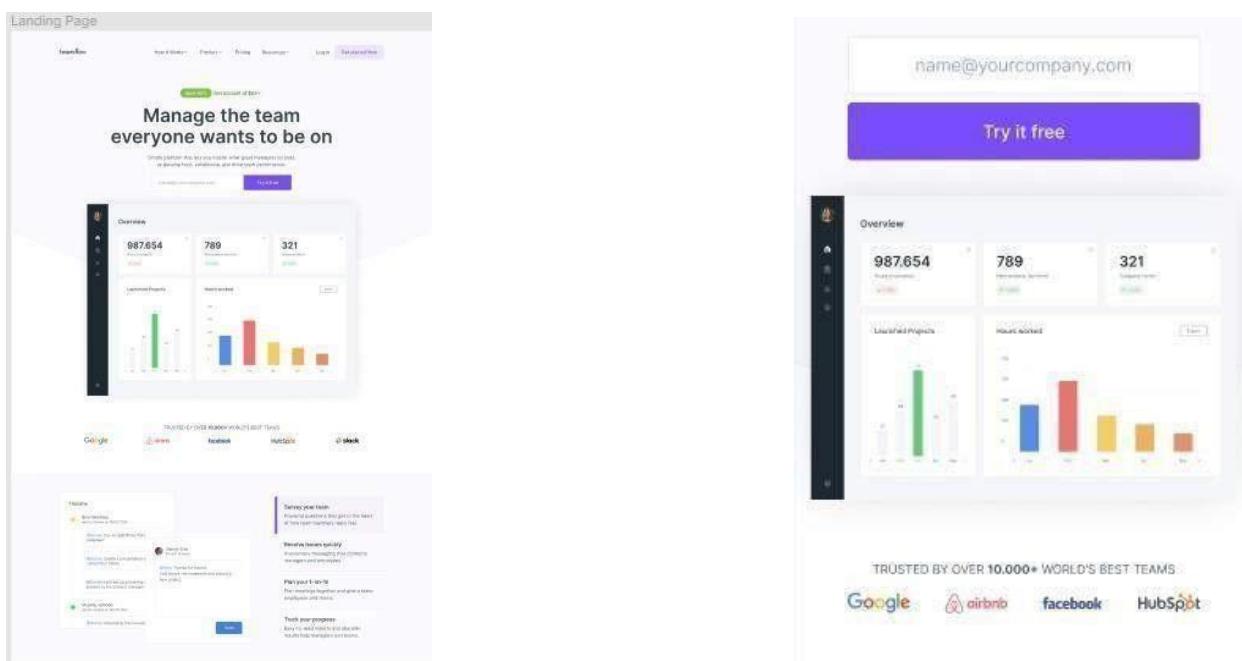
- Create below example responsive media query (use given link figma file)
https://www.figma.com/file/THg3uvkrmtFxI49fZyeqki/Web_Mobile-%E2%80%94-

Template-Website-

[\(Community\)?type=design&node-id=263%3A387&t=5kSwj12CLI7djPgw-1](https://www.figma.com/file/THg3uvkrmtFxI49fZyeqki/Web_Mobile-%E2%80%94-1)

