

INTERNSHIP PRESENTATION ON

HACK CHALLENGE

Presented by Prachi Jaiswal



HACK CHALLENGE TEAM



ANKIT GAUTAM
16070122004

MOINUDDIN
BHAVNAGRI
16070124016

PRACHI JAISWAL
16070124040

INDEX

- **Introduction**
- **Project Objective**
- **Insight**
- **Technology Platform**
- **Implementation**
- **Application Features**
- **Details of the Project**
- **Future Enhancement and Difficulties Faced**
- **Conclusion**



INTRODUCTION

Cyber Security is high demand because hackers are trying to find new ways to access, change or delete sensitive information, Users must be aware of cyber threats and security principles.

Therefore I with my team have created a Gaming Application based on Cyber Security to generate awareness; how hackers can get through one's personal stuff.

The project has been developed on the basics of CEH Syllabus (Certified Ethical Hacking). This android application will let users know their aptitude in Cyber Security.



The Main Objective of “Hack Game App” is to Develop a Android Application to generate awareness and train the employee about the Cyber Security principles.

In this App every user can to play all the levels from low to high priorities.

After Playing this game every users will be able to get the basic idea of linux tools and command like nmap,whois lookup,ping,webgoat,Dns,Dnsenum etc.

PROJECT OBJECTIVE



INSIGHT

PLATFORMS

- Android Studio
- OWASP ZAP
- Termux
- Firebase
- SQL Injection
- HackTheBox
- NMap



TECHNOLOGY

XML

We used XML for android layout and design.

JAVA

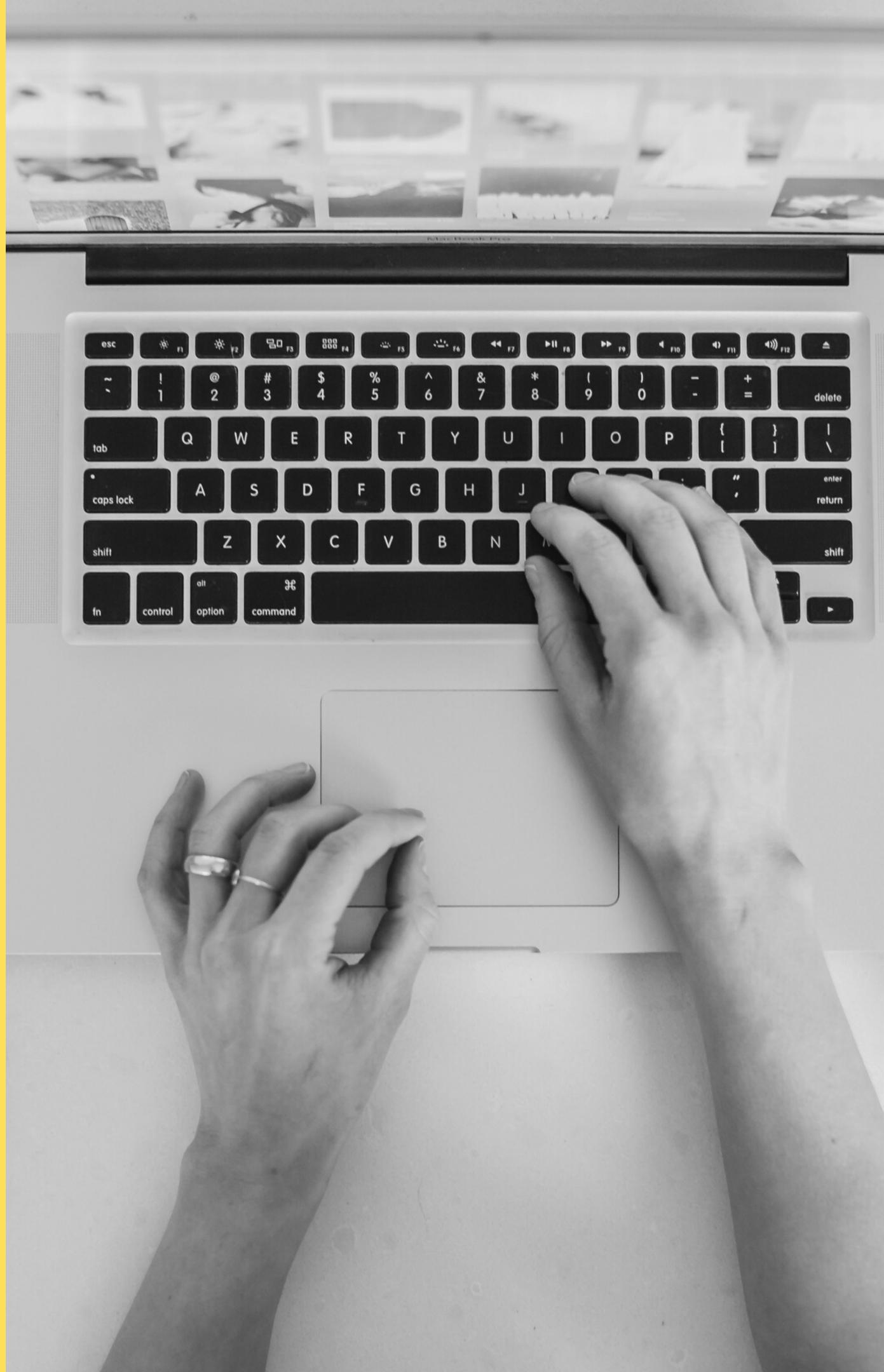
We used JAVA for as development language

