

UML and UI Design Document

Become Pac-Man

version: 1

Group F8

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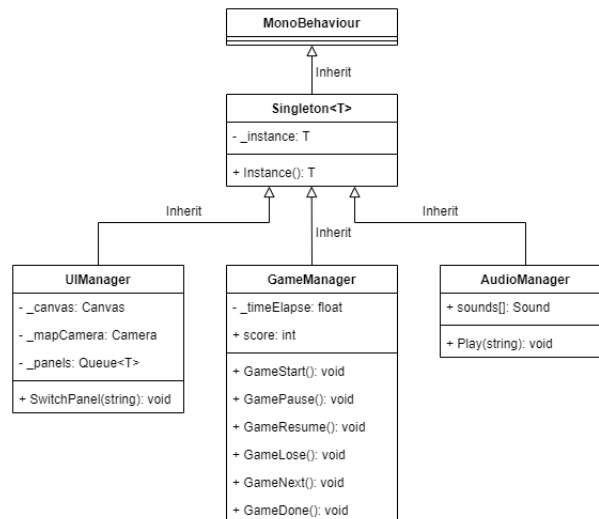
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1 UML DESIGN

1.1 Manager Class

1.1.1 Structural Diagram

class diagram



1.1.2 UMLs

use-case diagram

sequence diagram

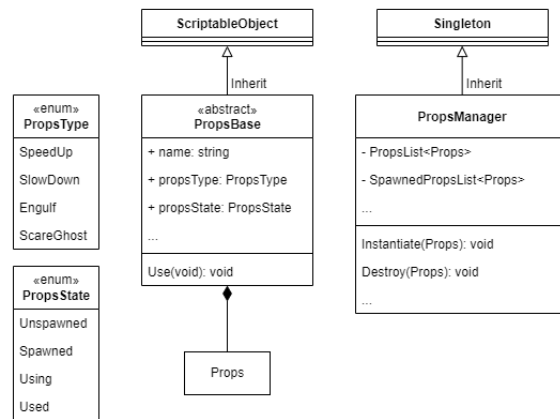
1.1.3 Component Functionality

1.1.4 Major Procedure and Functions

1.2 Props Class

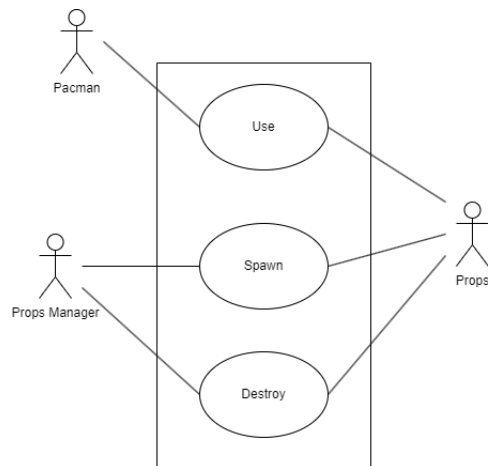
1.2.1 Structural Diagram

class diagram

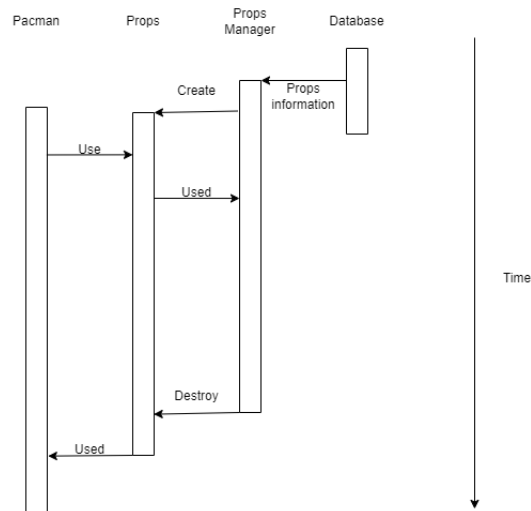


1.2.2 UMLs

use-case diagram



sequence diagram



1.2.3 Component Functionality

The props class is to provide the bases for game objects, such as pellets in the maze for Pacman to achieve scores, or other props that will enhance in-game experience.

1.2.4 Major Procedure and Functions

Use(void): The Use function is to obtain the action of using the prop, by destroying the prop from the maze.

Instantiate(Props): The instantiate function is to create the props for each game.

Destroy(Props): The destroy function is to destroy the prop from the maze for each game.