Desktop -web

Mobile



Module - Website Designing - HTML5

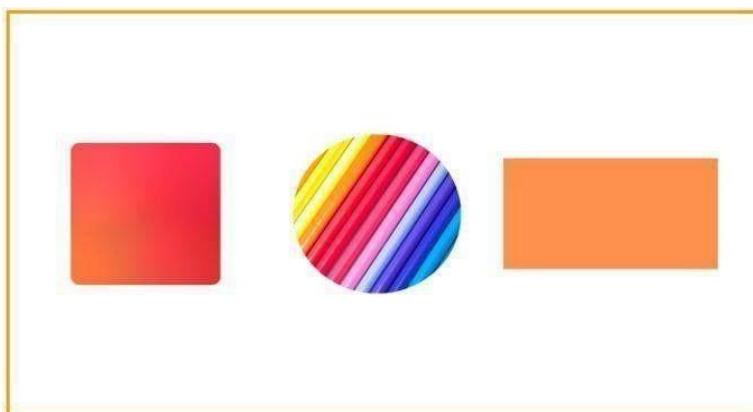
- create this using video tag



- create some audio file like this in html 5

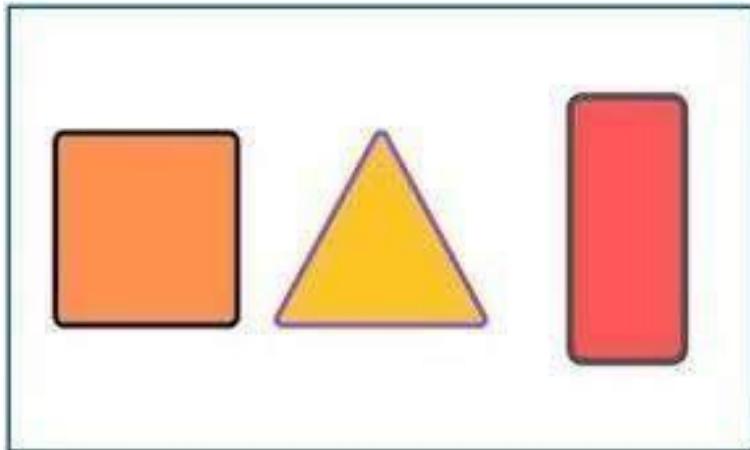


- create some shape using canvas tag in html



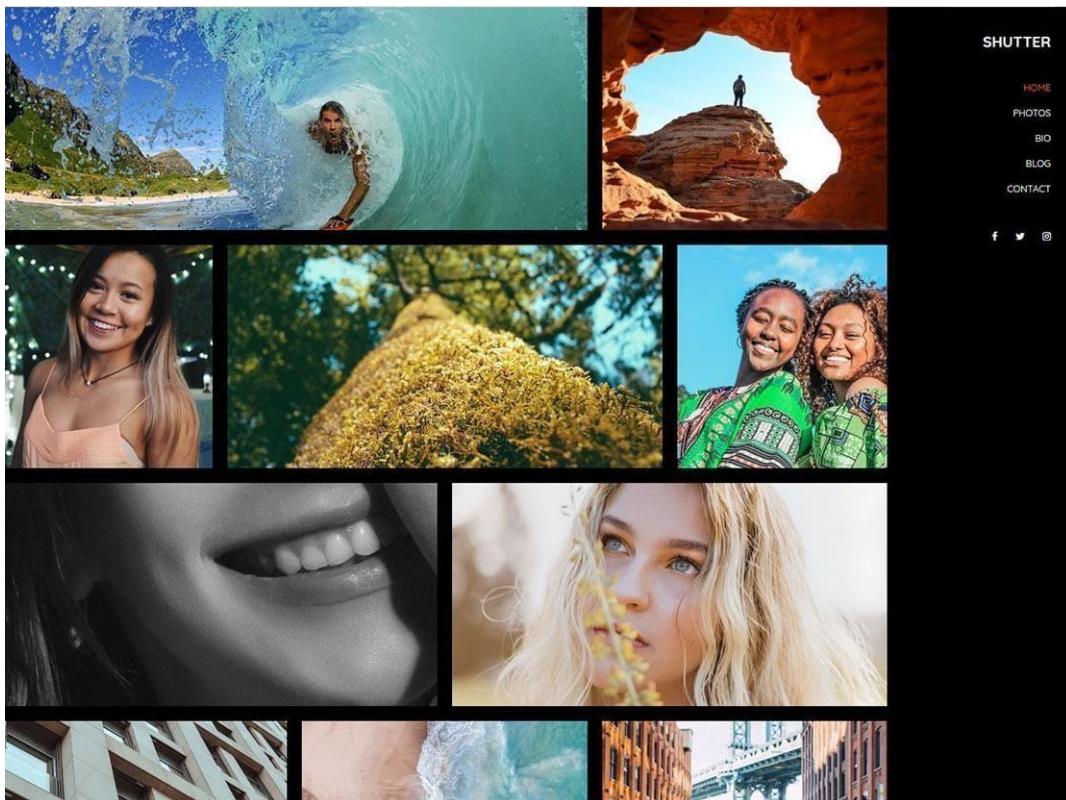


- create some shape using svg tag in html



Module – Wd - Advance CSS/CSS Preprocessors

- Make this layout using SCSS variables and mixins : -



- Create mixin for a flexbox
- Create this layout using extend

First article

Tacos actually microdosing, pour-over semiotics banjo chicharrones retro fanny pack portland everyday carry vinyl typewriter. Tacos PBR&B pork belly, everyday carry ennui pickled sriracha normcore hashtag polaroid single-origin coffee cold-pressed. PBR&B tattooed trust fund twee, leggings salvia iPhone photo booth health goth gastropub hammock.

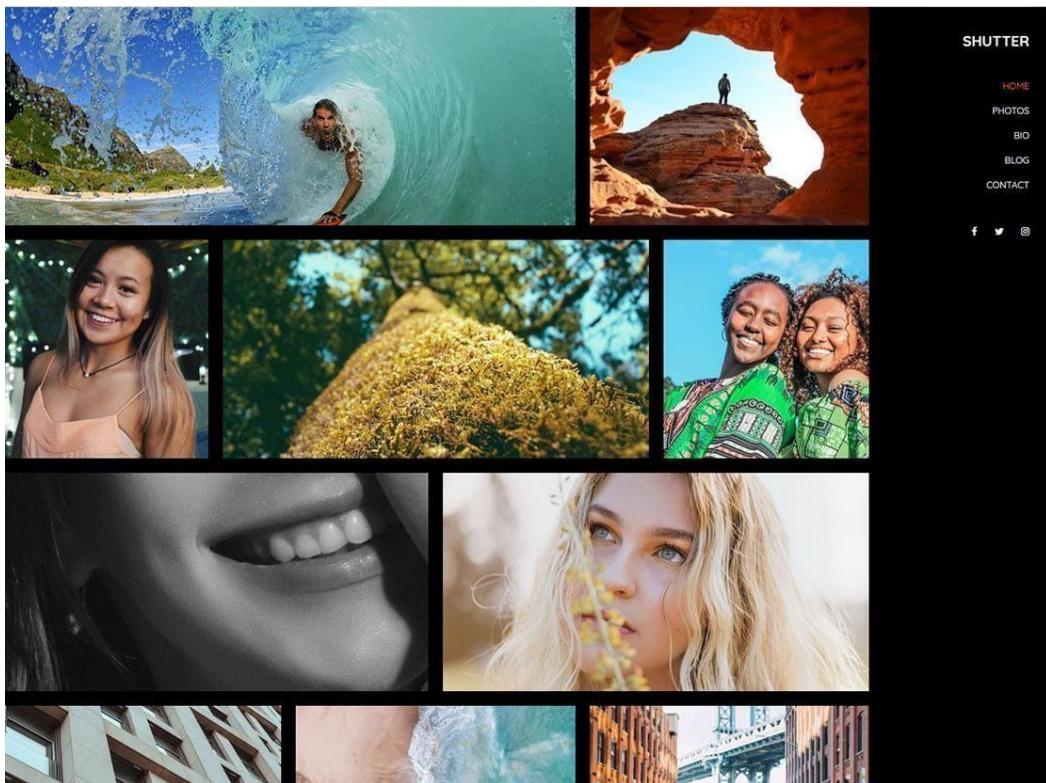
Second article

Tacos actually microdosing, pour-over semiotics banjo chicharrones retro fanny pack portland everyday carry vinyl typewriter. Tacos PBR&B pork belly, everyday carry ennui pickled sriracha normcore hashtag polaroid single-origin coffee cold-pressed. PBR&B tattooed trust fund twee, leggings salvia iPhone photo booth health goth gastropub hammock.

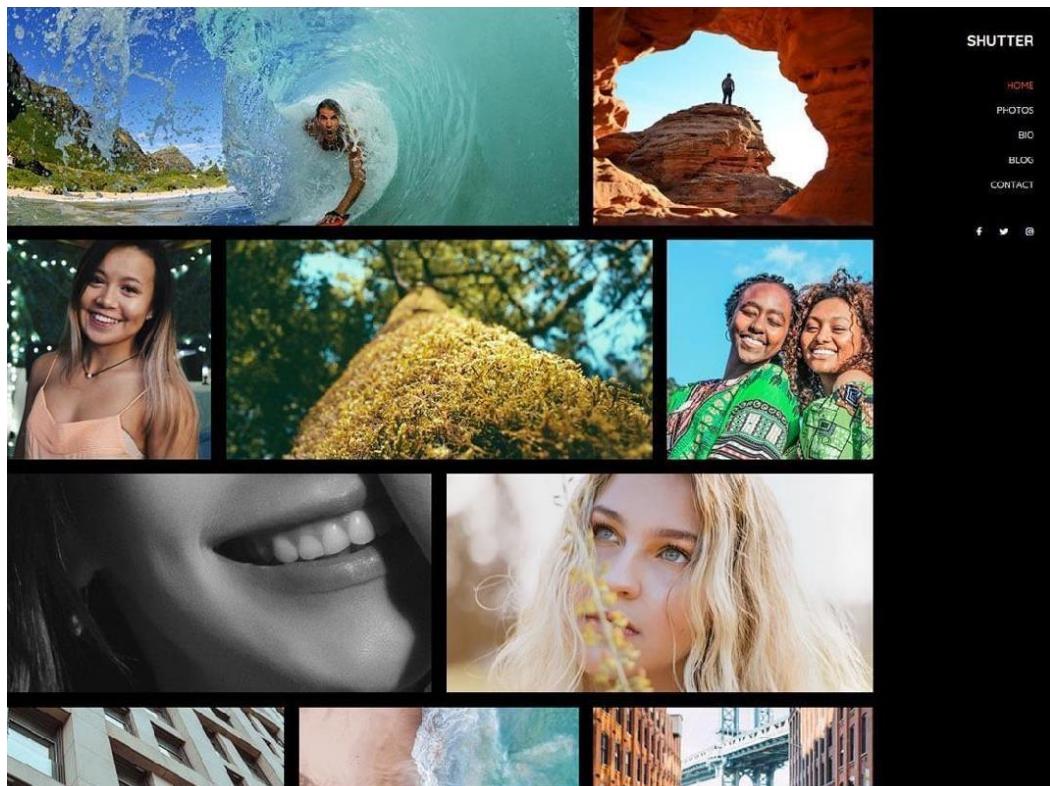
Smile	Laugh	Wink	Shrug
Blush			
Tacos actually microdosing, pour-over semiotics banjo chicharrones retro fanny pack portland everyday carry vinyl typewriter. Tacos PBR&B pork belly, everyday carry ennui pickled sriracha normcore hashtag polaroid single-origin coffee cold-pressed. PBR&B tattooed trust fund twee, leggings salvia iPhone photo booth health goth gastropub hammock.			
Cray food truck brunch, XOXO +1 keffiyeh pickled chambray waistcoat ennui. Organic small batch paleo 8-bit. Intelligentsia umami wayfarers pickled, asymmetrical kombucha letterpress kitsch leggings cold-pressed squid chartreuse put a bird on it. Listicle pickled man bun cornhole heirloom art party.			



