CivClicker Check-In:

**Ideas to Implement:**

*Game Features*

* Ability to trade with other users in the database depending on what each user has.
* Game Achievements
* Deities
* Random Event Features
* Multiple metals
* Science tree like in Sid Meyer’s Civilization where certain upgrades are locked until enough science is generated (we can add a profession like scientist or something idk)

*Stylistically*

* Adding a menu box with tabs to access different features, such as upgrades, buildings, etc

**How have we split up the projects?**

* By major tasks:
  + Design
  + Databases
  + Logic
  + Accounts

**Challenges:**

* Choosing which features to implement and learning the most efficient way to implement them.

Basics

Ok so basically we need actual resources and upgrades and stuff. I propose the game to be split into eras. Specifically:

* Stone age: stone tools and such. No conquest or anything cool. Just tutorial
* Bronze age: bronze tools and such. Unlocks conquest
* Ancient: Iron and steel stuff. Cooler upgrades. Unlocks merchants
* Medieval: Cooler military units. Unlocks religion
* Modern: Even cooler military units. Unlocks commerce (? maybe)
* Future: Space conquest. Unlocks automation (? maybe)

The player should spend about three (real life) days in each era.

Balancing

Ok so basically the game needs to be structured around the multiplayer aspect of conquering. As such when it comes to balancing this is the parameter we need to balance. Now, the obvious issue with balancing from the get-go is that we don’t want progress to continue exponentially high, otherwise a player’s civ could become so immensely powerful that they could easily conquer every other civ and every player would get instantaneously steamrolled. To address this, I propose the creation of three variables, A, D and S.

* A represents roughly the log of “attack power” of the civ.
* D represents roughly the log of “defense power” of the civ.
* S represents roughly the log of “size” of the civ.
* A and D should be proportional with A being at least as high as D
* S should increase at the same rate as A and D. In other words a player does not grow in power or size too quickly
* dS/dt should tend towards 0 as t->infinity, i.e. dS/dt is proportional to 1/t. Meaning A, D and S are all proportional to log t
* In other words if your civ at time t is S, to get your civ to size 2S would require t^2 more time
* In summary, A ~ D ~ S ~ log t

In principle, a player is free to make whichever decisions they can, meaning that they won’t likely stick to these balancing ideas. As such, game mechanics need to be instituted in order to push the player along this track. I suggest the following:

* A,D require the same resource (soldiers & weapons) ensuring A ~ D
* Attacking civs acquire a penalty in conquest, meaning D <= A
* A,D resource collection is tied with resources from land, meaning A,D ~ S
* The log increase can be solved by saying that the actual size and actual attack power and actual defense power increase linearly.
* If the player has S