# SYNOPSIS SUBMITTED

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SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI

# **TITLE: -** Tool kit for cyber security and CTF (Catch the flag) player.

# **TEAM NAME: -** DEVIL\_DEVELOPERS.

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# **Introduction:-**

## **Introduction to Cyber Security:-**

Picture an employee at her computer, working with data. In the background, a hacker secretly accesses her company’s confidential files. He steals sensitive information and sells it to criminals, who then hold the company ransom for a profit.

It sounds like something out of a movie, but unfortunately, it’s a common occurrence in today’s online landscape. This is why Cyber Security has become such a vital part of any business strategy—and Cyber Security specialists are in demand now more than ever.

## **What is Cyber Security?**

Cyber Security is a process that’s designed to protect networks and devices from external threats. Businesses typically employ Cyber Security professionals to protect their confidential information, maintain employee productivity, and enhance customer confidence in products and services.

The world of Cyber Security revolves around the industry standard of confidentiality, integrity, and availability. Privacy means data can be accessed only by authorized parties; integrity means information can be added, altered, or removed only by authorized users; and availability means systems, functions, and data must be available on-demand according to agreed-upon parameters.

The main element of Cyber Security is the use of authentication mechanisms. For example, a user name identifies an account that a user wants to access, while a password is a mechanism that proves the user is who he claims to be.

### **Capture the Flag (CTF) in Computer Security:-**

In computers security capture the Flag (CTF), "flags" are secrets hidden in purposefully-vulnerable programs or websites. Competitors steal flags either from other competitors (attack/defense-style CTFs) or from the organizers (jeopardy-style challenges. Several variations exist, including hiding flags in hardware devices.

Security CTFs are usually designed to serve as an educational exercise to give participants experience in securing a machine, as well as conducting and reacting to the sort of attacks found in the real world. Classic activities include reverse-engineering, packet sniffing, protocols analysis, system administration, programming, cryptanalysis, and writing exploit, among others. In an attack/defense style competition, each team is given a machine (or a small network) to defend—typically on an isolated competition network. Teams are scored on both their success in defending their assigned machine(s) and on their success in attacking the other team's machines. A variation from classic flag-stealing is to "plant" own flags on opponent's machines.

# **Analysis of Problem:-**

In New Digital World and Daily life the rate of cyber-crime increases very rapidly in day by day. We need to required audit or analysis our network, network-devices like routers, hub, switches, servers, others. Also we need to analysis system – software and application software as well as hardware.

In Our New Digital world “Hackathon” was organized by many Organization. During the hackathon solving CTF players having trouble (activities include reverse-engineering, packet sniffing, protocols analysis, system administration, programming, cryptanalysis, and writing exploit) when if command syntax will wrong, when website searching for task perform that time website particular url cannot remember or name of website by ctf player, others troubles.

# **Proposed Work and Objectives:-**

In Linux Operating System cyber security application was in command line interface (cmd) and when we run this application we need to type command on terminal it’s get lot of time to run particular application. And if any condition command syntax or spelling will incorrect it’s give an error .but we are wanted one clicked on application and it can run application and it gives function and feature like it without getting error. As well as it tool kit gives lots of help to ctf players for solving hackathon task in at one toolkit.

# **Desired Implications:-**

We are provide delightful, easy to use, Attractive cyber security tool kit application with many services and features and functions.

# **References:-**

We are getting references from Wikipedia, Cybersecurity, Linux, window, others

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