- Make this layout using LESS variables and mixins : -

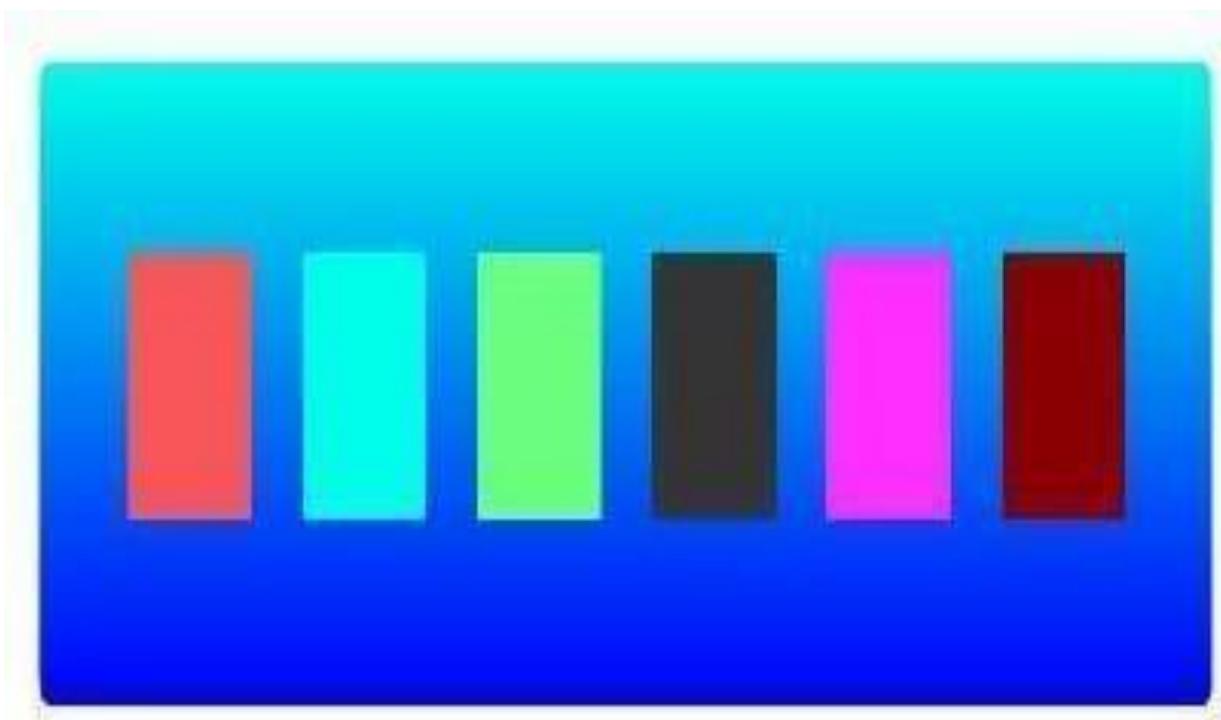


- Make this layout using SCSS variables and mixins : -



Module WD - JQuery Basic, Effects & Advanced

- How to create slider with animation?
 - Change Background-color using JQuery



□



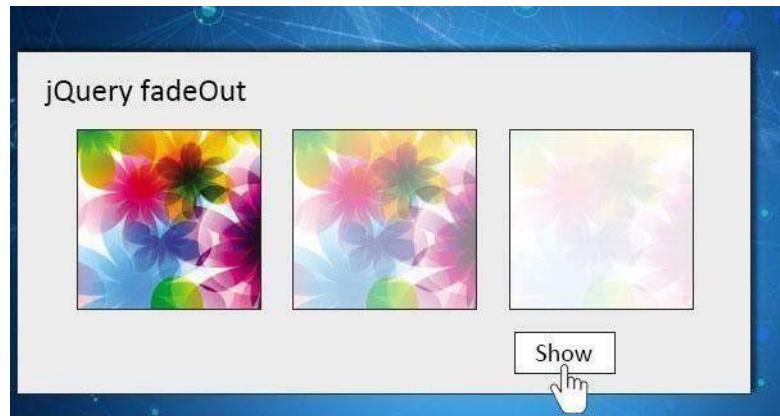
Create this using JQuery



- Create this using Jquery



- Create Fade out using JQuery



Module - WD - JavaScript Essentials & Advanced

Q.1 Using console.log() print out the following statement: The quote 'There is no exercise better for the heart than reaching down and lifting people up.' by John Holmes teaches us to help one another. Using console.log() print out the following quote by Mother Teresa:

Q.2 Check if typeof '10' is exactly equal to 10. If not make it exactly equal?

Q.3 Write a JavaScript Program to find the area of a triangle?

Q.4 Write a JavaScript program to calculate days left until next Christmas?

Q.5 What is Condition Statement?

Q.6 Find circumference of Rectangle formula : $C = 4 * a$?

Q.7 WAP to convert years into days and days into years?

Q.8 Convert temperature Fahrenheit to Celsius? (Conditional logic Question)

Q.9 Write a JavaScript exercise to get the extension of a filename.?

Q.10 What is the result of the expression $(5 > 3 \&\& 2 < 4)$?

Q.11 What is the result of the expression $(true \&\& 1 \&\& "hello")$?

Q.12 What is the result of the expression $true \&\& false \parallel false \&\& true$?

Q.13 Check Number Is Positive or Negative in JavaScript?

Q.14 Find the Character Is Vowel or Not ?

Q.15 Write to check whether a number is negative, positive or zero?

Q.16 Write to find number is even or odd using ternary operator in JS?

Q.17 Write to find maximum number among 3 numbers using ternary operator in JS?

Q.18 Write to find minimum number among 3 numbers using ternary operator in JS?

Q.19 Write to find the largest of three numbers in JS?

Q.20 Write to show

i. Monday to Sunday using switch case in JS?

ii. Vowel or Consonant using switch case in JS?

(Conditional looping logic Question)

Q.21 What are the looping structures in JavaScript? Any one Example?

Q.22 Write a print 972 to 897 using for loop in JS?

Q.23 Write to print factorial of given number?

Q.24 Write to print Fibonacci series up to given numbers?

