Project Proposal

The project I’m working on is a restaurant management game. Players can customize the layout of the restaurant during the night, and manage and control the employees during the day.

Features:

**Restaurant Customization:** Place furniture in desired locations, will not allow placements that block movement. This can be done by making sure every location is accessible from the entrance of the restaurant.

**Control employees:** Order employees to perform certain tasks. Players can only control one employee at once. The controlled employee will be highlighted and AI activity will be ceased.

**AI employees:** Players have the option of purchasing AI employees. These employees can act by themselves. There will be varying types of AI, depending on how expensive they are. The most efficient AI are the most expensive.

**Types of employees:**

**Chef:** Combines ingredients to make dishes. Certain combinations yield better food than others. Good AI has a bias to select better recipes. Learned recipes will not be forgotten.

**Server:** Walks around to serve food and clean up dishes. Will have varying levels of pathfinding from random backtracking to efficient pathfinding algorithms.

**Customer Characteristics:**

**Food Preference –** What the customer likes to eat

**Patience –** How long the customer is willing to wait

**Tip –** How much the customer tips

**Restaurant Workflow**

First, customers appear at random intervals throughout the day. Customers that do not find seating within a given timeframe will leave the restaurant. When a customer finds seating, they will wait for their food to be served. The longer they wait, the less they pay. After a customer is finished with their meal, the player earns money. A server must clean up the table before it can be used again.

**External Modules Needed**: pygame