1 Use of reference architectures and frameworks

In this section we will discuss reference architectures and frameworks

1.1 An object-relational mapper

Object-relational mapper is a technique of converting data between incompatible systems by means of object orientated programming. For example the conversion of database attributes into a database object. This allow the interacting object orientated language to manipulate this database object without tedious statements, in essence the data can manipulated and presented in a way that any object is presented in that programming language.

1.1.1 Advantages

The advantage of using object-relational mappers with databases in particular is that joins aren't used that often as object types can be followed by means of pointers. (CITATION NEEDED)

Relationships are also established by means of pointers which can increase efficiency for complex data.

1.1.2 Disadvantages

This approach works well for large amounts of data, as the object can be manipulated easily for each field, but it can be considered inefficient with small amounts of data as objects will still be created which might be less efficient than a quick lookup of those particular fields.

1.2 Application Server

Software framework for web applications and a server to run the environment. An example of Application Server architecture framework is the Java EE framework. This architecture is based on the layer model and client-server model and contains a service layer which is accessed by means of an API to the core functionality.

The advantages of using Application Servers include:

- Data and Code integrity (Expand)
- Security (Expand)
- Performance (Expand)

1.2.1 Advantages

1.2.2 Disadvantages

1.3 Enterprise Services bus

Variant of the Client-Server model ... (Expand)

1.3.1 Advantages

1.3.2 Disadvantages

2 References

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