

Phase 1 CRC

Main

Public static void Main
Runs a session

Session

Session

Public void run - calls Update and Draw
in a loop
Private void Update
Private void Draw

Main
OpenGL
Level
CollisionManager
EntityManager
InteractionManager

InputController

Takes keyboard input

Session

Level

Stores all the information of a level

Stores an instance of GraphGenerator and uses it to generate the layout of the level.

Populates each state in the graph with a Room object.

Stores current room

Public Room GetCurrentRoom - returns the current room

Public void WalkThroughDoor - takes a value that represents which door the player has walked through. This updates the current room.

Session
GraphGenerator
Room

GraphGenerator

Generates a connected planar graph
with given number of states.

Level

Room

Stores a collection of Entities.
Stores the dimensions of the room.
Stores the background image of the room.

Level
Drawable
Enemy

Drawdata

Represents an image and coordinates to be drawn on screen. (and which layer to draw on)

Drawable

Implements a method draw() which returns drawdata to be drawn.

Interface

Room
Item
Entity

Entity

Abstract

Represents an item on the screen which
changes state over time

Sprite (image representing the entity)

Has an update function

Level
Drawable
Enemy

Player

Inherits from Entity
Implements Drawable
Stores xp
Stores collection of ItemData (inventory)

Level
Drawable
Collidable

Enemy

Abstract

Inherits from Entity

Has an update function

Act: abstract method

Level

Drawable

Collidable

Rat

Inherits from Enemy

Has an update function, defined:
“move toward player”

Level

Drawable

Collidable

Chest

Inherits from Entity

Allows interaction when collided with

Level

Drawable

Interactable

Collidable

ItemData

Represents items that are not entities

Item gets added here after colliding as entity

Level

Interactable