**HW3 - Basic Storage**

The options available to an android developer for storage are:

Pros and Cons are discussed in terms of our app that helps users pick a place to eat or drink. User preference data needs to be stored as well as trip specific data, such as time visiting a bar/ restaurant or an individuals rating of a bar/ restaurant.

DATA Store – Storage solution for storing key value pairs.

* Pros: Easy to implement. In the context of our app it would mean that each call to our restaurant/bar selection “algorithm” would use these key value pairs as arguments.
* Cons: User preference data is very valuable for future development of the app, so having this data stored locally may not be utilizing this data to it’s full potential.

App specific storage – Storage of files for an app within that apps directories.

* Pros: This is similar to the DATA Store, selecting this option would inform how the rest of the app would function. It could be a selling point for the app, in that the app respects your privacy.
* Cons: Again the abstraction of user data that could be valuable is a definite con.

Shared storage – Storage of files so they are accessible by other apps.

* Pros – Maybe this could be useful if you were to link this app with social media apps, however I think that data is shared in the cloud rather than locally. Other then that can’t see a pro to this option in the context of our app.
* Cons – Less secure and abstraction of valuable data away from the apps ability to use it to make more informed choices.

Databases - Storage of structured data in a database

* Pros: I cannot see any practical use case for this type of storage in our project, unless we decided to record all data of a user such as visits to a restaurant or bar, time they were there, rating etc.
* Cons: Unnecessarily complex as we essentially just need to store user preferences. If we stored all user data here, again we wouldn’t necessarily have it readily available to inform our suggestion algorithm.

Network – Storage of data in remote severs.

* Pros – Definitely a pro for certain types of data, such as feedback from a visit. Reasonably all data including user preferences could be stored online with a specific user profile being created per user, this data would go into improving suggestions for other users.
* Cons – More complex and would be an added expense, although the data needing to be stored per user would be quiet small.