Luke Gidley

LSEPI Analysis

In this essay I will be discussing the 7th Project Specification. This Specification covers the plan to develop an IOS app that uses AR technology to guide new students around the university to help them find the buildings and rooms they need, while giving them an easy to follow interface. The combination of AR and GPS will allow for an easy to follow design that will show you where you are and have an arrow on the phone showing you where to go. The LSEPI issues with this project are how the data from the app is stored, this includes what is stored and how it is used. This depends on whether the user needs to sign up to use the app, along with whether data on where they are going is deleted immediately or if it is saved for future use. There is also an issue surrounding GPS systems and what would happen if someone could gain access to the GPS data and track you, along with what integration is set with the GPS.Another issue is that it takes attention away from the user making them less aware of their surroundings and how this can lead to theft and accidents.

Firstly, depending on what data is stored, there will need to be different levels of security. If the app stores any level of personal data, it will have to follow GDPR. This will most lightly happen if the app requires a sign up, which is not specified in the specification. This, along with if the app was expanded to other universities, would require this feature, along with wanting to save routes around the university. The most important part of the GDPR to this project would be the consent to store the data, and consent to track the data, with it explicitly stated whether the app will collect data in the background. For the collection of data, in line with the GDPR it must follow this: “If the data subject's consent is to be given following a request by electronic means, the request must be clear, concise and not unnecessarily disruptive to the use of the service for which it is provided.” (EU, 2018) This means that the app must tell you that it is tracking and using this data, and how it is used, along with who else can see it. This shows that any data collected needs to be specified in how it is stored, and who can see it.

Secondly, Since the app is most lightly going to be integrated with google maps, which means google will also receive this data. This is shown in google's own policy for third parties: “Users of your Maps API Implementation may provide information directly to Google through your Maps API Implementation, as needed.”(Google, 2018) This means that google are able to process the location data, and if the app keeps tracking in the background, google get all of this information. This isn’t the first time Google has done this, especially with one example where they tracked data even after directly telling them not to, last year a feature called location history would track you minute by minute, this could be paused in your settings, but some google apps would still track you and send this data back, even though the setting was supposed to stop it for all google apps.(The Guardian, 2018) This shows some of the issues that google maps can cause. If the student specifies exactly what it will be used for and who has access, along with only tracking while the app is open it will fully comply with the GDPR and have no issues.

Finally, the last issue is how the app could distract people from their surroundings, leading to theft or injury. This can occur because if the app requires a lot of attention to tell you where to go, which AR will, it makes the user an easy target of robbery. The metropolitan police have even put out an article warning about it and how to avoid it, with one point being, “Make it quick so you don't become distracted.”(Metropolitan Police, 2019) This shows that the app could make the user a target of theft as it will require a good amount of time to set up and find a path, which in this time it could easily be stolen straight out of your hands. There are also many examples with people being injured while using AR, with the most prominent coming from Pokemon Go, this can be seen with how two people were hit by a car while playing the game(SUNGAI PETANI, 2016). This is related to this project as it was AR that caused the crash, along with it being on the road, which the uni has many of going through it, it shows that these types of apps pull people's attention away from their surroundings. A solution to this problem could be to implement a warning to tell users to stay aware of their surroundings, or have a system that will tell you where you need to go through headphones so you can keep the phone out of reach.

Overall, the solutions to the first two points should be easily solvable as long as the creator follows the GDPR properly, along with telling the user exactly what their data will be used for, and who can see it. The harder solution is the final point as it will take much more work to implement the system suggested, but an easier solution may exist.

Luke Gidley

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