LINUX

We used Linux operating system for some levels which we learnt in our training



IMPLEMENTATION



► REQUIRED TOOLS AND SOFTWARE:

- JAVA STANDARD EDITION(SE) 9 AND ABOVE.
- ANDROID IDE
- ANDROID POWERED DEVICE FOR APP RUNNING AND DEBUGGING.

► DATABASE IMPLEMENTATION :

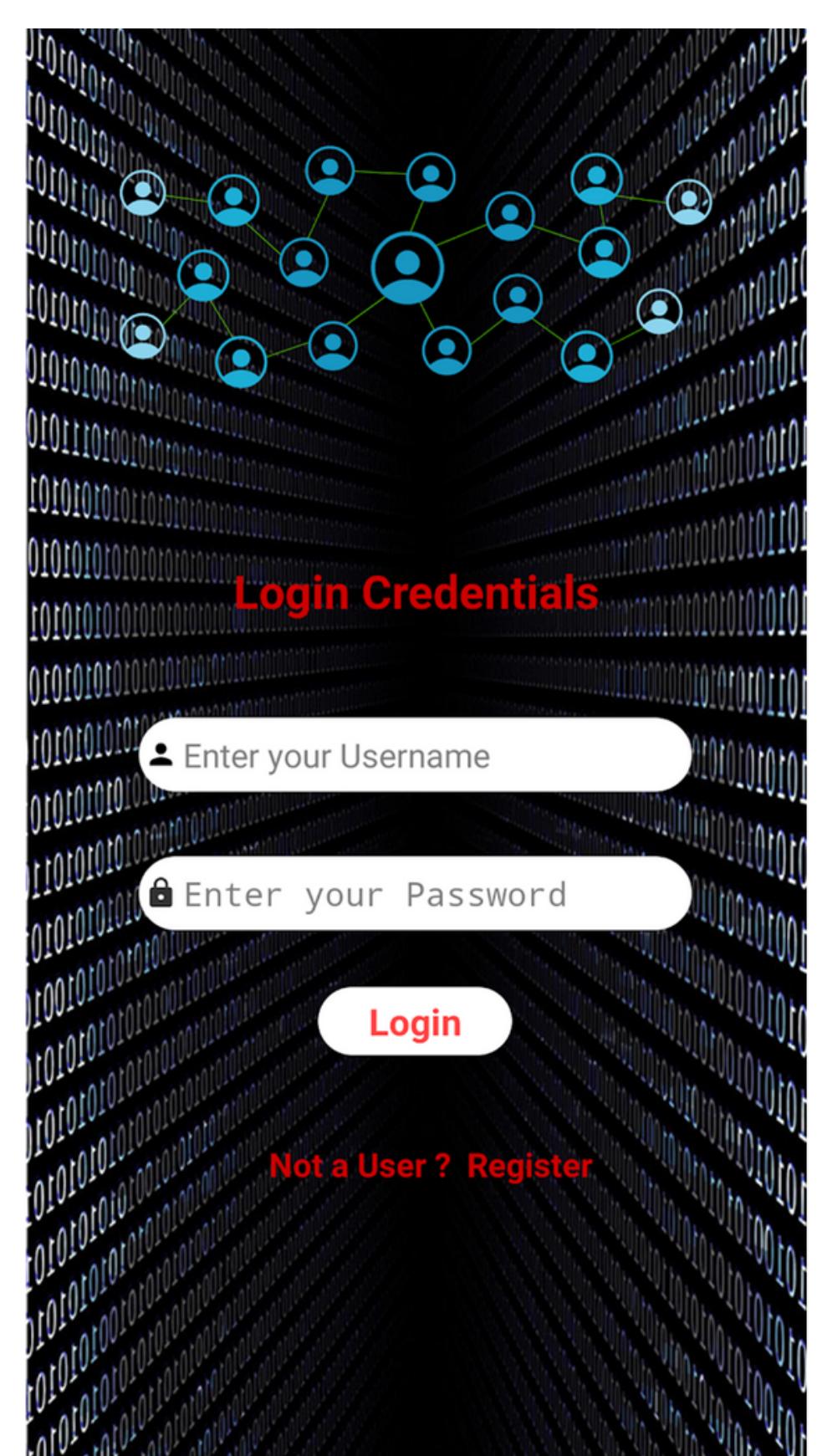
- WE HAVE USED FIREBASE AS DATABASE FOR LOGIN AND SIGNUP.

