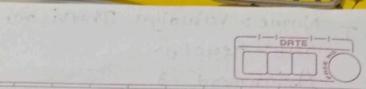
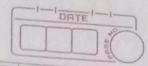
Name: - ValVadiya Dhayvi m. MSC. ICT Sub! - React is Assignment 3 1) Application exchitectare React JS is a Javascoipt library for building user interfuces. - Aachitectype key Points: I. Component - Based Architefure: Applications are bejilt using reuserble comfonents. 2. One way Duta Flow: Duty Flows from Pyrent Components to child components through Props, 3. Virtual Dom: updates use first seflected in the virtual Dom and then efficiently yeldeted in the seell DOM. 4. Jsx: simplifies the process of writing end mein teining 47 code -) React creates a vistual Dom in memory -) Instead of manifellating the boowser's Dom diseatly, React coedtes a virtual DOM in Memory, where it does all the nessasy manifestating before making the changes in the browser Dom. 2) cluss components -> Event handling methods erre typically defined as methods of the dess. - Binding of event hundler methods in the constauctor or using closow function is seguired to the remiserance -> Binding 'this' is messcray for event hundless to access the component's instance state & Poops. -) Methods for binding: 1. Binding in the Constayator 2. Using arrow functions in class fields.

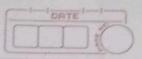


-	-) Example of class components
	class Para Clin
Tilled 1	class Bestnelick extends React. Componente
	Constructor (Props) &
	SziPer (Props);
	this state = & clicked : false3;
	this. handleclick = this, handle Click, bind (this)
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	handle Click () &
a will	· this, set Styte (& clicked: toug);
	- I be O and self-residence and proper or the leading
	Dender () E
L. Ca	deturn 1
	xbeition on click = Ethis, handle clickys
	& this state clicked " clicked! ': 'click me'
	(b2) Ho my
	10. San); il gette primehetimbre to prostantical
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	y with the discourse of the land of the la
THE HE	profes assumed and the following the and a substitute
2)	functional Components
2)	TUNIC TIONELL CONTIDUISMENT CO
	functional components use hooks for event hundling,
	Szich as use State for state and use Effect for side effect
	No Need for this in functional Components.
	Event handless use declared as functions with in
	the component,
s alk	and the same of the side of the same of th
-	Example of Functional Components
	import Reyet, susestately from 'react's
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	and ick - 80 => pand on tuvosites
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41	
	Nested Components
	7-0
	In React, nested components are a Powerful way to
	build complex Us by breaking down the interface
	into Smaller, relisable Pieces, Here's quick overriew
	of how to creete and use or nested components.
	La transfer to the same of the
->	Excimple of Nested Components.
	userjs
<u>-)</u>	userjs import React from 'seact';
	1m/o of Kellet 100m compile () => &
The Marian	const User = (& name, email 2) => &



setyon (xdiv class Name="useo"> The sendmey Thes <P> Eemail 3 </P> < Idiv> 35 33 expost default User; arrain anon i asperante organista como 11 Usedist: is countries castrono stonio s impost React from react; impost User From '/User's Lability of the Contract of th Const UsexList = (& Msexsy) =) & setyon (rdiv dass Name = "Msex-list"> EUSESS, map ((USED index) =) & (KUSET KRY=Eindexy name=vyset, name email = syser email y 1> 1) 4 Kldiv > D': 7: export defant Userlist; sections of all valoues it into // APP. is impost Reuct from 'react'; import Userlist from 1./Userlis+1; (ons+ APP = () =) & const Useds = [formail: Johnaw. comy,



Ename: 'smith', email: 'smith agmail.com's

Sname: bob', email: 'bob agmail.com's, Detyon (Kdiv class Name = "app"> Khiz User List xlhis (Usealist Use as : & use as 3 /> expost default APP. Il conditional and looking constructs -) conditional rendering in React can be exchieved Using Javascript expansions. Here are a few Common Patterns: 1. You can use regular if else statements inside the render method. 2. A more wrise way is to use the ternary of. 3. you can also use the logical 22 ofesutor for sendesing components Conditionally. I when you need to render lists lists of items, you can use the marcifona to loop through grounds. 1 Example of conditional and looking constauts import React four beact;

Const shoofing list = (v items, is logged In Dose

if (items, length === 0) &

petron KP> No items in your shopping listely. setter (shars islogged In a Your shoping list!

'Please log in to see your shopping list's Eislogged In 22 items, map ((item index))
(×141> <ldi>>> cons+ APP = () =) & Const items = ['Apples', Banans', loadn']; Const islogged In =toye; retyon (<di> <div> </di> Kshopping List items = Eitemsy islogged In = Sislogged In) 1> </div> export definel + APP; 6) Styte React Components has a built in State object. - The state Object is where you store Property values that belong to the component.



when the state object changes, the component ae-a-enders to carecte State Object. -) State Object is initialized in the constauctor Example 1cluss Cur extends React; Component & Constauctor (Poops) & 521Per (Poops); this. Style = & bound: "ford" ys gender (78 aetyrn (Zdivy ZhI>My (ax x/hI> F) Pours and a man and a man - Poops goe clogaments Passed into React Components. -1. Props goe pussed to components vie HTM L attributes -> Ext- ex const my Ele = < (c) & bound = food 1>; function cur (Poups) & retyrn <h2>] um a sports. bound y! </h2>

8) form (controlled component) -> A controlled component is an infert element whose value is compolled by React. React handles the form's state and yeldetes it with every infert. - Example of a simple form impost React, susestate y from 'react's Mnction Simple form () & const [neime, setNume] = 4seState (' '); Const hamdle Change = (e) => & Sel Name (e. farget, value); 43 Const handle Szibmit = (e) => & e porvent Defyyt (); aleat (form Submitted Name: 5 thamey)3 35 option (L form on Submit = L'hundle Submit ys < abel> Name . dinfert type="text" Value = snames on Change = Thandle Change 5/> Kbzitton tipe = "szibmit" > Szibmit / lbzitlon > (1form> expost defuylt simple form ;