



# SECURITY DESIGN PATTERNS



# Introduction

This refer to a proven and repeatable solution to solving specific reoccurring information security problems.

- Should be based on security best practices
- Should solve a specific issue in terms of the CIA triad
- Should be adaptable



# Introduction

Security patterns have their origin from physical architecture and construction and are attributed to Christopher Alexander who developed a pattern based approach to architecture.

His approach was later adopted by the software developers



# Template

A security pattern structure consists of

- Title
- Purpose/Intent
- Abstract
- Motivation (in relation to the business)
- Specific problem statement
- Solution to the problem
- Structure/Diagram
- Risks



# Categories

- Availability & resiliency patterns (predictable and reliable access problems)
- Protection patterns (CIA) (unauthorized access and disclosure, tampering and authenticity problems)



# Design Methodology

- Define the problem
- Identify all resources, users and possible threats
- Identify realistic ways the resources can be compromised
- Define the protection goals
- Create relational diagram