Design Patterns

Why should they be used?
Start thinking in design patterns.

Definition

A design pattern is a repeatable solution to a software engineering problem

Definition

Characteristics

- Battle tried.
- Reusable.
- Abstract.
- Template.
- Distinguishable.

Definition

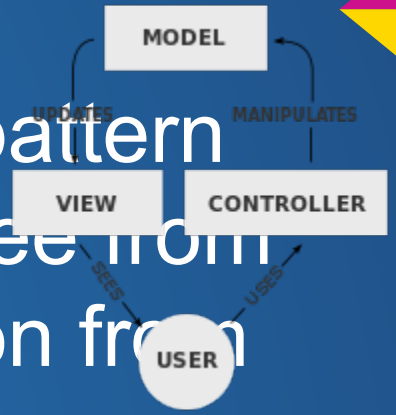
What are they NOT?

- Classes.
- Libraries.
- Specific to one language.

Definition

Example

The model view controller design pattern seperates the part that the users see from the part that controls the information from the database.



Types of Design Patterns

Structural -- Connections. Relationships.

Creational -- Object production.

Behavioral -- Communication.

Specific Design Patterns

A total of 23 design patterns.

Patterns we will cover:

- Strategy
- Adapter
- Factory

Strategy Pattern

Its a behavior design pattern.

The behavior is decided at runtime.

Singleton Pattern

We used this in our project.

Adapter Pattern

Structural design pattern

Wrap a class in a new interface.

Factory Pattern

A creational design pattern.

Creates classes and the specific class that is chosen at runtime.

Gotchas

Choose a specific design pattern to match its problem.

Don’t plug in a design pattern just because you can.

Why use a design pattern?

Become a better developer
Simplify logic.

Don’t reinvent the wheel.

Communication.

References

http://www.informit.com/articles/article.aspx?p=2044336

http://www.techopedia.com/definition/18822/design-pattern