1.3 Database

1.3.1 Structural Diagram

class diagram

1.3.2 UMLs

use-case diagram

sequence diagram

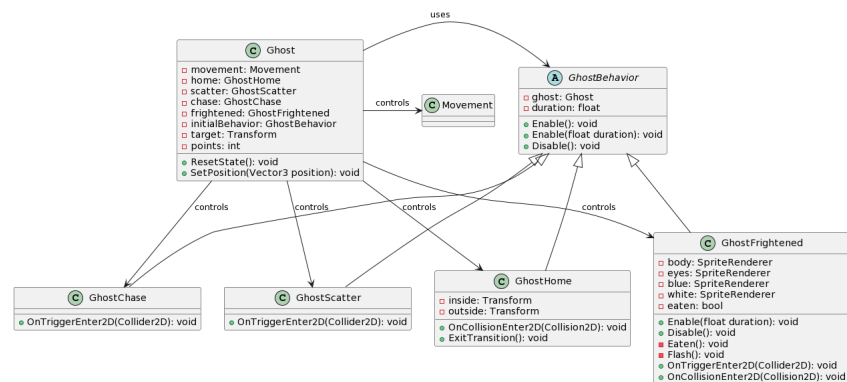
1.3.3 Component Functionality

1.3.4 Major Procedure and Functions

1.4 Ghost Class

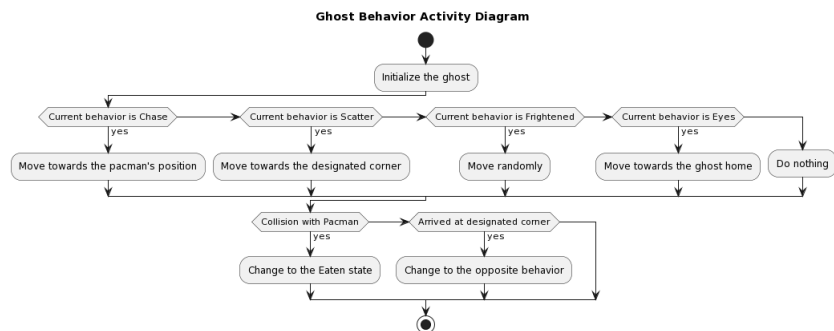
1.4.1 Structural Diagram

class diagram

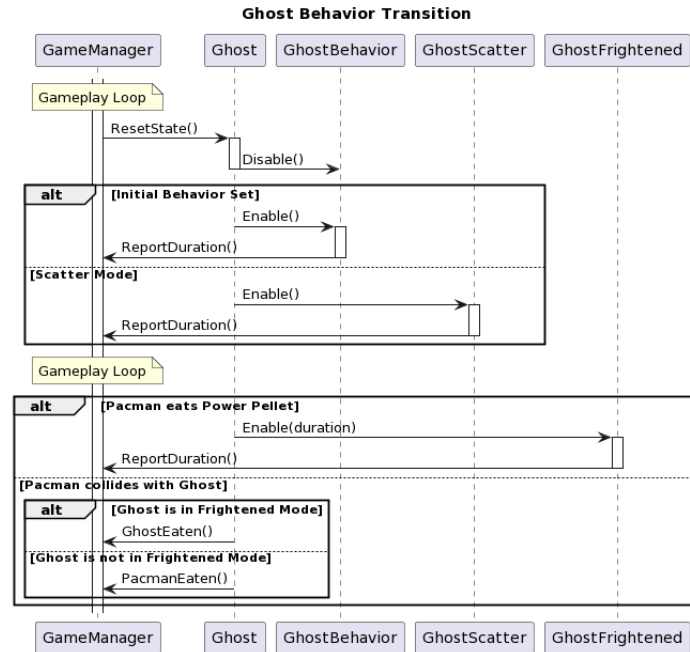


1.4.2 UMLs

activity diagram



sequence diagram



1.4.3 Component Functionality

The Ghost class is to indicate movement for each of all ghosts in the game. It manipulate with ghost behaviour and different status of a ghost.

1.4.4 Major Procedure and Functions

Enable() and Disable(): The two functions set in Ghost Behaviour provide the indication of activation of a ghost, i.e. whether the ghost is working.

ResetState(): This function is to reset the status of a ghost to its default status.

ExitTransition(): This function is to end the transition procedure.

2 UI DESIGN

2.1 Login/Sign-up page

2.1.1 Description of view

2.1.2 Screen Image

2.1.3 Objects and actions

2.2 Title Screen

2.2.1 Description of view

2.2.2 Screen Image

2.2.3 Objects and actions

2.3 Shop UI

2.3.1 Description of view

2.3.2 Screen Image

2.3.3 Objects and actions

2.4 Setting UI

2.4.1 Description of view

2.4.2 Screen Image

2.4.3 Objects and actions

2.5 Main Game

2.5.1 Description of view

2.5.2 Screen Image

2.5.3 Objects and actions

2.6 Record page

2.6.1 Description of view

2.6.2 Screen Image

2.6.3 Objects and actions