Experiment No.7 MAD & PWA LAB

I. <u>Aim:</u> To learn about Progressive Web Apps and how they are different from standard websites.

II. Theory:

PWA:

A progressive web app (PWA) is an app that's built using web platform technologies, but that provides a user experience like that of a platform-specific app. Like a website, a PWA can run on multiple platforms and devices from a single codebase. Like a platform-specific app, it can be installed on the device, can operate while offline and in the background, and can integrate with the device and with other installed apps.

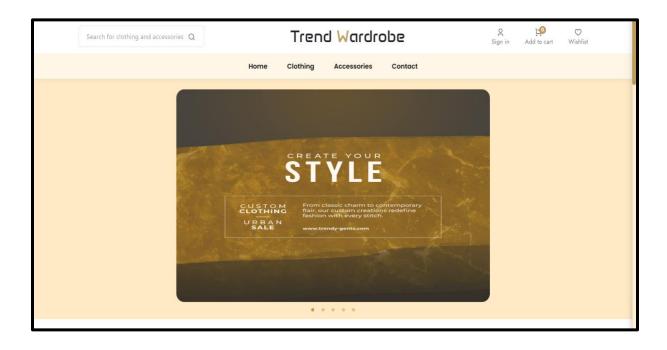
BENEFITS OF PWA:

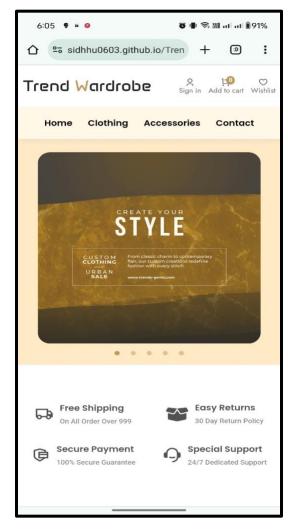
- ✓ Easy for users to access: They get their own icon on the device, making it easy for users to find and open them.
- ✓ Offline and background operation: They are able to operate when the user is not interacting with them and when the device is offline. This, for example, enables a chat app to receive messages when it is not open, and display a notification to the user. It also enables a news app to update in the background so it can show fresh content even if the device is offline.
- ✓ Dedicated UI: They can implement their own distinctive, immersive UI.
- ✓ OS integration: They can be integrated into the host OS: for example, a messaging app can register as a share target, enabling users to select an image in the photo app and send it using the messaging app. They can also access device features such as the camera, GPS or accelerometer.
- ✓ App store integration: They are distributed using the app store, giving users a single place to find them and a consistent way to decide whether they want to install them.

Manifest.json:

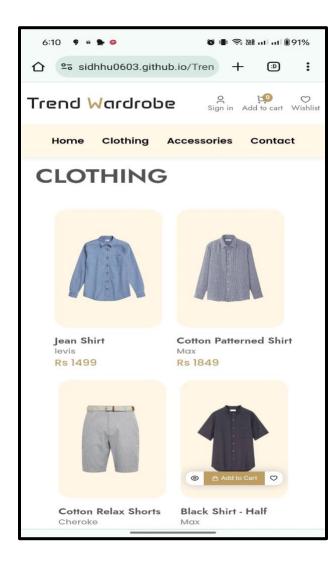
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                                                          "sizes": "144x144"
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                                                       },
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  "display": "fullscreen",
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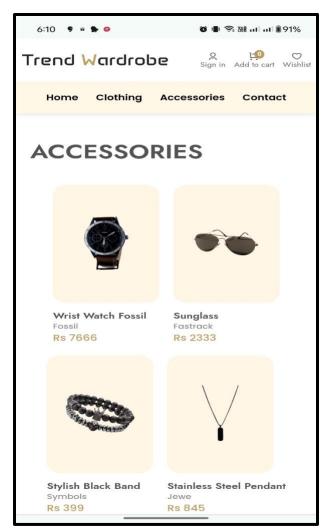
III. Output:











IV. <u>Conclusion:</u>

Hence, successfully understood the Progressive Web Apps (PWAs) involves grasping their unique characteristics and how they differentiate from traditional websites. Unlike standard websites, PWAs leverage modern web technologies to offer users a more applike experience.