► SERVER IMPLEMENTATION:

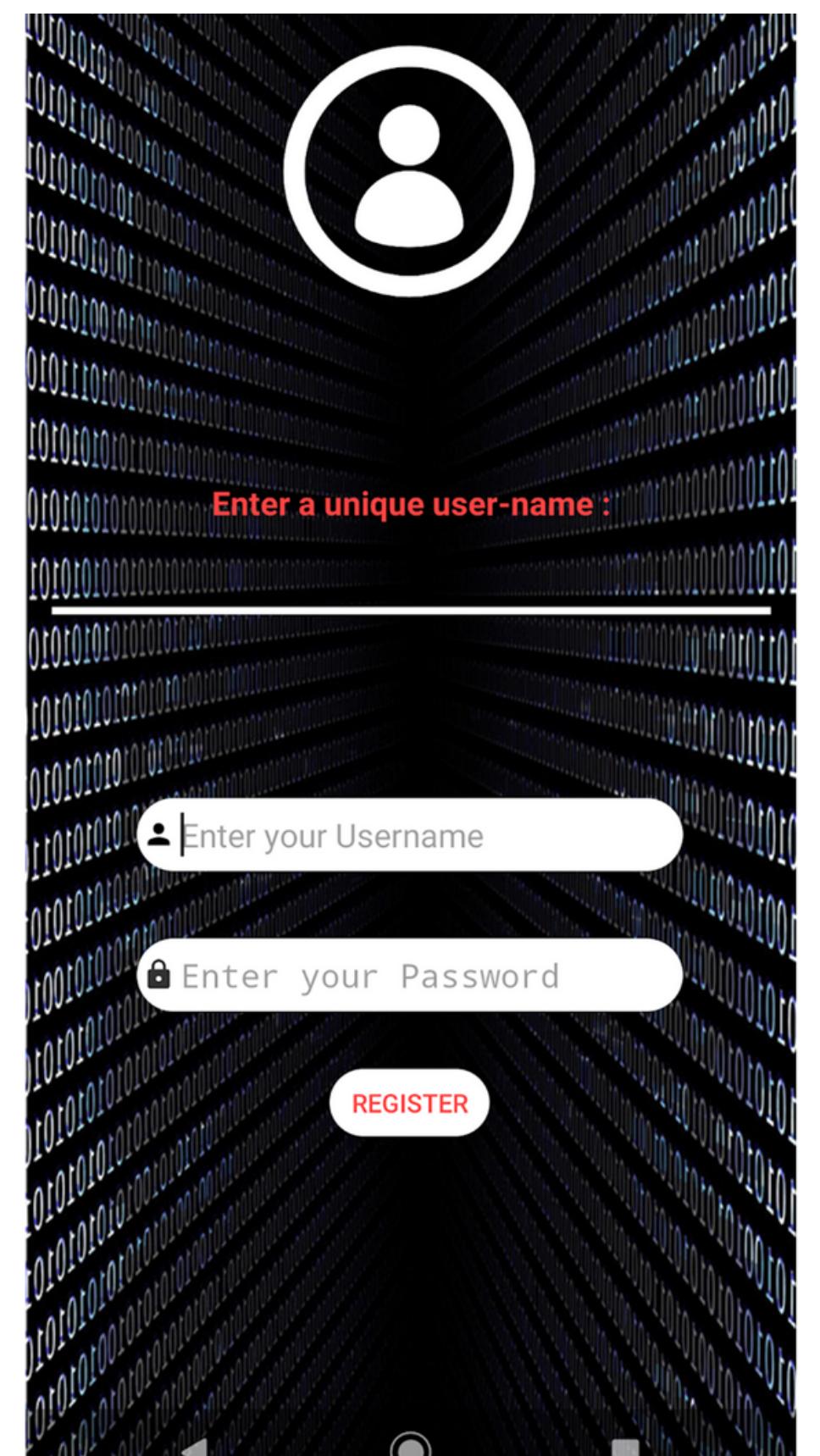
- WE HAVE USED AWS SERVER AS A BACKEND FOR CHALLENGES.



