

## 1. Motivation

- a. I love to cook, but get tired of always trying to find new recipes or choosing from existing ones. This project will provide a program that helps to remove the indecision from the process of selecting what to cook.

## 2. Classes, Attributes, and Methods

- a. Cocktail - representation of an instance of a Cocktail object that will eventually be placed in the Menu
  - i. *Attributes:*
    1. primary\_liquor, ingredients, flavor\_profile, how\_served, garnish, season\_served, mood\_pairing, occasion\_pairing, directions\_url
  - ii. *Methods:*
    1. `__init__`
    2. `.get_user_preferences()` - ask for user preferences (if the user has not already told the system an occasion or mood). These will be passed into `__init__` using a `@classmethod` decorator
    3. `.pair()` - this pairs a cocktail with the mood or occasion, if entered
    4. `.make_cocktail()` - creates a Cocktail object based on the user input with lookups to the cocktail data frame
    5. `.play_sound()` - this will play a cocktail shaker sound
- b. Appetizer - representation of an instance of an Appetizer object that will eventually be placed in the Menu
  - i. *Attributes:*
    1. cuisine\_type, season\_served, flavor\_profile, prep\_effort, mood\_pairing, occasion\_pairing, directions\_url
  - ii. *Methods:*
    1. `__init__`
    2. `.get_user_preferences()` - ask for user preferences (if the user has not already told the system an occasion or mood). These will be passed into `__init__` using a `@classmethod` decorator
    3. `.pair()` - this pairs an Appetizer with the mood or occasion, if entered
    4. `.make_app()` - creates an Appetizer object based on the user input with lookups to the appetizer data frame
- c. MainCourse - representation of an instance of a MainCourse object that will eventually be placed in the Menu
  - i. *Attributes:*
    1. cuisine\_type, season\_served, flavor\_profile, prep\_effort, mood\_pairing, occasion\_pairing, primary\_protein, directions\_url
  - ii. *Methods:*
    1. `__init__`
    2. `.get_user_preferences()` - ask for user preferences (if the user has not already told the system an occasion or mood). These will be passed into `__init__` using a `@classmethod` decorator

3. `.pair()` - this pairs a MainCourse with the mood or occasion, if entered
4. `.make_main()` - creates a MainCourse object based on the user input with lookups to the `main_course` data frame
- d. Dessert - representation of an instance of a Dessert object that will eventually be placed in the Menu
  - i. *Attributes:*
    1. `season_served`, `has_chocolate`, `prep_effort`, `mood_pairing`, `occasion_pairing`, `directions_url`
  - ii. *Methods:*
    1. `__init__`
    2. `.get_user_preferences()` - ask for user preferences (if the user has not already told the system an occasion or mood). These will be passed into `__init__` using a `@classmethod` decorator
    3. `.pair()` - this pairs a Dessert with the mood or occasion, if entered
    4. `.make_dessert()` - creates a Dessert object based on the user input with lookups to the `dessert` data frame
- e. Menu - representation of an instance of a Menu object
  - i. *Attributes:*
    1. `cocktail`, `appetizer`, `main_course`, `dessert`
  - ii. *Methods:*
    1. `__init__` - initializes the Menu object with `cocktail`, `appetizer`, `main_course`, and `dessert` objects constructed from the classes above
    2. `.print_menu()` - formats the menu so it can be easily read
    3. `.get_directions()` - displays the url links for each course

### 3. Program Flow

- a. User will start with the choice to be guided through construction of each item on the Menu or can enter an "occasion" or "mood" and let the system generate the Menu
  - i. If User enters an "occasion" or "mood", the system will randomly pick items from each class which match the occasion or mood and add them to the menu
  - ii. Otherwise, the user will answer questions about preferences for each item on the menu
- b. The flow will end when:
  - i. The Menu has been generated
  - ii. The User types "quit" into the prompt

### 4. Data

- a. The data will be imported from Excel files as dataframes. There will be one dataframe for each class (i.e., a data frame for Cocktail to pull from, a data frame for Appetizer to pull from, etc).