Q.25 Write to print number in reverse order e.g.: number = 64728 ---> reverse =82746 in JS?

Q.26 Write a program make a summation of given number (E.g., 1523 Ans: - 11) in JS?

Q.27 Write a program you have to make a summation of first and last Digit. (E.g., 1234 Ans: -5) in JS?

Q.28 Use console.log() and escape characters to print the following pattern in JS?

```
1 1 1 1 1  
2 1 2 4 8  
3 1 3 9 27  
4 1 4 16 64  
5 1 5 25 125
```

Q.29 Use pattern in console.log in JS?

- 1) 1
 1 0
 1 0 1
 1 0 1 0
 1 0 1 0 1

- 2) A
 B C
 D E F
 G H I J
 K L M N O

- 3) 1
 2 3
 4 5 6
 7 8 9 10
 11 12 13 14 15

4) *
* *
* * *
* * * *
* * * * *

Q.30 Accept 3 numbers from user using while loop and check each numbers palindrome

Q.31 Write a JavaScript Program to display the current day and time in the following format. Sample Output: Today is Friday. Current Time is 12 PM: 12 : 22 2 ?

Q.32 Write a JavaScript program to get the current date?

Q.33 Write a JavaScript program to compare two objects?

Q.34 Write a JavaScript program to convert an array of objects into CSV string?

Q.35 Write a JavaScript program to capitalize first letter of a string?

Q.45 Write a JavaScript program to determine if a variable is array?

Q.46 Write a JavaScript program to clone an array?

Q.47 What is the drawback of declaring methods directly in JavaScript objects?

Q.48 Print the length of the string on the browser console using console.log()?

Q.49 Change all the string characters to capital letters using toUpperCase() method?

Q.50 What is the drawback of declaring methods directly in JavaScript objects?

Q.51 Write a JavaScript program to get the current date. Expected Output : mm-dd-yyyy, mm/dd/yyyy or dd-mm-yyyy, dd/mm/yyyy?

Q.52 Use indexOf to determine the position of the first occurrence of a in 30 Days Of JavaScript?

Q.53 Use lastIndexOf to determine the position of the last occurrence of a in 30 Days Of JavaScript?

Q.54 Form Validation in JS?

Q.55 Form in Email, number, Password, Validation?

Q.56 Dynamic Form Validation in JS?

Q.57 how many type of JS Event? How to use it ?

Q.60 What is BOM vs DOM in JS?

Q.61 Array vs object defences in JS?

Q.62 Split the string into an array using split() Method?

Q.63 Check if the string contains a word Script using includes() method?

Q.64 Change all the string characters to lowercase letters using toLowerCase() Method.

Q.65 What is Character at index 15 in '30 Days of JavaScript' string? Use charAt() method.

Q.66 copy to one string to another string in JS?

- Create basic math operation in JS

Maths Operations

Enter 1st number :

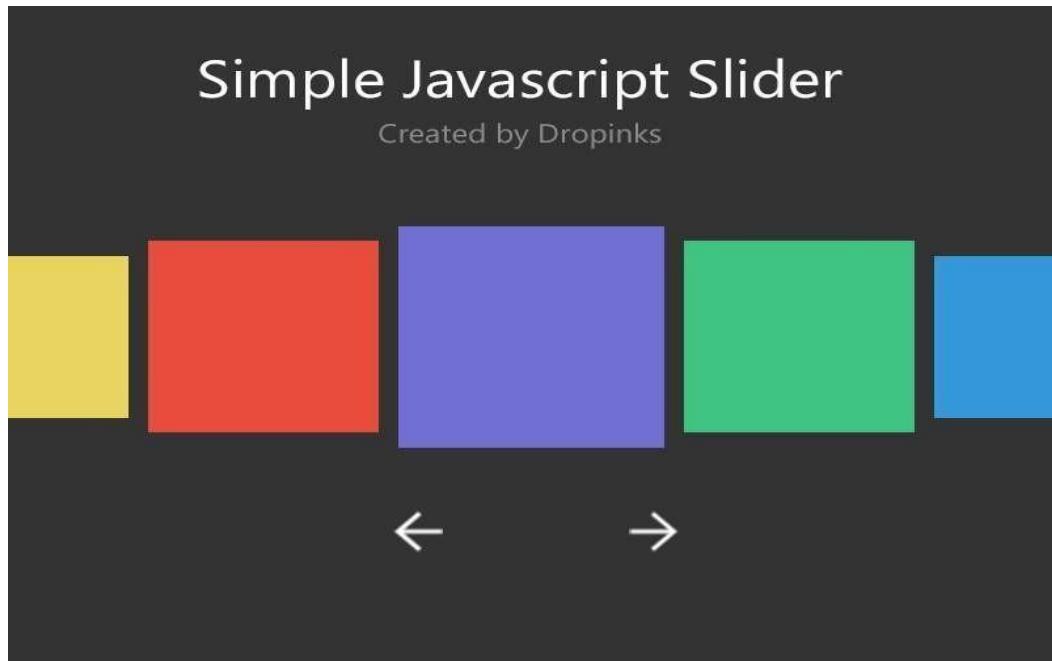
Enter 2nd number :

Answer is : 55

- Create result

Marksheet for Information Technology	
Enter Marks	
1. C Language	34
2. C++ Language	44
3. Database	22
4. HTML	33
5. CSS	45
6. php	44
7. Core java	50
<input type="button" value="Result"/>	
Total is : 272 / 350	Percentage is : 78 %

- Create a slider using JavaScript

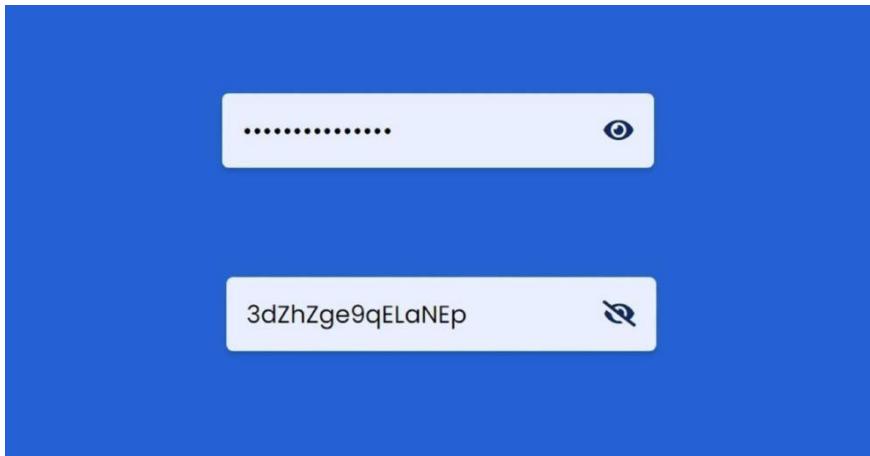


- Change background using java script





- Create a hide show password functionalities.



- Create a form and apply validations as shown in below example.

Sign Up

Username:

Username must be between 3 and 25 characters.

