## Design Patterns Summary

- 1. Singleton Ensure only one instance
- 2. Factory Create objects without exposing logic
- 3. Observer Notify all observers on state change
- 4. Strategy Change behavior at runtime
- 5. Adapter Convert one interface to another
- 6. Decorator Add behavior without changing class
- 7. Command Encapsulate commands as objects
- 8. MVC Model-View-Controller separation

## Each includes:

- Intent
- UML Diagram
- Code Example (in Java or C#)