**MongoDB Database-Login Details**

*Context:*

The user is supposed to login to gain full access of app features such as the multi-player mode. Login details must be stored and verified.

Problem:

There a number of problems associated with storing user login details on the app directly. The first being it is unsafe to do so, anyone with access to the code source can gain user login details. The second problem is storage, working on the assumption there will be a large number of players/users that will have accounts it becomes less ideal to store the usernames and passwords on the app directly for storage reasons.

*Solution:*

Implementing a MongoDB database on Microsoft Azure. Mongo Database hosted on Azure was chosen for two reasons. The first reason being it easy to integrate with the rest on the code and there are no deployment issues. The original MongoDB database was hosted on mongo DB cloud but that resulted in deployment issues on Azure app deployment. The second reason is its reliability and ease of use, verification can be easily with database.

*Potential Problems with the Database:*

The database does not solve the problem of securing user login details such the password. Anyone with access to the database can still see user passwords. To fix this issue before saving user details such as the user passwords, user email address and usernames, the user passwords are hashed before being saved to database. This ensures that even if anyone has access to the database, the user passwords are hidden and secured.