



# Password Policies

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# Password Policies and their function?

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- Rules that relate to both the length and structure of a password
  - Used to detail the minimum/maximum needed for the password
  - The policy implemented should provide a strong minimum standard
  - Used to encourage and implement stronger passwords
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# Common Policies

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- Policies are utilised in many different areas such as websites and for application accounts
- Policies between websites can be similar in design
- Different policies can differ largely in requirements
- Online tools exist that document policies used on websites

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Policies  
used in  
Popular  
websites

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# Evaluation Project

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- Evaluating the effectiveness of common policies
- Looking at key differences between policies
- Evaluating these influential differences that provide security
- Provide a standard policy that should be followed where possible

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# Evaluation Project Process

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- Websites selected to be evaluated
- Policies detailed and grouped
- Password lists created for each group
- Hashed using MD5 and Bcrypt
- Tested using various cracking techniques and applications
- Groups judged and compared on maximum cracking potential

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# Findings

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- Hashed storage algorithm used has a big impact on the security
- Increasing the minimum characters amount provided a simple and effective increase in security
- Also increasing the required contents of the password was suggested
- Online hash crackers provide a quick and relatively successful option

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# Policy Changes

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- Policies should adopt a minimum of 8 number of characters
- Handling/storing of the password after submission is important
- A standard policy should include numbers, symbols, and both upper and lower case letters
- Don't set unneeded maximum character allowances on passwords



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Thank  
you for  
Listening

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Are there any Questions ?