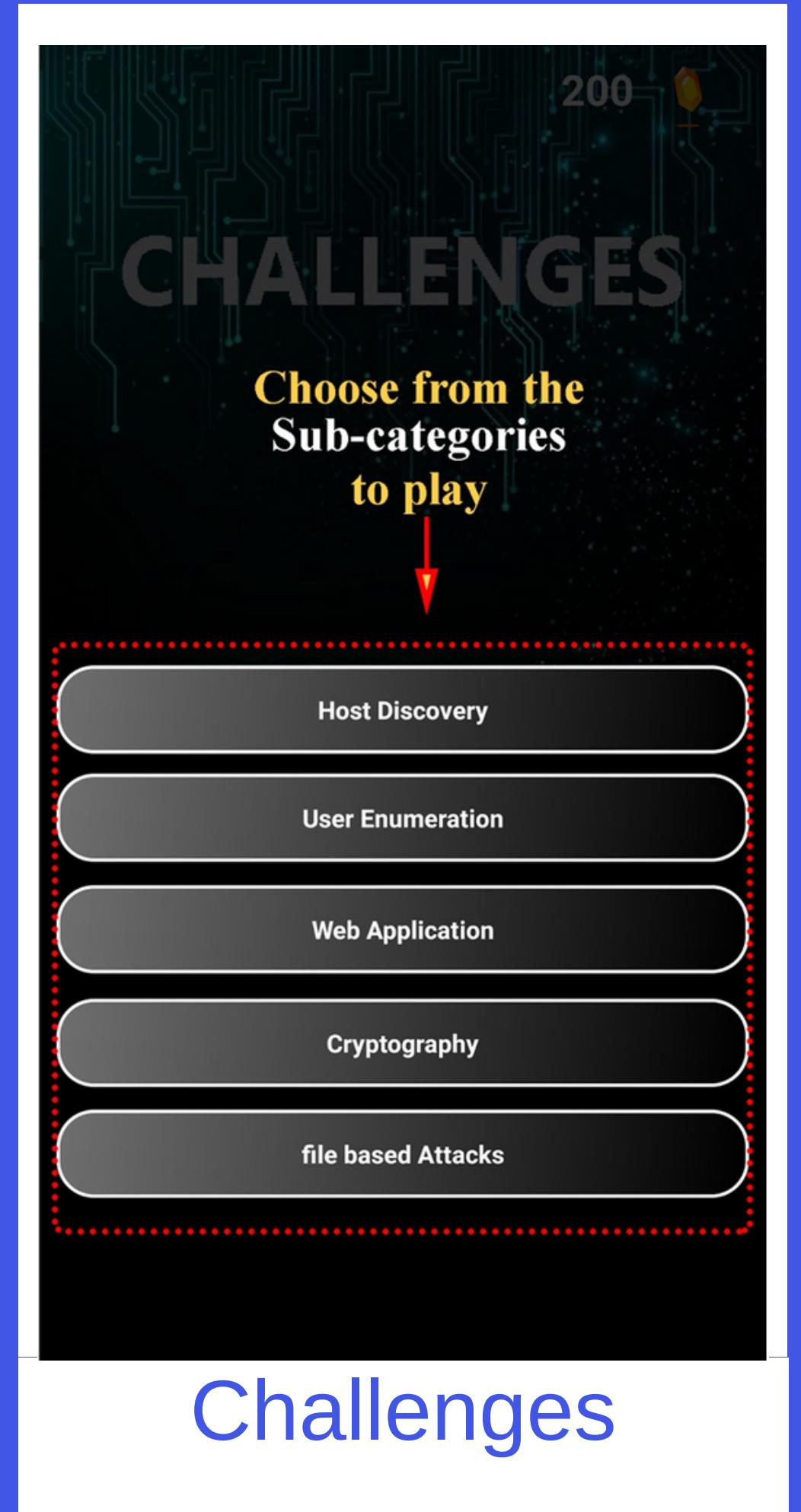
