Hexagonal Architecture

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What is Hexagonal Architecture?

Architecture model created by Alistair Cockburn in 2005;

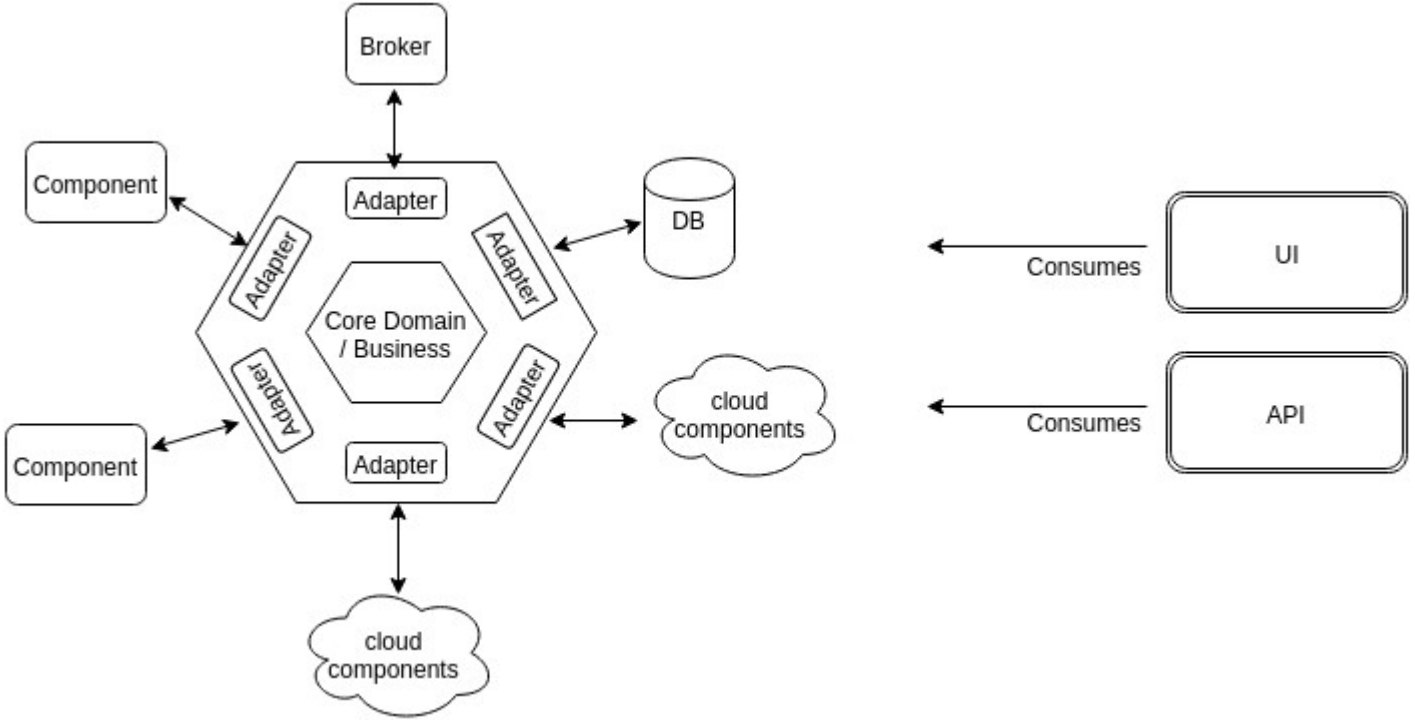
Port / Adapter concepts;

Architecture focused in isolation;

