Task 7

I personally agree with the conclusions of the purpose statements of Qiao, X. et al. (2019) qualitative study “Web AR: A Promising Future for Mobile Augmented Reality—State of the art,  
challenges, and Insights”. As he addresses the challenges and insights of Web-Based Augmented Reality.

I agree with Qiao, X. et al. (2019) that at this point of time self-contained Web-Based AR will be generally defined as gaining attention due to its lightweight and cross-platform features.

I agree with the purpose statement point that Qiao, X. et al. (2019) discussed, as saying that Web-AR is cross-platform.

Web-AR can be classified as being cross-platform because it is able to be used on different types of phones or with different software packages.

Oursky Posts. 2022. *Augmented Reality for the Web: Using WebAR to Speed Up Cross-Platform Mobile Development - Oursky Posts*. [online] Available at: <https://blog.oursky.com/2021/01/15/augmented-reality-for-the-web-using-webar-to-speed-up-cross-platform-mobile-development/> [Accessed 12 April 2022].

Qiao, X. et al., 2019. Web AR: A Promising Future for Mobile Augmented Reality—State of the art,  
challenges, and Insights. Proceedings of the IEEE, 107(4), pp.651–666

I also agree with another point that he mentioned saying that WebBased-AR is Lightweight. This is because the library used (AR.js) is a light library used in AR. This because the computational stress to display Web-AR content is being done from the server side instead of the user’s phone.

Contentstack.com. 2022. [online] Available at: <https://www.contentstack.com/blog/tech-talk/augmented-reality-frameworks-for-an-enterprise-web-based-ar-application/> [Accessed 12 April 2022].

Medium. 2022. *Creating Web-Based Augmented Reality With Just 10 Lines of HTML Code (For Beginners — AR.js)*. [online] Available at: <https://medium.com/@fauziali/creating-web-based-augmented-reality-with-just-10-lines-of-html-code-for-beginners-ar-js-d62ef596eab> [Accessed 12 April 2022].

Qiao, X. et al., 2019. Web AR: A Promising Future for Mobile Augmented Reality—State of the art,  
challenges, and Insights. Proceedings of the IEEE, 107(4), pp.651–666

Roy, S.G. & Kanjilal, U. (2021) conducted quantitative research to find the performance of the webbased AR application using different specifications of smartphones.

I personally disagree with this purpose statement as Web-AR is lightweight (as previously explained) and the specifations of the phone does not change the performance of the Web-App. The only reason which the AR had better performance was because the browser could have used more memory to store the downloaded content, and the internal modem used to connect the the network. This is because Web-AR depends heavily on the network connection.

Roy, S.G. & Kanjilal, U., 2021. Web-based Augmented Reality for Information Delivery Services: A  
Performance Study. DESIDOC Journal of Library & Information Technology, 41(03), pp.167–174

A2 Consulting LLC - Innovative Software, Design and Digital Solutions. 2022. *WebAR | Web Augmented Reality | Advantages and Use Cases*. [online] Available at: <https://a2consultingllc.com/advantages-and-applications-of-web-augmented-reality> [Accessed 12 April 2022].

I agree with Javornik, A. et al., (2018) purpose statement as they conducted a qualitative study to investigate how different types of AR content can affect the flow experience as well as other cognitive, affective and behavioural responses.

The addition of text with images in AR Applications allow knowledge gained to be assisted by the AR designer in creating stimulating experiences for individuals.

Miller, M. et al., (2019) further researched about how AR effected interaction in the real world, and said this “their interactions in their physical world changed as well, even with the AR device removed”.

Miller, M., Jun, H., Herrera, F., Yu Villa, J., Welch, G. and Bailenson, J., 2019. Social interaction in augmented reality. *PLOS ONE*, 14(5), p.e0216290.

Javornik, A. et al., 2018. An experimental study on the role of augmented reality content type in an  
outdoor site exploration. Behaviour & Information Technology, 38(1), pp.9-27

I also agreed with point Javornik, A. et al., (2018) mentioned, saying that AR effects the knowledge.

M. Kern. and R.G. Belleman, (2018( also agree with that point saying “augmented reality enhanced material to study the spatial and visual information will most likely lead to the best results”

M. Kern. and R.G. Belleman, 2018. Effects Of Augmented Reality On The Knowledge Gain. FACULTY OF SCIENCE UNIVERSITY OF AMSTERDAM.

Javornik, A. et al., 2018. An experimental study on the role of augmented reality content type in an  
outdoor site exploration. Behaviour & Information Technology, 38(1), pp.9-27