

1. Identifying the Need for Security in Your Software Projects

- Identify Security Requirements and Expectations
- Identify Factors That Undermine Software Security
- Find Vulnerabilities in Your Software
- Gather Intelligence on Vulnerabilities and Exploits

2. Handling Vulnerabilities

- Handle Vulnerabilities Due to Software Defects and Misconfiguration
- Handle Vulnerabilities Due to Human Factors
- Handle Vulnerabilities Due to Process Shortcomings

3. Designing for Security

- Apply General Principles for Secure Design
- Design Software to Counter Specific Threats

4. Developing Secure Code

- Follow Best Practices for Secure Coding
- Prevent Platform Vulnerabilities
- Prevent Privacy Vulnerabilities

5. Implementing Common Protections

- Limit Access Using Login and User Roles
- Protect Data in Transit and At Rest
- Implement Error Handling and Logging
- Protect Sensitive Data and Functions
- Protect Database Access

6. Testing Software Security

- Perform Security Testing
- Analyze Code to find Security Problems
- Use Automated Testing Tools to Find Security Problems

7. Maintaining Security in Deployed Software

- Monitor and Log Applications to Support Security
- Maintain Security after Deployment