Email:

Password:

Password must has at least 8 characters that include at least 1 lowercase character, 1 uppercase characters, 1 number, and 1 special character in (!@#\$%^&*)

Confirm Password:

Please enter the password again

SIGN UP

- Create basic math operation in JS

Maths Operations

Enter 1st number :

Enter 2nd number :

Answer is : 55

- Create result

Marksheet for Information Technology

Enter Marks

1. C Language	<input type="text" value="34"/>
2. C++ Language	<input type="text" value="44"/>
3. Database	<input type="text" value="22"/>
4. HTML	<input type="text" value="33"/>
5. CSS	<input type="text" value="45"/>
6. php	<input type="text" value="44"/>
7. Core java	<input type="text" value="50"/>

Total is : 272 / 350 Percentage is : 78 %

Advance JavaScript

- Calculate subtotal price of quantity show in below image

Product Info	Quantity	Price (per unit)	Price (subtotal)	
 Fortunata Window Hardware - Decorative Holdbacks - Mocha	2	\$29.99	\$59.98	Remove
 Woven Trellis Window Hardware - Clip Rings - Bronze	1	\$12.99	\$12.99	Remove
\$72.97				

- Create below form and do apply validation show in below image

Form Validation

Form Validation

Full Name

Email Address

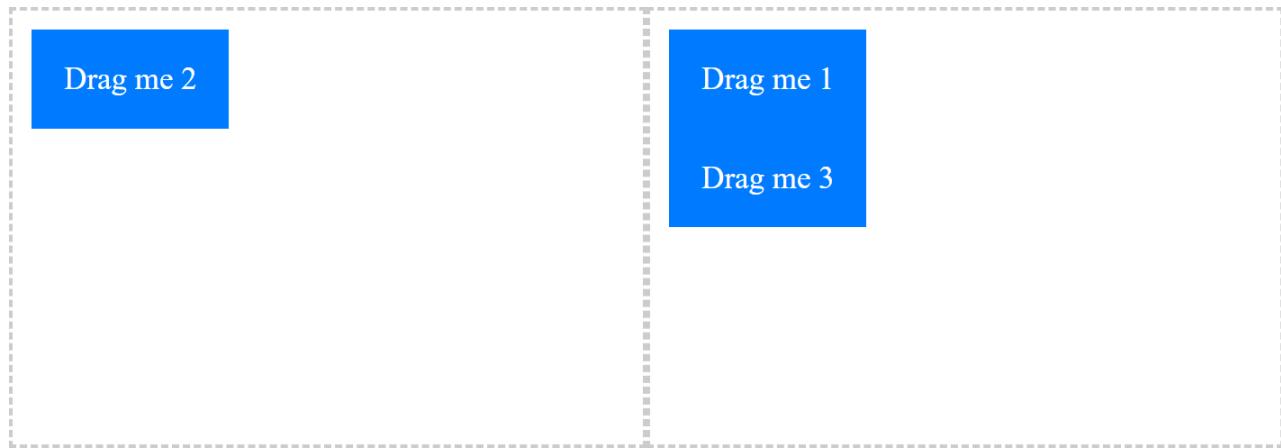
Password
 (*)
Enter your password

Birth Date
 (*)
Select your date of birth

Gender
 (*)
Select your gender

Submit

- Create two containers and drag from one to another show in below image



- Create Email validation program show in below image

Email Validation JavaScript

Enter your email

codinglab@gmail.com

codinglab@gmail.com

- Create Password Strength checker show in below image



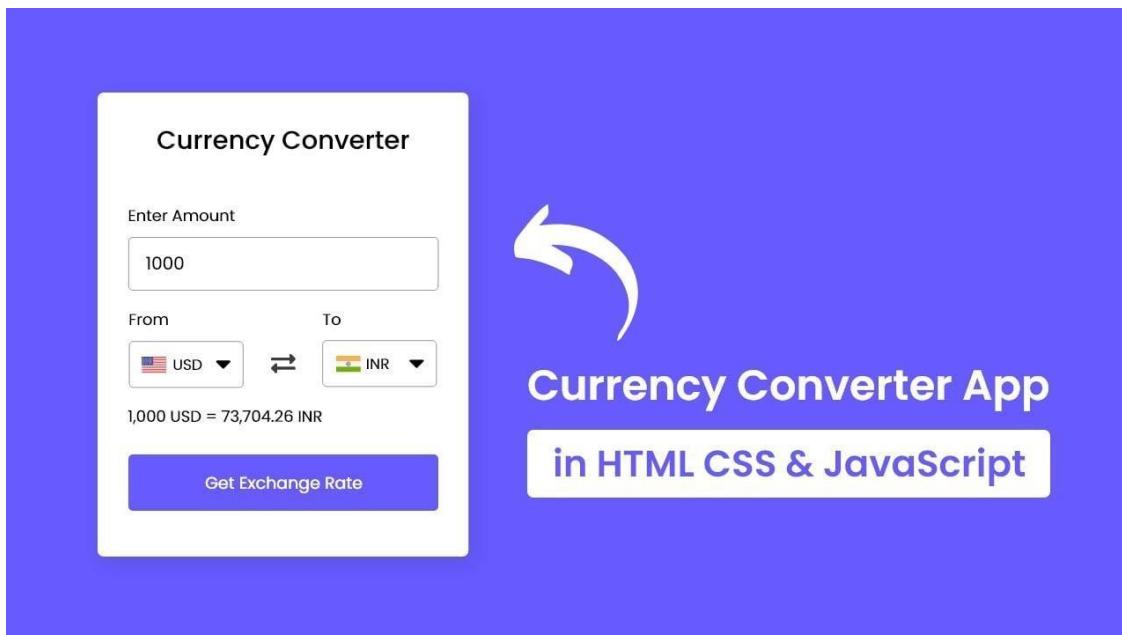
- Create program to generate Random quote show in below image



- Create program to Export html table to excel show in below image

Name	Age	Country
Alice	30	USA
Bob	25	UK
Charlie	35	Canada
Export to Excel		

- Create Currency converter show in below image



- Delay function result using debouncing
-

hi

You typed: hi

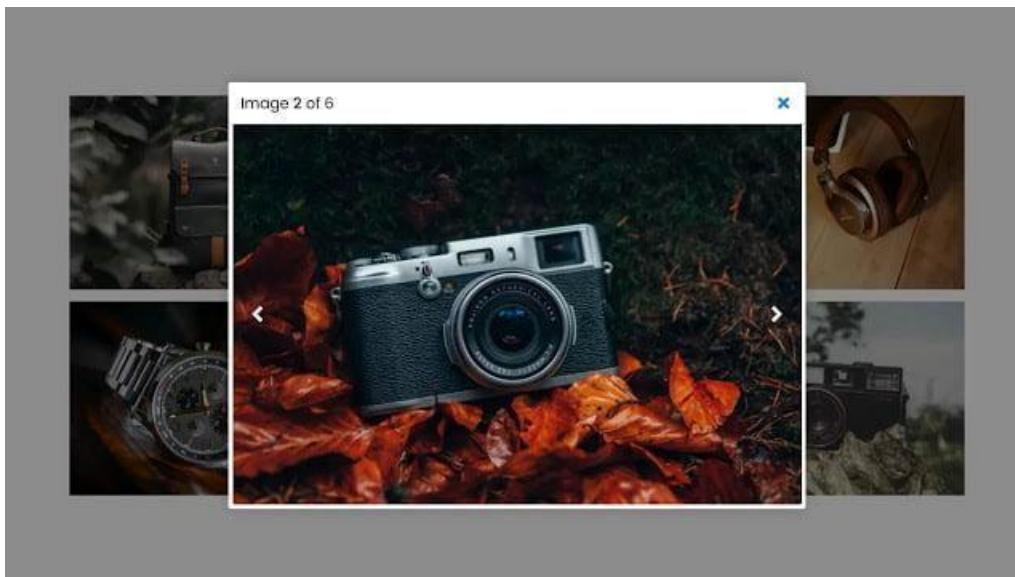
- Achieve Throttling using below example (on mouse over display mouse coordinates.)

