Spring 2022 Deliverable 2/3 Planning Matrix

**Group Goals:**

Introduce Multithreading & Multiprocessing to the system which allows the models to run in a separate instance from the environment while simultaneously making decisions based on the current environment.

Introduce a trading system that follows supply and demand.

Introduce skills or traits that affects actions and states for the NPCs:

* 1. Skills or traits would allow NPCs to complete certain tasks much effectively
  2. Forces the AI to make NPCs to do a certain task (introduction of occupations)
  3. Allows opportunity to add additional layers and complexity

Integrate multiple models to the environment and output visuals in Camelot.

**Individual Deliverable 2/3 Goals:**

Joe’s:

* Add trading system that follows supply and demand. Also create multiple studies how the market is affected based on demand caused by NPCs.
* Work on adding skill or traits that affects actions and states for the NPCs on their own.
* Work on multithreading & multiprocessing that allows multiple models to train simultaneously and run the environment separately from multiple models.

Chen:

* Integrate the multithreaded environment with the codes produced by the backend. Allows simultaneous output from the AI’s actions straight to Camelot for users to see.
* Add more layers and improve GUIs and interactions between the backend and Camelot.
* Add additional layers in the Camelot/ GUI that allows users to view different perspectives of the NPCs as well as be able to change some parameters in the ecosystem should time permit.

**Tentative Schedule:**

Week of: Joe Chen

March 30th: Add supply and demand Work on multi layers integration

April 5th : Work on multi layers Add additional layers

April 19th: Add Skills & Traits Work on adding user changeable parameters

April 26th: Run multiple models Integrate multiple models with Camelot