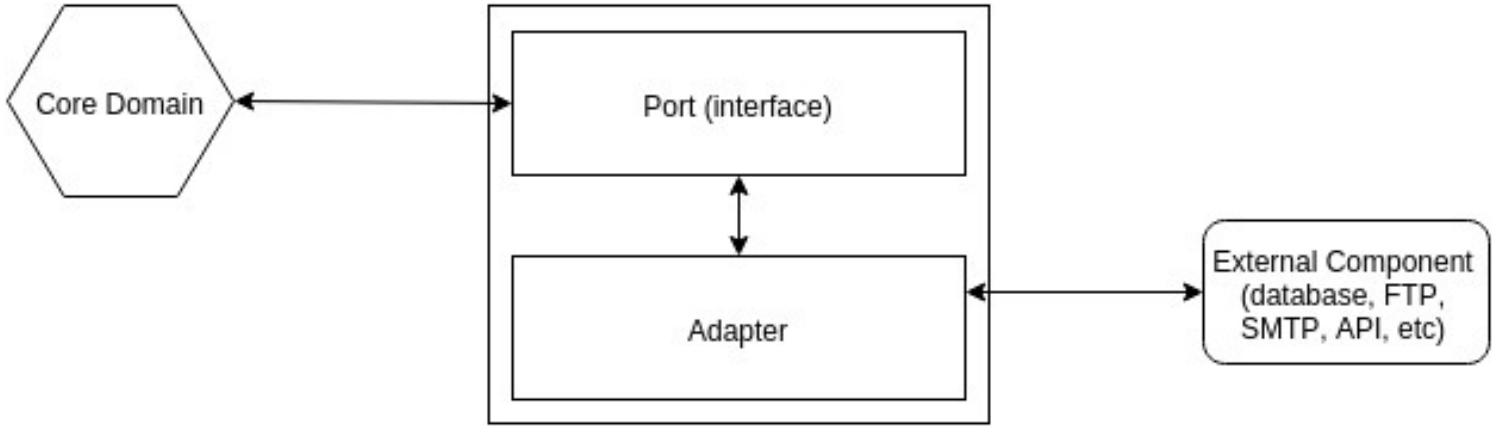
Domain/Core Business centralized;

Easy to test isolated components;

High level view



Adapter Anatomy

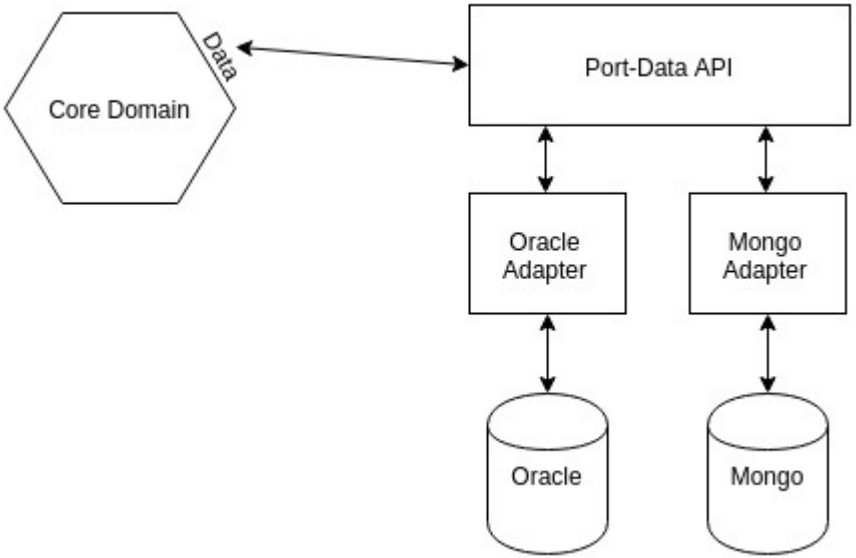


A port is usually an API;

An Adapter knows how to deal with external components;

Adapter Anatomy

We also can group adapters per port:



When should I use it?