Mouse coordinates: 324, 17

- Create Simple Alarm Clock show in below image



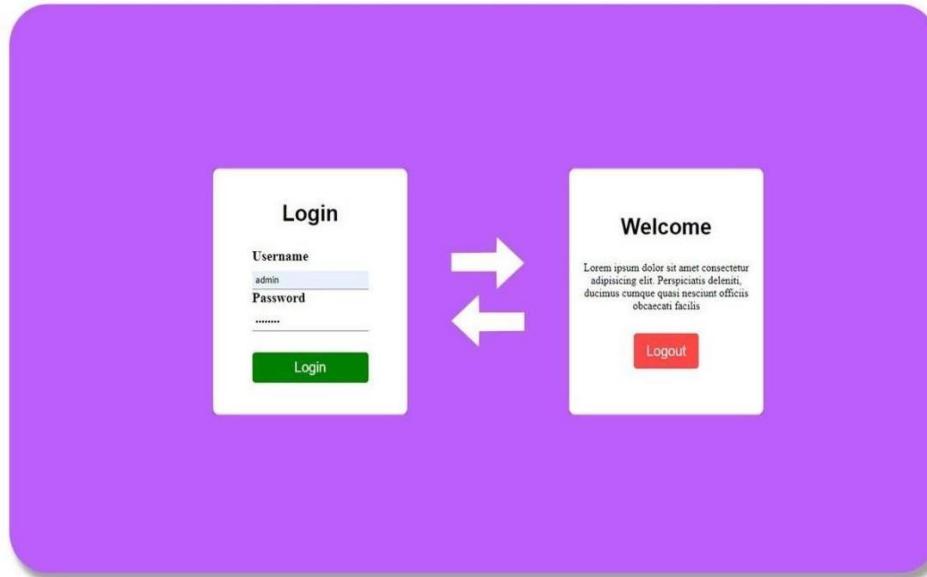
- Create Responsive Light box Gallery shown in below image



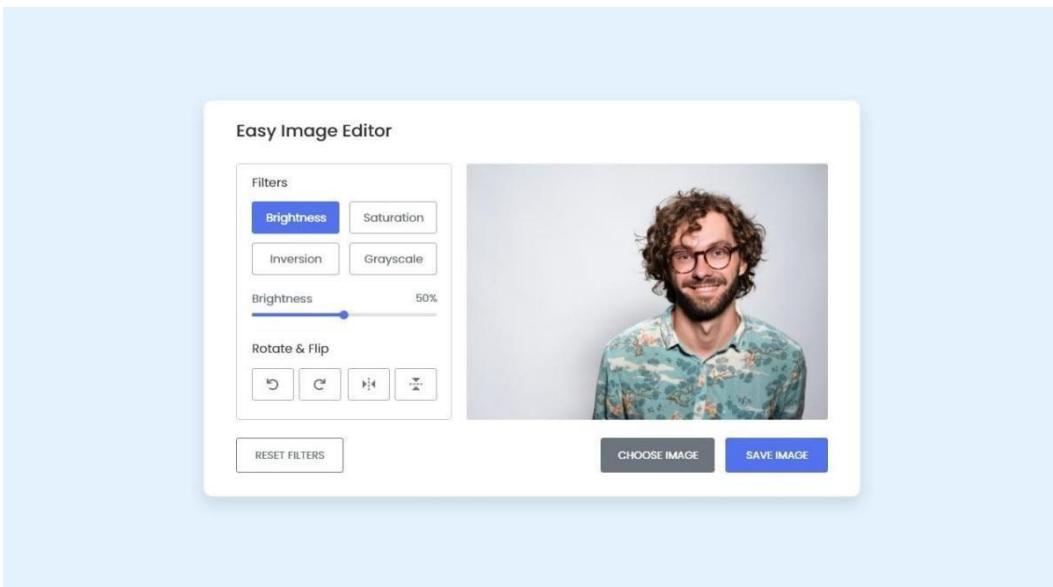
- Create review Card slider shown in below image



- Create Login Logout system shown below



- Create Image Editor shown below and apply filters like brightness, contrast etc.



- Perform Localstorage CRUD as below

CRUD with LocalStorage

Items:

Apple

milk

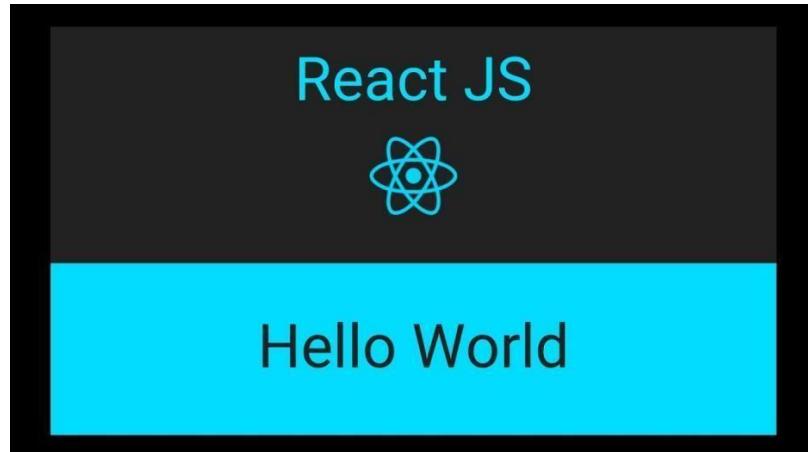
banana

bread

Module – ReactJs

,Components , states ,props

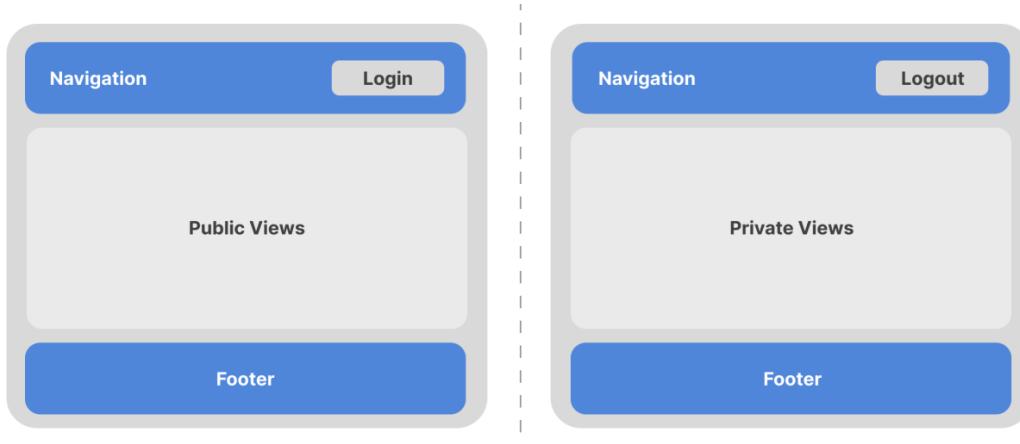
- Create Hello World React program show below