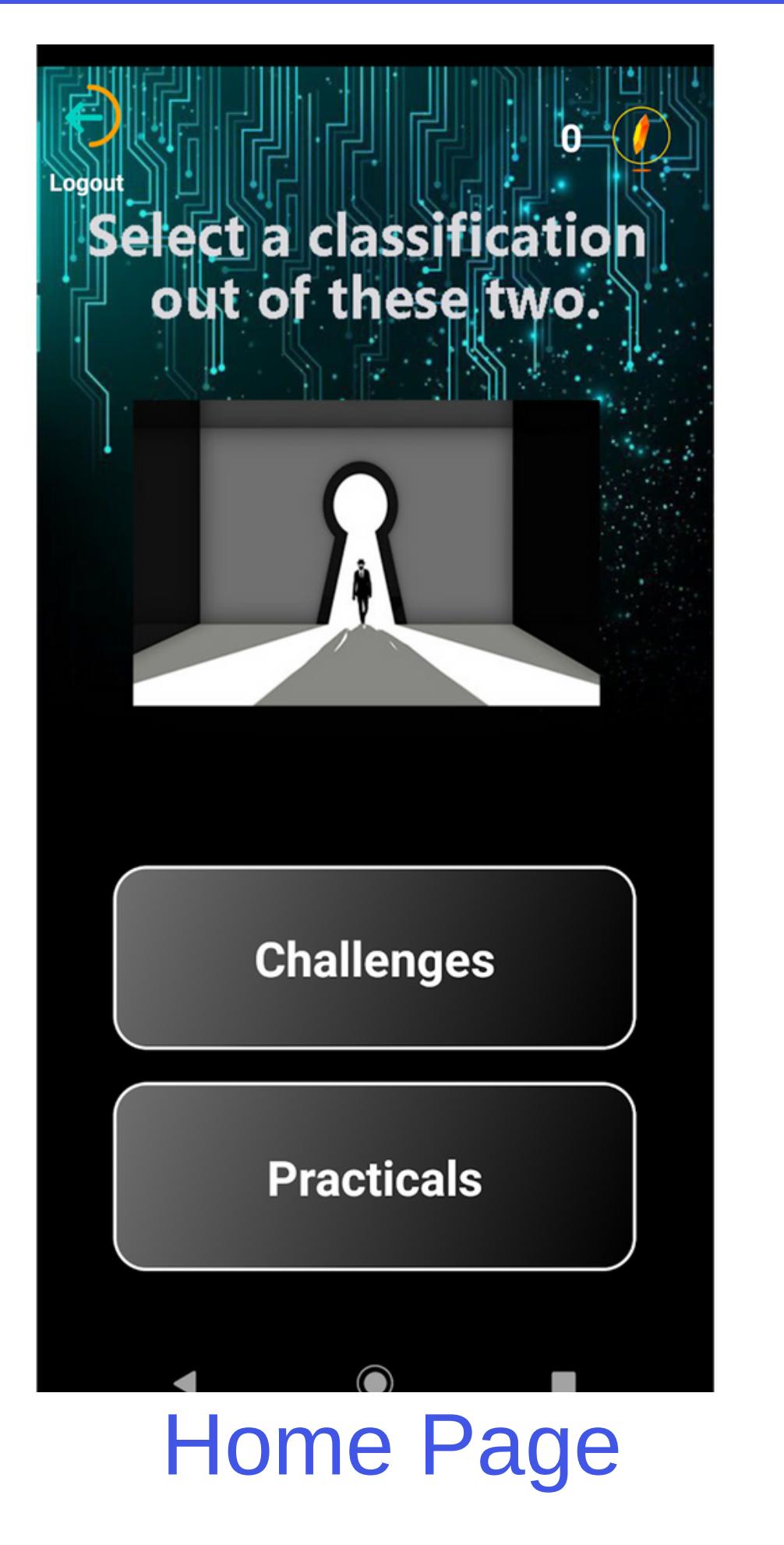
Application Features



