

**SINS CIPHERSEC -  
PASSWORD CHECKER AND PASSWORD GENERATOR**

**PROJECT REPORT**

*Done by*

**Mr. Suhas Dhole**

**Mr. Mohamed Ibrahim**

**Mr. Sabir**

**Mr. Naresh Mekala**

Under the guidance of

**Mrs. SINI S NAIR**

(PRINCIPAL TECHNICAL OFFICER)

*In partial fulfilment of the requirement for*

**CERTIFICATION COURSE IN  
CYBER SECURITY AND ETHICAL HACKING**



**NATIONAL INSTITUTE OF ELECTRONICS &  
INFORMATION TECHNOLOGY, CALICUT**

(An Autonomous Scientific Society of Ministry of Electronics & Information Technology)

**Government of India**

Post box no.5, NIT Campus P.O., Calicut 673601, Kerala, India.

# DECLARATION

**We hereby declare that the project work entitled  
SINS CIPHERSEC -  
PASSWORD CHECKER AND PASSWORD GENERATOR**

**Done at  
NATIONAL INSTITUTE OF ELECTRONICS &  
INFORMATION TECHNOLOGY, CALICUT**

(An Autonomous Scientific Society of Ministry of Electronics & Information Technology)

**Government of India**

Post box no.5, NIT Campus P.O., Calicut 673601, Kerala, India.

**Under the guidance of  
Mrs. SINI S NAIR**

**Name of the Students**

**Signature**

**Mr. Suhas T Dhole**

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**Mr. Mohamed Ibrahim A**

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**Mr. Sabir T P**

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**Mr. Mekala Naresh**

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**Place: CALICUT**

**Date: \_\_\_\_\_**

# **CERTIFICATE**

*This is to certify that*

**Mr. SUHAS DHOLE**

**Mr. MOHAMED IBRAHIM**

**Mr. SABIR**

**Mr. NARESH MEKALA**

Of Certificate course on Cyber Security and Ethical Hacking have successfully completed their project work entitled ***SINS CIPHERSPEC - PASSWORD CHECKER AND PASSWORD GENERATOR*** at the ***Information Technology Lab, NIELIT Calicut***, under the guidance of ***Mrs. Sini S Nair, Principal Technical Officer***. The duration of the project is fifteen days.

***Internal Guide***  
***NIELIT Calicut***

***Course Coordinator***  
***NIELIT Calicut***

# ACKNOWLEDGEMENT

First of all, we express our sincere gratitude to the almighty whose blessings helped us to materialise this project.

We would like to thank **Dr. M P Pillai**, Executive Director, NIELIT Calicut for providing all the facilities required.

Our sincere thanks to our project guide **Mrs. Sini S Nair**, Principal Technical Officer, NIELIT Calicut, for spending her precious time for us and giving her valuable ideas and suggestions, which helped completing our project successfully.

We express our deep gratitude to **Mr. Hari K** and **Mr. Mohamed Affan** for providing us with necessary technical support.

Finally we would like to express our sincere thanks to all of our friends, colleagues, parents and all those who have directly assisted during this project.

# ABSTRACT

The SINS-CipherSec project is a comprehensive password management and security solution that aims to empower individuals and organizations to secure their online accounts. The project offers a user-friendly interface that allows users to easily generate strong and unique passwords using a passphrase and name as inputs. The generated passwords are then checked for strength against various criteria, including length, character types, and the presence of repeating characters, and are also cross-referenced against known compromised password databases.

In addition to password generation, the SINS-CipherSec project also provides a feature to save the generated passwords in a user-specific directory, with the current date as the file name, to allow easy tracking. This project offers both command-line interface (CLI) and graphical user interface (GUI) options, making it accessible to users of all technical backgrounds.

The SINS-CipherSec project is designed to make password management and security more accessible and user-friendly, providing a powerful tool to help individuals and organizations secure their online accounts and protect themselves from cyber threats.