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# PANDORA SECURITY LABS

Expert advice. Experience advantage.  
Proactive Security Solutions Through Cutting-Edge Research.



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We are a  
Security-as-a-Service  
company

Providing businesses with on-demand IT  
security controls for them to meet their 24x7  
security strategies & requirements.

We Make IT Secure

# Developing Secure Applications

Quick Tips

# Use Strong Authentication

# IAAA

- Identity is a claim.
- Authentication is the proof of Identity.
- Authorization describes the actions you can perform on a system once you have identified and authenticated.
- Accountability holds users accountable for their actions.

# Use Strong Authentication

- Strong authentication (such as tokens, certificates, etc) provides a higher level of security than username and passwords.
- The generalized form of strong authentication is “something you know, something you hold”.

# Use Strong Authentication

When to use strong authentication:

- For high value transactions
- Where privacy is a strong or legally compelled consideration (such as health records, government records, etc)
- Where audit trails are legally mandated and require a strong association between a person and the audit trail, such as banking applications
- Administrative access for high value or high risk systems

# Use Strong Authentication

## Best practices:

- Authentication is only as strong as your user management processes
- Use the most appropriate form of authentication suitable for your asset classification
- Re-authenticate the user for high value transactions and access to protected areas (such as changing from user to administrative level access)
- Authenticate the transaction, not the user
- Passwords are trivially broken and are unsuitable for high value systems.



# Use Strong Authentication

Best practices:

- Do not allow your website, especially the login form to be brute forced, consider having captcha in the login form.
- Have long passwords with a mix of upper & lower case letters, digits and special characters.

# Homework:

- Add captcha to your login form.

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