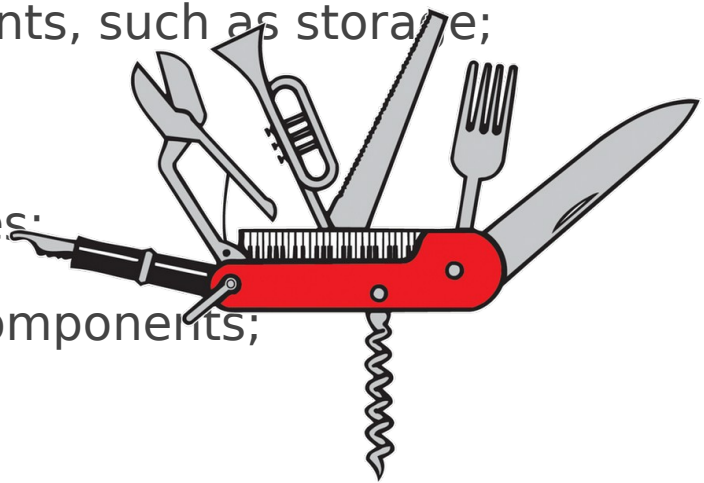
If you need high level test coverage;

If you have the necessity to switch components, such as storage;

Long way evolutive applications;

If your application tend to go to microservices;

Need to communicate with manu external components;



Advantages

Isolation;

Testability;

Multiple implementations;

Less coupling;

No logic mixing;

Scalability, as far as I can scale the ports (in format of API);

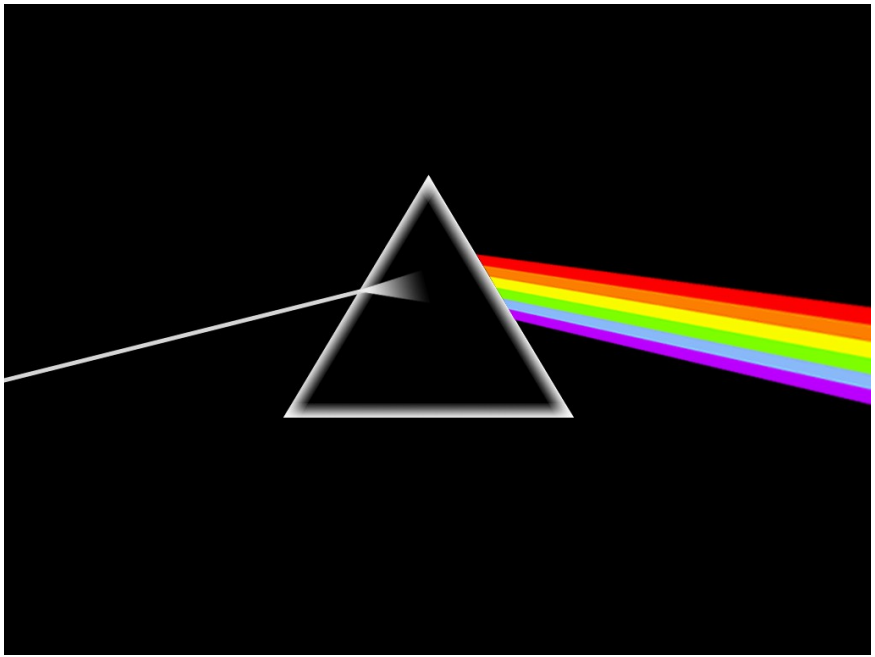
Disadvantages

Many adapters tends to generate confusion;

Problems inherited from distributed architectures;

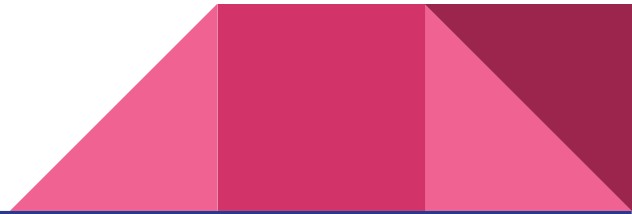
Should I have only 6 adapters?

It’s hexagonal, but not necessarily 6 sides/ports



References

http://alistair.cockburn.us/Hexagonal+architecture



THANK YOU!