

**Eric Son**  
**Progress Report 8**  
**CSE 4500-01**  
**David Turner**

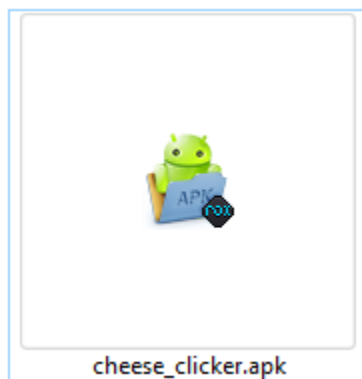
**Short Project Description:**

Cheese Clicker is an idle/incremental game made using the Unity Game Engine and intended for Android/Windows 10. It will feature Firebase supported email/password logins, cloud saves, a score leaderboard, and various gameplay mechanics usually found in the genre.

**Progress Report 8:**

Now that all of the features are present. This progress report will deal with fixing any potential bugs and making sure that all code is compatible with Androids/Windows 10 builds.

- Made the game wait for a save to finish before allowing a sign out
- Re-organized some of the authentication code
- Fixed a bug where accounts weren't being properly signed out with the log-out button
- Fixed a bug where the Guest save wasn't loading when Login As Guest was clicked after a new signup
- Added a confirmation prompt to the reset data button
- Implemented an automatic sign-in after a sign-up
- Troubleshooted and fixed build errors for x86 architecture
- Compiled and tested a desktop build
- Compiled and tested an Android build on the Nox Android emulator
- Uploaded release files to the Github repository





### **Concluding Remarks:**

Learning how to use the Firebase libraries with Unity was an interesting and confusing experience. Even if it might be more intuitive and convenient than setting up your own database and system to interface with, it seems that managing user data across platforms is still a tricky task to accomplish. Although my current program is functional, it may run into mysterious bugs if the user's internet connections were to fail at the worst moments. In future projects, I will have to consider more points of failure before I even begin writing my code.

Since this program was already developed with a simple mobile interface, not a lot needed to be changed in order to port this game onto Android. Some problems exist with the .json Guest saving system needing to be tweaked in order to work properly with the Android filesystem, but since the Guest system is merely an afterthought to the Firebase login system, I did not feel the need to fix it.

My coding skills definitely still have a lot of room for improvement and I feel like these types of projects are perfect for gaining some experience in code refinement and management. I'm getting more and more comfortable with completing these kinds of projects, so it might be a good idea for me to focus more on code cleanliness and closely adhering to some conventional coding standards.

I may not use Firebase itself in the future, but there definitely may come a time where I have to interact with some similar database systems. For now, I think it's time to conclude this project and move on to something new.