CRC Cards for Ms. Pacman

Group: Breakfast

GameObject

Interface that descries the common essential behaviors of all characters in the game. This includes draw() and update()	Pacman Ghost Pellet Cherry

ArcadeList

A list of Arcade objects. In a pacman game lifecycle, there may be more than one arcade used. This list manages to control and update each individual Arcade.	Arcade

Arcade

Hold 1 Arcade object that describes the layout of the map. The Arcade object provides a coordination system and constraintes so that the game objects such as the pacman, pellets, and cherries can be hold upon.	ArcadeBlock

ArcadeBlock

The ArcadeBlock is most fundamental building block to an Arcade. The ArcadeBlocks are of the same shape but with different coordinates and properties.	N/A

Pacman

Save all 4 Pacman faces/directions into an array and be able to return the correct face with animation based on the direction argument passed be the caller object. Eat Pellets.	Ghost PelletCell PowerPelletCell BitmapDivider

GhostList

It stores and renders all 4 ghosts,	Arcade Ghost BitmapDivider

Ghost

ramdomized Ghost's movement without user input. Try to kill Pacman by Collision	Pacman CollisionDetector

PacmanActivity

initialize the game and set up all screen configuration (fill sceen, and maybe landscape mode). Handle pause and resume situations.	PacmanGame

PacmanGame

initialize the all images, such as the Pacman, ghosts, obstacles, ect. Run the game until all 3 lives of the pacman have been consumed. be able to move the Pacman. Be able to detect collision.	Pacman Ghost Arcade ScoreSystem PlayerInput GhostControl

PlayerInput

Be able to register the user input through swipes (up, down, left, and right) and return the command back to the caller object (PacmanGame)	N/A

ScoreSystem

Seperate class for keeping the scores of the pacman game, will be initialized in Pacman Game, Keep tract of the scores that the pacman is gaining. Based on the different pellets that pacman eats, score different score will be added. Also have a boolean value for cherry, if cherry is eaten, everything gets eaten after will counts double of its original points.	pacmanGame Pellets PowerPelletCell Cake

PelletList

Has the collection of pellets, i.e. pelleteCell, powerpelletCell. Initialze the location of each cell, and their points. Visibility states.	PelletCell PowerPelletCell ArcadeList PackmanGame TwoTuple

PelletCell

Each cell has type of pellets, State: uneaten/visible, eaten/unvisible. Initializes with points, if gets eaten then decrement the points	GameObject

PowerPelletCell

Inherites the pelletcell, but has different points, look and locations.	PelletCell

Cake

Independent class for dispalying the Cake onto the screen. Set a timer fot the when to be displayed and for how long.	MotionInArcade TwoTuple Arcade

UserInput

This objects works as a listener to the touch events on the screen. It extract essential information from each touch event and keep the information so that functtions in other threads can use it.	listener (Java util)

JsonParser (ArcadeDecoder)

The Aarcade information is kept in a JSON file. This object reads the file and calls the construtor of ArcadeList	JsonReader (Android IO)

BitmapDivider

Divide one bitmap into multiple based on row and column	N/A

WelcomeView

This is the first class that gets displayed onto the player's display, and allows the player to choose the game mode (easy, normal, and hard)	N/A

CollisionDetector

This object takes 2 Obstacle objects and determine if they have collided into each other.	Obstacle

Obstacle

This object takes a game object and transorm it into a obstacle. Every GameObject can be considered as an Obstacle. This class will assist collision detection. The reason we want this class is to calculate the dimension of the bounding box of a moving or stationary GameObject.	N/A

GameMode

It changes the speed of the entire game based on the player initial input at WelcomeView page. Options are: easy (slow), noraml (faster), and hard (fast).	WelcomeView

NextMotionInfo

Use this class to return updated motion information. if the motion information is not valid, the gameObject recive this motion info can not change its motion status.	TwoTuple

GhostBehavior

We have 4 ghost in the game, and each of the ghost acting differently. (i.e. the red ghost will trace the pacman.)	Ghost

MotionInArcade

Detect the motion in arcade is valid or not. Project current motion onto the arcade block. Current motion is not only decided by current position but also current direction.	TwoTuple Arcade

NavigationButtons

This is the pacman contorl which based on the input of player's touch on the button to control the pacman	N/A

UserInput

we take user input and process all other stuff based on this object.	N/A

TwoTuple

contains the X and Y coordinate.	N/A

ConsoleReader

This is an utility class that reads console input (keyboard input). The reason we do this is to use keyboard to control Pacman.	N/A