



# **Project Proposal for Password's Strength Check**

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# Project Proposal



**Introduction**



**Objective**



**Methodology**



# Introduction

Q1 : What is a password ?

Passwords provide the first line of defense against unauthorized access to your computer and personal information

Ref : Google



# Introduction

## Fields where password is used :

- Securing our Bank Accounts
- Securing our Social Media Accounts like Facebook, Twitter, LinkedIn
- Securing our Confidential Data
- Securing our PC, Wi-Fi and others
- Where there is Security there is Password

# Objective

Q2 : What is the objective from this project ?

To make people aware of the importance of sound password and provide with a handy tool that will monitor the quality of the password

# Methodology

Q3 : What is the methodology for determining a strong password ?

# Methodology

1. The source code is in the C++ language
2. Take the password as string
3. Run various tests on the password
4. Run some sanitizers in the password string
5. Give the verdict regarding the password's strength
6. Display proper helpful comments to make the password even more stronger

# Methodology

Q4: What are the tests that we performed in the password string ?

Test 1: Checking the Length of the Password

Test 2: Checking the Upper Case letters in the Password

Test 3: Checking the Lower Case letters in the Password

Test 4: Checking the Special Characters in the Password

Test 5: Checking the existence of Numbers in the Password



# Methodology

Q5: What are the sanitizers that we performed in the password string ?

Sanitizer 1: Checking Common “QWERTY” keyboard combination in the Password

Sanitizer 2: Checking Contiguous Characters in the Password

# Methodology

Q6: What are the index that will determine a healthy password ?

Length (7) + Upper Case (4) + Lower Case (2) + Special Characters (4) + Numbers (3) = 20

Common “QWERTY” Combination (-8) / Contiguous Characters (-8) = -8

# Methodology

Q7: How the judgment will be given ?

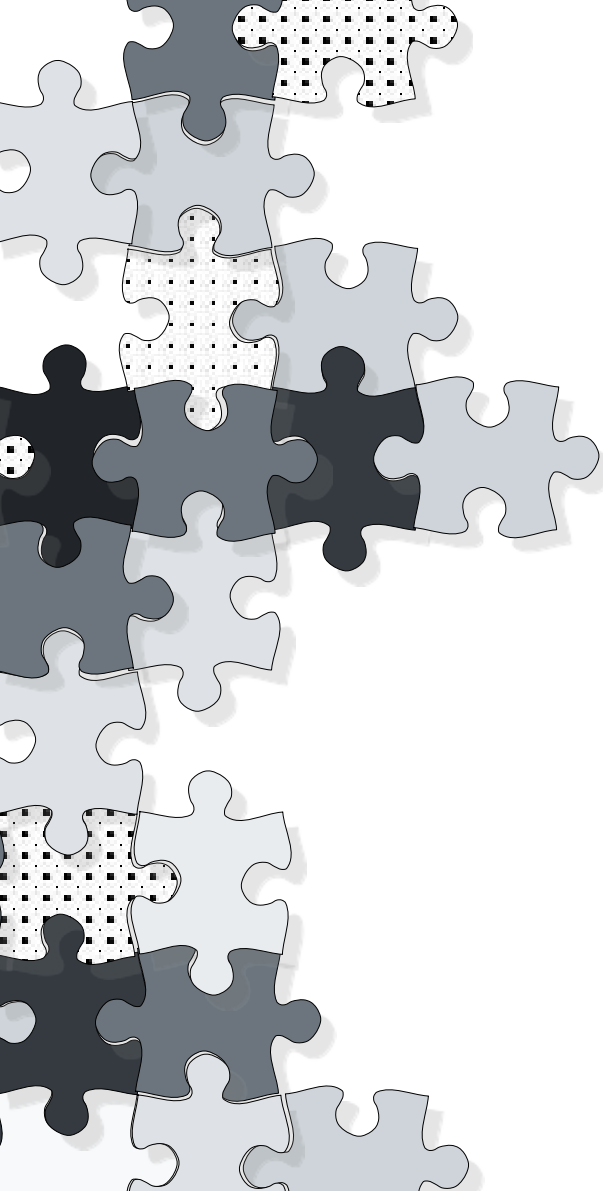
- If the length is below 6 characters : Extremely Weak
- If the length is between 6 to 8 Characters : Weak
- If the index value is more than or equal to 15 then : Strong Password
- If the index value is more than or equal to 10 : Fair Password
- If the index value is more than or equal to 7 : Weak Password
- Else the password will be treated as Extremely Weak Password

↑  
Priority

# Methodology

Q8: The criteria for the comments to be shown ?

- If the length of the password is small.
- If the ASCII Code of the characters entered are contiguous.
- If the Password is in the Wordlist file of Kali Linux.
- If the characters are common “QWERTY” combination.
- If user entered special symbol more than three or equal to three to remind to remember it carefully.
- If the user entered space as a password : to remind him about the fact.
- If insufficient number of Upper or Lower case letters are entered.
- If insufficient number of Alphanumeric characters are used.
- To congratulate if a strong password is entered.



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**Thank you**  
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