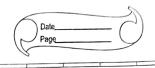
WEEPA BEHRANI
DISB-05 MPL ASSIGNMENT D. Date
MIPL ASSIGNIVIEN I &:
Define progressive webapp (Pwn) & explain its significance in
modern development & Bouss the key characteristics PWA's from
traditional mobile apps.
Soln:
A progressive webapp (PWA) is a type of web application that
works like a mobile app & mins in a browser
Significance of RPWA in modern web development:
1) Cross platform computability
9) Cettline Support.
3) Fast performance
4) No app state required
5) Lower development cost.
PWH Traditional app
Installation: Direct from Download from exp Store.
Browser
Internet work offilm Usually requires interner.
sequired with caching
performance Fast with service fast but need installation
workers
updates Automana manual
Development Lower Higher
C 091
Define sesponsive web design & explain its importance inkthe
content of progressive web apps. Compare & construct responsive
fluld & adaph ve web design approaches.
Soin: Pefinition of responsive wes design!
Responsive coop design (RWD) is a sechnique that makes
Responsive coet design (RWD) is a technique that makes uch pages adjust cutomanally to different screen soze
Teacher's Sign.:



and devices. It ensures a good users experience an mol tablets & dest tops without needing reparate version of websi te. Importance: 1) Better user empenence 2) faster load time 3) SEO Benefis 41) cost effective. Approach How it works Pros cons cong Responsère | Use frenible grêds | works on Can be 1 & css medla gueries all derlos compl fuld Use % based width works well less on different Prostead cy fined contro Screen size, Over O3) Describes the lifecycle of services workers, including registration, installation & a chration phoses Solo: lifecycle of service workers: A service workers is a script that owns in the background & helps a web app work office to faster & send push nonfications. Its isteaple has 3 phases: 1) registration phase : Browser register the service worker using Tavascript. Eg: Pf ('serviceworker' in navigator) & ravigator. Service worker regester ("/sw.js) ·then () > console log ("service register

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· catch (error) > console · log ("failed! coros)



2) Installation phase: Theraffire service works downloally recessary files (HTML, cis, is) & stores them in cache. if successful it moves to the activation phase eg: self add Event Listener ("install", event => ? event. Wait until c eache opent ('app=cache') then (cache=) { seturn cache add All ['1' indeach +my 'styles.chi). 3)); 3); 3) Achvation phase. The old seaveces worker is seplaced with new one unreal cache files from the previous version are deleted final step: fetch and sync ance activated, the services worker intercept network Dequest serves cached folls & syncs date. Exphin the used of internal indesced DB in the Service worker for data storage Use of IndexOB Por sorver worker for Data storage: Index -ed DB is a browser database that stores large amount of Structured data leke JSON, objects. It helps purps work coffline by serving & somicing data efficiency. why use Indexed DB in service workers? 1) Offline Support: Store data when offline and Sync its later. 27 Efficient storage: Saves Structure dates like User 8) faster Access: Rotrieves data quickly without needing

4] Persistent Pata: Data Jemains saved after the browser is closed.

a network request

Teacher's Sign.:

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B Lowed DB?
How sorvice womers use Indexed DB?
opening the olatabase:
(et db:
aclean coll by the state of the
Decree Constitution 3 tonch on
db=event.target-apen (1)
creating a store and adding date.
request oncepgredeneeded = function (event)?
let db= even-target = desult;
let Stok = db. creak Object store ('Users', Exer
Store. add (? id: 1, name: John Doe' age: 25}
fetch pata en service worker
Let transaction: db. transaction ('Users ' readon
 let store = transaction. Object store ('user').
let getuser store get (1).
get user consuccess function () 3
console log (get user result);
g; ger der desult);