Create counter app program shown below

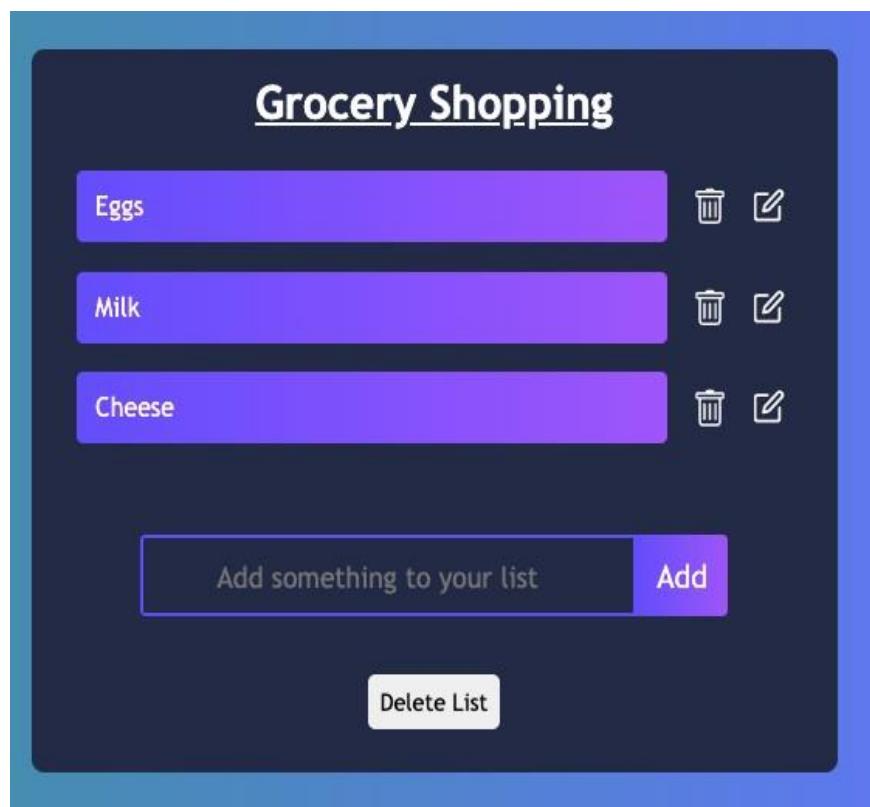


- Create Login Lout React program as below

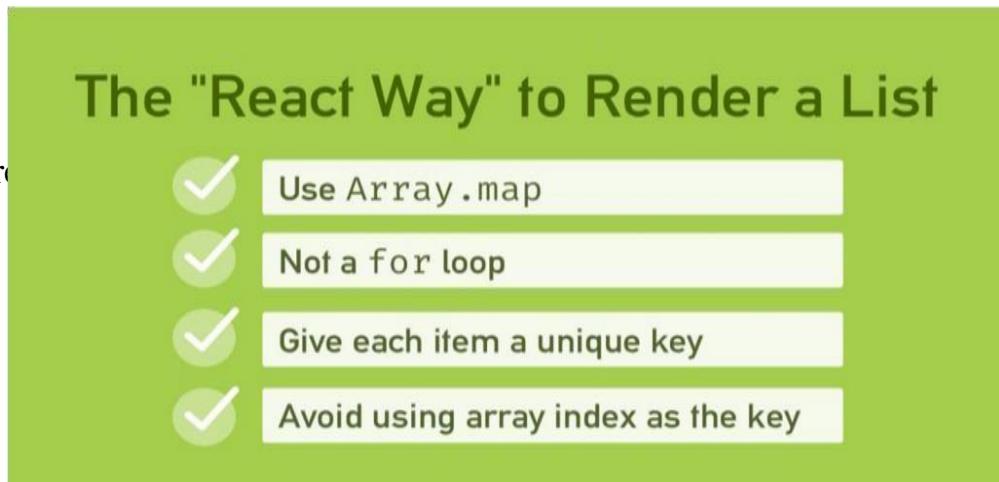


Module – Lists , Hooks , LocalStorage, API Project

Create TODO app show in image

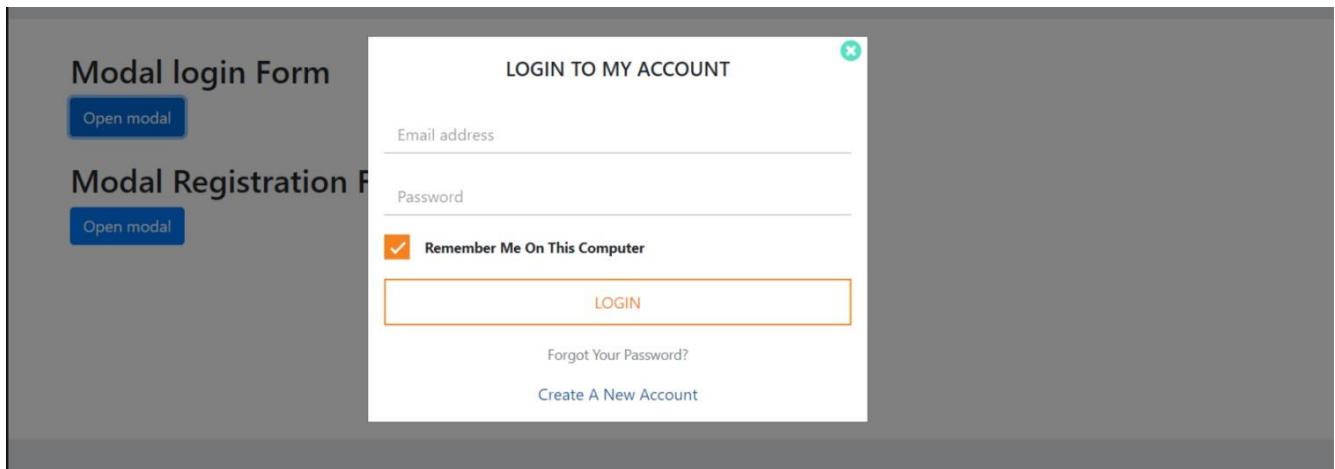


- How to Create a List View in React Js?

