

# Team Subhunters

Link to Repo: <https://github.com/ecs160ss12019/Subhunters>

## Project Assigned

Pacman

## Story mapping

<https://github.com/ecs160ss12019/Subhunters/blob/master/StoryMapping.md>

## Team Members

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# Team Subhunters - Pacman

## BHAG

You are Pacman stuck in a maze being chased by four ghosts, while collecting as many pellets as possible to escape, some pellets give Pacman the ability to fight back against the ghosts, and other fruits can help rejuvenate Pacman to escape the maze.

## Epic Stories

1. As Pacman, I want to collect all the pellets and power pellets to complete the game and get out of the maze.
2. As Pacman, I want to collect as many points as possible in order to get a high score in order to show my proficiency at getting out of the maze.
3. As the ghosts, I want to catch Pacman in the maze.
4. As a game developer I want to make my game pleasing to the eye.
5. As a fruit, I will spawn randomly and grant different rewards for the type of fruit I am.
6. As the maze, I want to keep Pacman and the ghosts contained within an area.

## Sprints Chart

Epics	As Pacman, I want to collect all the pellets and power pellets to complete the game and get out of the maze.	As Pacman, I want to collect as many points as possible in order to get a high score in order to show my proficiency at getting out of the maze.	As the ghosts, I want to catch Pacman in the maze.	As a game developer, I want to make my game pleasing to the eye.	As a fruit, I will spawn randomly and grant different rewards for the type of fruit I am.	As maze, I want to keep Pacman and the ghosts contained within an area.
Sprint 1	Pacman wants to be able to move in four directions in one button press and not run through walls and move when user wants to move.	There are "good" items in the maze, if eaten they will grant points.	The ghost moves in the maze with movement pattern (or not).	The design of Pacman should be distinct from the ghosts for the players to identify themselves.	There are different kinds of fruit in the maze.	The maze has proper-sized walls to restrict the movements of Pacman and ghosts.
Sprint 2	Pacman wants to be able to eat pellets for points and power pellets to be able to eat ghosts.	There is a deduction of points if the Pacman is caught by the ghost or eats "bad" items.	The ghost can be eaten by Pacman, and if so, it will return to the center of the maze.	Both Pacman, fruits and ghosts should be obvious in the maze (colors or shapes differ)	The fruits exist in random positions that can be reached by Pacman (not in the wall or out of the maze).	It should be in a proper size for the ghost to Pacman.
Sprint 3	Pacman is able to eat fruits to gain extra points.	Pacman can eat ghosts granting bonus points.	The ghost has the ability to "hurt" Pacman.	When Pacman hits a ghost, an item, or the destination, there are animation or sound effects.	Different fruits should have different look to be identified.	There could be different maze patterns that show difficulties.

## CRC

- PacmanActivity/MainActivity: overall game lifecycle
- Grid: builds the maze for the game/activity to create paths for movement
- Blocks: individual block pieces of the maze (can be split up into more if needed)
- Pellets: add points to the score of pacman when eaten/collected. Parent of SuperPellet
- SuperPellet: add points to the score of pacman and make him super for a time
- BonusFruit: add points to the score of pacman when eaten/collected (can be split into more if needed)
- Pacman: Pacman movement and interaction with other objects in the game
- Ghost: Basic ghost parent class with movement and interaction
- Blinky: ghost that follows Pacman to location he is at
- Pinky: ghost that ambushes Pacman by cutting him off and getting in front of him
- Inky: target is same distance from Pacman as Blinky but at opposite offset to Blinky's offset from PacMan
- Clyde: Clyde goes to scatter location unless within certain distance from Pacman. Within this distance Clyde behaves like Blinky