Layered architecture is a structure that divides a complex system into layers.Each layer does its own thing, and each layer is one-way dependent.The game is also designed according to the layered design ideas.Games can be divided into core layer, engine layer, game type layer, game layer.This layered architecture design can help us deconstruct complex systems, so as to achieve the singularity of each subsystem or module.Each layer in the layered architecture is highly cohesive, and each layer should be loosely coupled with the layers below it.

Core

Engine

Game Genre

Game

SPORTS

SLG

RPG

FPS

The layering in the game can be divided into five layers

1. Collect information around

The first layer is equivalent to a global perceptron that can store information about players around.Just like in shooting games, we need to sense the players around us and update the real-time status of players

1. Update decision layer-what to do

The decision-making layer is responsible for deciding what the agent should do at this time, for example, if I want to go to a certain position, I want to attack, release skills, etc.Based on all the current information, make a "what" decision The content will be encapsulated in a "request" structure and continue to pass down

1. Update behavior layer

This layer mainly adjusts multiple behaviors based on the "request" information of the previous layer to complete the target request

Open-close Principle

Introduce the concept of open and closed layers, which can help us define the relationship between different layers and the transfer of requests.Pass the necessary information between each layer in the layered architecture.If a layer is marked as open, it means that the request can go directly through this layer to its next layer