

***Nick, Alie, Katie, Mehdi, Mas*** (Team 20)

8/2 Presentation

## Meet the Team



Nick  
 Alie  
 Katie  
 Mehdi  
 & Mas

N  
 A  
 K  
 MM=M<sup>2</sup>



Mas



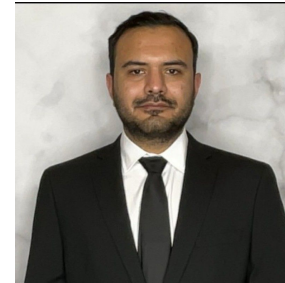
Nick



Alie



Katie



Mehdi



Program by



## Game Demo

TechWise

Supported by



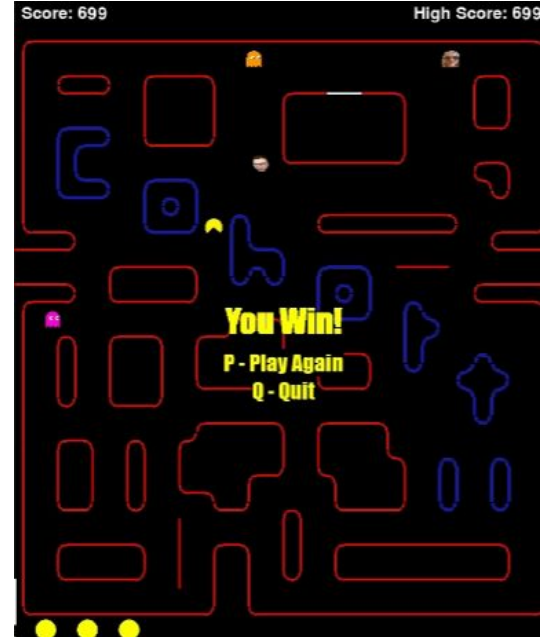
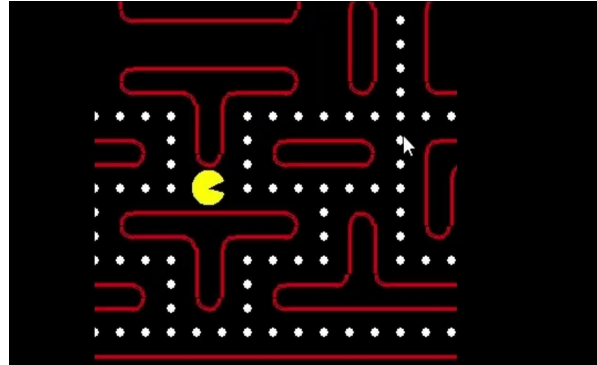
Team 20



# Katie

- Tile based Movement
- Code Clean up
- Bug fixes
  - Lives
  - Respawn
  - Win Screen
  - Multi Level
  - Play Again

```
for ghost01, ghost02 in combinations(ghosts, 2):  
    if ghost01.rect.colliderect(ghost02.rect):  
        ghost01.pos = ghost01.last_pos
```



# Mas

## Modifications:

1. Adding Dawn as fourth ghost
2. Changing the live's icon
3. Player movements:
  - 3.1. Keep moving
  - 3.2. Player and the tiles
4. Freight mode
5. Some other flaws (winning the Game, high score, etc)

```

main.py x power_up.py
1 freight_img = pygame.transform.scale(pygame.image.load('images/powerup.png'), (45, 45))
2 dead_img = pygame.transform.scale(pygame.image.load('images/dead.png'), (45, 45))
3
4 SCORE = 0
5 POWER_UP = False
6 POWER_COUNTER = 0
7 EATEN_GHOSTS = [False, False, False, False]
8 targets = [(player_x, player_y), (player_x, player_y), (player_x, player_y), (player_x, player_y)]
9
10 usage
11 def check_collisions(score, power, power_count, eaten_ghosts):
12     num1 = (HEIGHT - 50) // 32
13     num2 = WIDTH // 30
14     if 0 < player_x < 870:
15         if level[center_y // num1][center_x // num2] == 1:
16             level[center_y // num1][center_x // num2] = 0
17             score += 10
18         if level[center_y // num1][center_x // num2] == 2:
19             level[center_y // num1][center_x // num2] = 0
20             score += 50
21             power = True
22             power_count = 0
23             eaten_ghosts = [False, False, False, False]
24     return score, power, power_count, eaten_ghosts
25
26 def power_up():
27     if powerup:
28         pygame.draw.circle(screen, 'blue', (140, 930), 15)
29
30 while running:
31     score, powerup, power_counter, eaten_ghost = check_collisions(score, powerup, power_counter, eaten_ghost)
32
33     if powerup and power_counter < 10 * FRAME_RATE:
34         power_counter += 1
35     elif powerup and power_counter >= 10 * FRAME_RATE:
36         power_counter = 0
37         powerup = False
38         eaten_ghost = [False, False, False, False]

```



# Mehdi

- **Frightened mode**
  - Pacman can kill the ghosts
  - They come back after 5 seconds
- **Made ghosts move more intelligently.**
  - Add an array of previous moves

```

for dot in self.dots:
    if self.player.rect.collidect(dot.rect):
        self.dots.remove(dot)
        self.sounds.play_pacman_eating() # Play eating sound
        self.player.score += 1 # Increase the score when a dot is eaten
        if self.player.score > high_score:
            high_score = self.player.score
        if self.player.score >= 20:
            self.player.lives += 1
            self.player.score = 0
            self.sounds.play_extra_life()

for ghost in self.ghosts:
    if ghost.dead_timer>0:
        ghost.dead_timer-=1
    if self.player.rect.collidect(ghost.rect):
        if frightened_mode==False:
            self.lose_life()
            play_pacman_dies() # self.sounds.play_pacman_dies() # Play pacman dies sound
        else:
            ghost.die()

if self.start_level:
    self.create_map_objects()
    self.start_level = False

#for tile in self.walls:
    #tile.draw(self.screen)
for ghost in self.ghosts:
    if ghost.dead_timer==0:
        ghost.draw(self.screen)
self.player.draw(self.screen)
for dot in self.dots:
    dot.draw(self.screen)

```

# Questions?



[linktr.ee/NAKMMan](https://linktr.ee/NAKMMan)

