SPA & PWA

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SPA(Single Page Application)

SPA, called Single Page Application) is a type of application which can download static files in one time and dynamically download other files when users communicate with web pages. It can reduce the sum of traffic, so speed up the websites. It seems a web page operating like desktop application.

Good things of SPA

1. SPA is user-friendly. The high speed of SPA can let users feel good.
2. SPA requests little server. SPA downloads files dynamically, so there is less than other webpages.
3. Development is simple and effective. It is quite easy to start coding because of not using servers. And it doesn’t need coding in server for rendering pages.
4. Debugging in Chrome is easy. Because of monitoring network operation, and searching page components with relative things.
5. Developers can reuse backend codes of web and mobile applications, it is easy to make mobile webs.
6. It can cache any local storage effectively.
7. SPA cause co-operating and work-split easy because of dividing frontend and backend.

Bad things of SPA

1. SPA has relatively low speed of first operating which causes all static resource for web application at first.
2. At first, searching engine optimizing does not occur, so web crawler cannot collect data effectively.
3. Cross-Site-Scripting(XSS) can cause cracker to inject other users’ client-side scripts. This causes security problems.
4. SPA can be used under Internet Explorer 8.
5. Slow down of system can be caused by memory outflow in javascripts.

PWA(Progressive Web App)

PWA, called progressive web app, can be easily told that is combined with mobile application and web technology. Mobile application uses time and cost, but web page needs not to be installed and can be accessed easily by URL. Mobile application once installd, can be used repeatedly, and web page need to type the used URL. Also, web page can be used in on-line environment, but mobile application can be used in off-line environment.

Good things of PWA

1. PWA is responsive. It can provide the same user experience in variable platform and machines.
2. PWA is reliable. Using local cache, it can be operated in offline or unstable networks.
3. PWA is safe. It is provided with https, more safe versus traditional web.
4. PWA is light-weigth.
5. PWA can be searched in portal search result like google, and naver.

Bad things of PWA

1. PWA has lower loading speed and performance.
2. PWA has limits in some platforms.
3. PWA doesn’t operate in safari brower, otherwise chrome, opera, and firefox.
4. PWA has unstable ios like not receiving push alarms and not integrated with siri.
5. PWA doesn’t supply basic device functions like NFC, Bluetooth, fingerprint scanning, and camera functions.
6. PWA use more battery life, because of accessing internet.