

Differences between Architecture and design pattern

An architectural pattern is a general, reusable solution to a commonly occurring problem in software architecture within a given context. ...

The architectural patterns address various issues in software engineering, such as computer hardware performance limitations, high availability and minimization of a business risk.

Architecture

1. Architecture is the overall structure of software.
2. Architecture is the structure of the software system in its entirety.
3. Developer chooses different design pattern according to the architecture specification and requirement.
4. It's define the granularity of the component.

Design pattern:

1. Design patterns are concerned with how the components are built.
2. It's about particular solution.

Differences :

1. Architecture comes in Designing phase and Design Patterns comes in Building phase.
2. Architectural pattern is like a blue print and design pattern is actual implementation.
3. Architecture is base which everything else adhere to and design pattern is a way to structure classes to solve common problems.
4. All Architecture is design pattern but all design pattern can not be architecture. Like MVC can come under both. But singleton design pattern can not be an architecture pattern. MVC, MVVM all come under both.
5. Architecture : how components should behave and communicate in the system, set the physical location of components and finally choose the tools in order to create components. Design : while architecture deals more with the wide picture, design should drill down into the details relating to implementing certain components. Designing of components end up with classes, interfaces, abstract classes and other OO feature in order to fulfil the given component tasks.