Project Design Proposal

Project Overview:

We wanted to build an upgraded Pacman game with more gaming rules. Instead of the traditional version, our project revitalizes the iconic Pac-Man game by introducing a new gameplay element: fruit-powered attacks. After collecting fruits, players can use them as weapons to target and eliminate enemies.

Library:

Graphics (GUI and animation), Camlimages (PNG image support)

Design:

The main function will call the render update function. The render update function needs a game state as input and will draw the game screen based on the game state. The game state includes 1. The game map. 2. The location and the status of all the game items including Player, Enemy, and Fruit. 3. The key input in the last frame. For details, see the .mli files.

Mock of Use:

You can use it like a traditional Pacman game. Using the Up/Down/Left/Right keys to control the Pacman to eat the fruit, beat the enemy, earn the point, and win the game! For example: https://www.google.com/search?q=pacman

Implement Order:

1. The main function and the render structure
2. The game map structure
3. The player
4. The enemy
5. The very basic gameplay
6. The fruit and attack
7. The game map load and level system
8. Other optional features: save/load, more enemy type, more fruit type, etc…