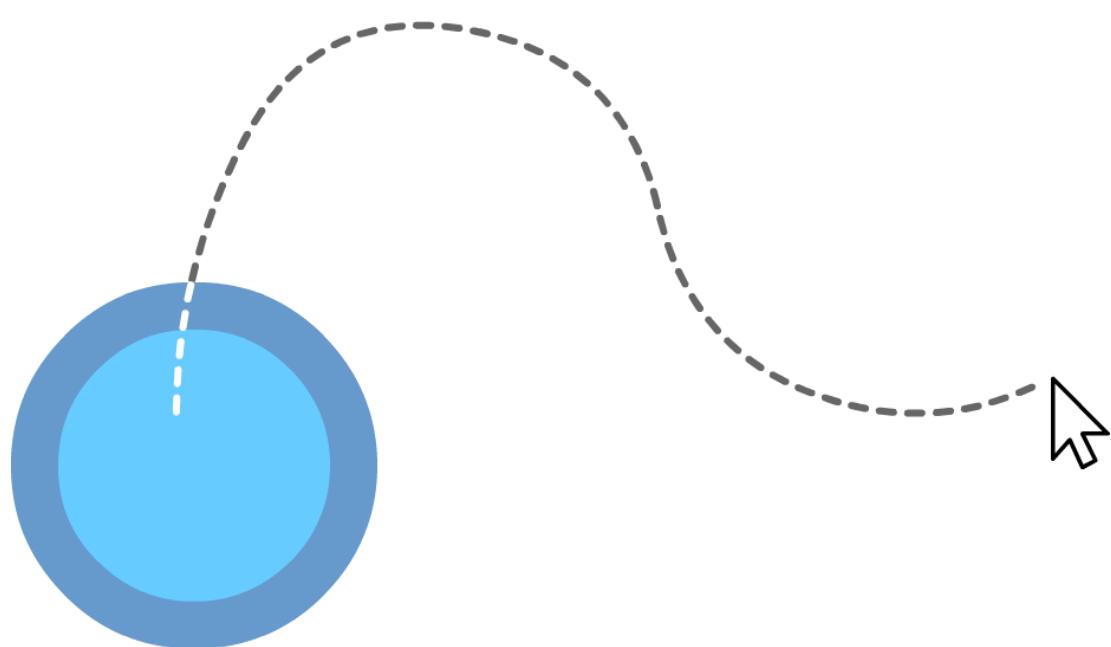




- Create modal for Login and Registration show in below image.

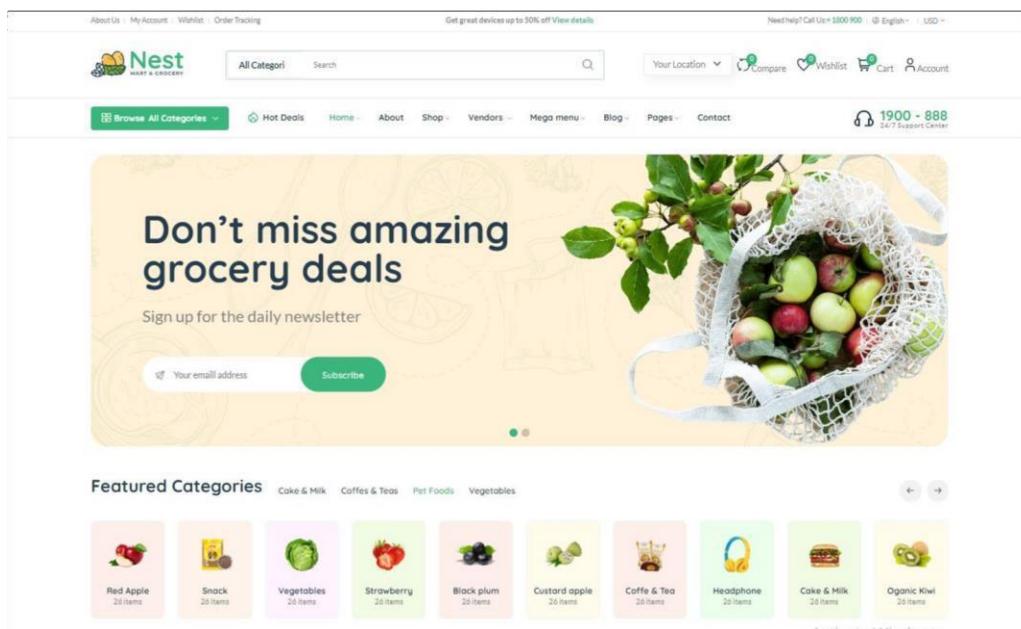


- Move an element on mouse move using useState OR useEffect Hook



Module -React -Advance React- Styling , Routing

- Create Shopping site home page with Styled- component



- Perform crud using Fake API and Material UI React Router

REACT CRUD & MATERIAL UI

≡
🔍

ADD BLOG

Category	Description	
React JS	This is simple UI Library	✍ 📝 🗑
Node JS	It is backend JS Framework	✍ 🗑
Angular	This is Frontend JS Framework	✍ 🗑
Vue JS	Another Framework for JS	✍ 🗑

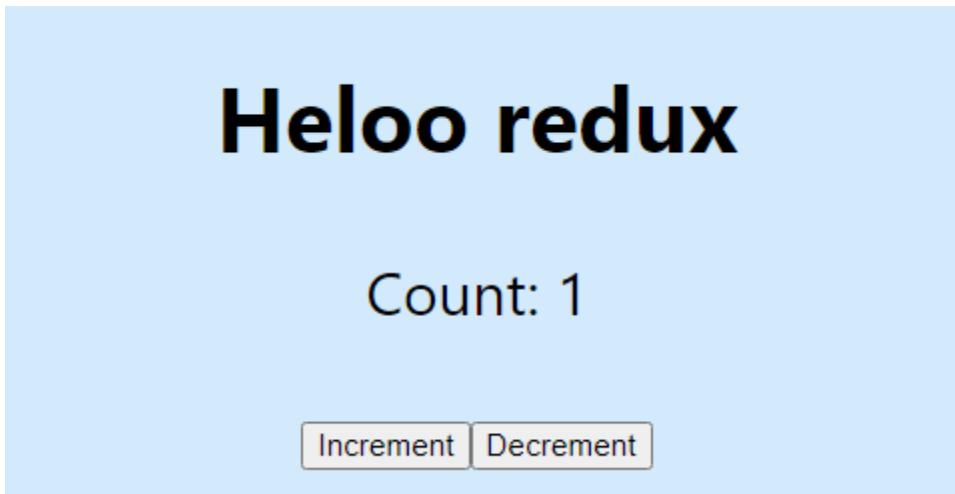
Module React – JSON-server and Firebase Real Time Database

- Create React app with modules and lazy loading (Admin-user module with child router and outlet)
- Perform Crud operation using json-server,axios,router



Module - React - Applying Redux

- Create app for Reduc counter as shown below?



- Create CRUD using Redux-thunk , Json-server, axios,router



REACT CRUD APP JSON-SERVER WITH REDUX-THUNK

Name	Email	Contact	Address	Action
Adam Marcus	adam123@gmail.com	83673677367635	UK	DELETE EDIT
Tommy	tom@gmail.com	83786646476	Japan	DELETE EDIT
James Bond	james@gmail.com	9484785787	France	DELETE EDIT
Larry	larry@gmail.com	347846746	UK	DELETE EDIT
Steve	steve@gmail.com	9348848887	Aus	DELETE EDIT

- Create a Single page application as show below.
- Create this portfolio page with at least three pages those all pages shold be openedwithout refreshing the page also apply dark light there on toggle button

