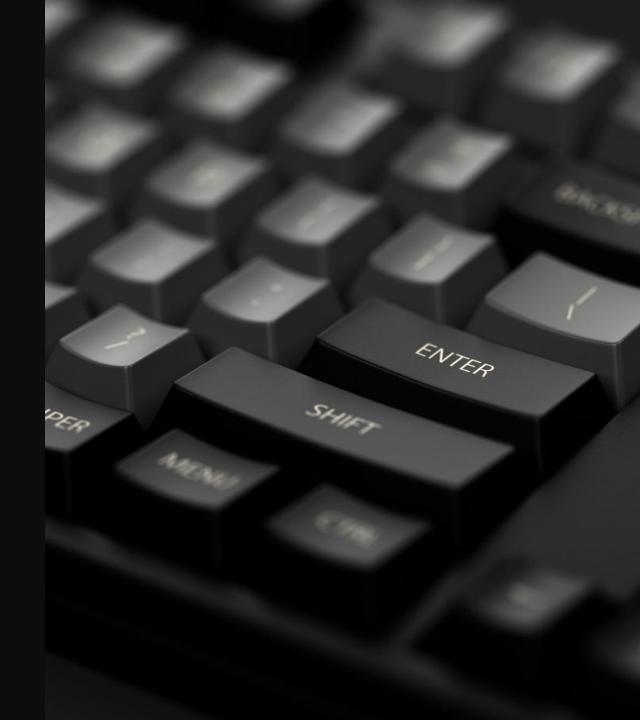
### Password Policies

Jack Sime



### Password Policies and their function?

- 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



## Common Policies

- 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

Policies used in Popular websites





## Evaluation Project

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

## Evaluation Project Process

- 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

#### Findings

- 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

### Policy Changes

- 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

# Thank you for Listening

Are there any Questions?