20220404-软件架构

1.过程描述

1.1 Software architecture

1)4+1view model

Logical view：

Process view

Development view

Physical view

Scenerios

2)Component diagram

2.结果输出

1.过程描述

1.1 Software architecture

1)4+1view model

Logical view：

- focused mostly on achieving the **functional requirements** of a system.The context is the services that should be provided to end user
- defining all of the **classes**; their attributes; their behaviors
- showing the **relationship** between **software objects and components**
- **State diagram** and **classes disgram** are most commonly used

Process view

- focus on achieving nonfunctional requirements which specify the desired qualities for the system, including quality attributes like performance and availability
- show the **execution order** of different objects, and the calls to methods defined by the logical view in the correct order. Behaviors that are asynchronous or concurrent are also described
- **UML sequence diafram** and **UML activity diagram** are often used

Development view

- consider things like **programming languages, libraries and tool sets**
- also includes management details like scheduling, budgets and work assignments. Especially project management

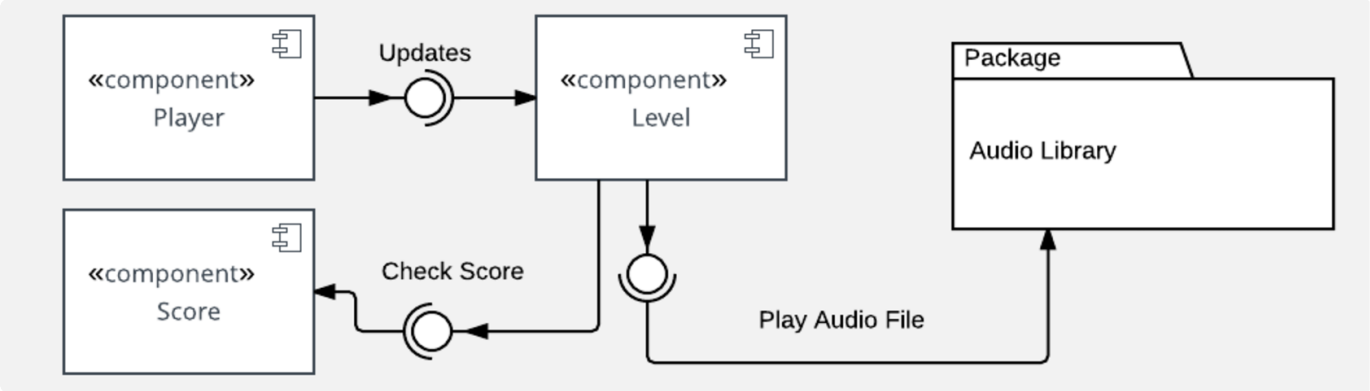
Physical view

- handles how elements in the logical process and development view to be mapped to different **nodes** of **hardware** for running the system.
- **UML deployment diagram** can express

Scenerios

- align with the use cases or user tasks of a system
- how the four other views work together
- often use script that describes **the sequence of interactions between objects and processes**

2)Component diagram



- the basis are component and their relationships
- a ball connector, is how you display a provided interface in component diagrams. the purpose of a provided interface is to show that **a component offers an interface for others to interact with it**
- a socket connector, display a required interface. to show that **a component expects a certain interface**
- first indentify the **main objects** used in the system, then indentify all of the **relevant libraries** needed for the system

2.结果输出

今天依旧不在状态，只在早上跟晚上短暂地学了一会。由于学校出现疑似阳性病例，现在活动范围已经局限在宿舍楼内，不太适应在寝室学习的感觉。不管怎样，明天得开始收收心重新审视并调整以下之前的规划。