THE SOFTWARE DEVELOPMENT PROCESS

Design Pattern

- A **design pattern** is a repeatable solution to a software engineering problem
- Unlike most program-specific solutions, **design patterns** are used in many programs
- **Design patterns** are not considered finished product; rather, they are templates that can be applied to multiple situations and can be improved over time, making a very robust software engineering tool
- Because development speed is increased when using a proven prototype, developers using **design pattern templates** can improve coding efficiency and final product readability

- Successful designs and architectures within design patterns make software development easier
- Establishing proven design pattern techniques makes them readily available for future system developers
- In system documentation, design patterns are also by improving existing system maintenance to create a better help tool
- By providing explicit specifications of class and object interaction and the interaction's original intent, design patterns help developers correctly work through the application