Login Page

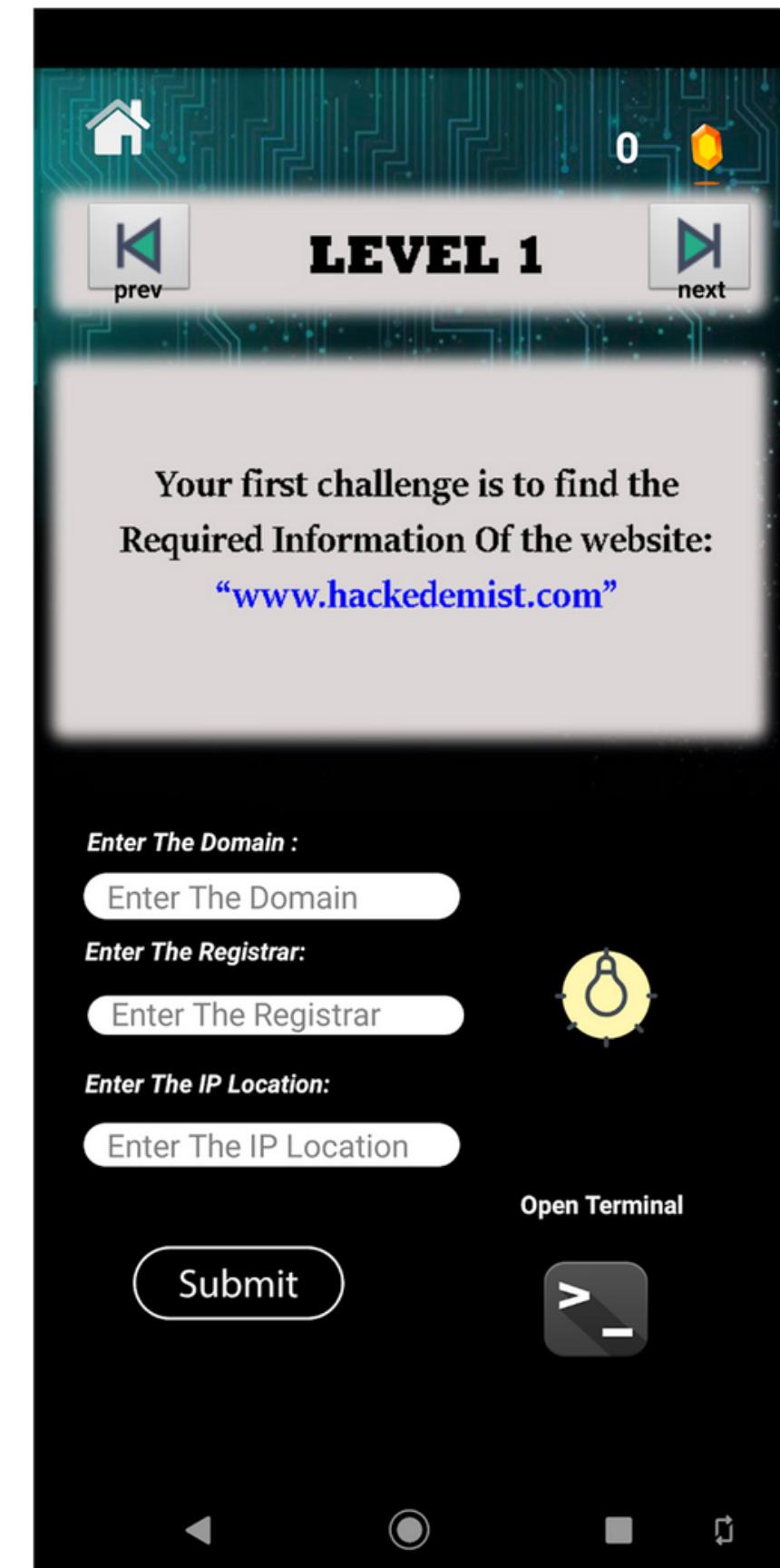


Register Page

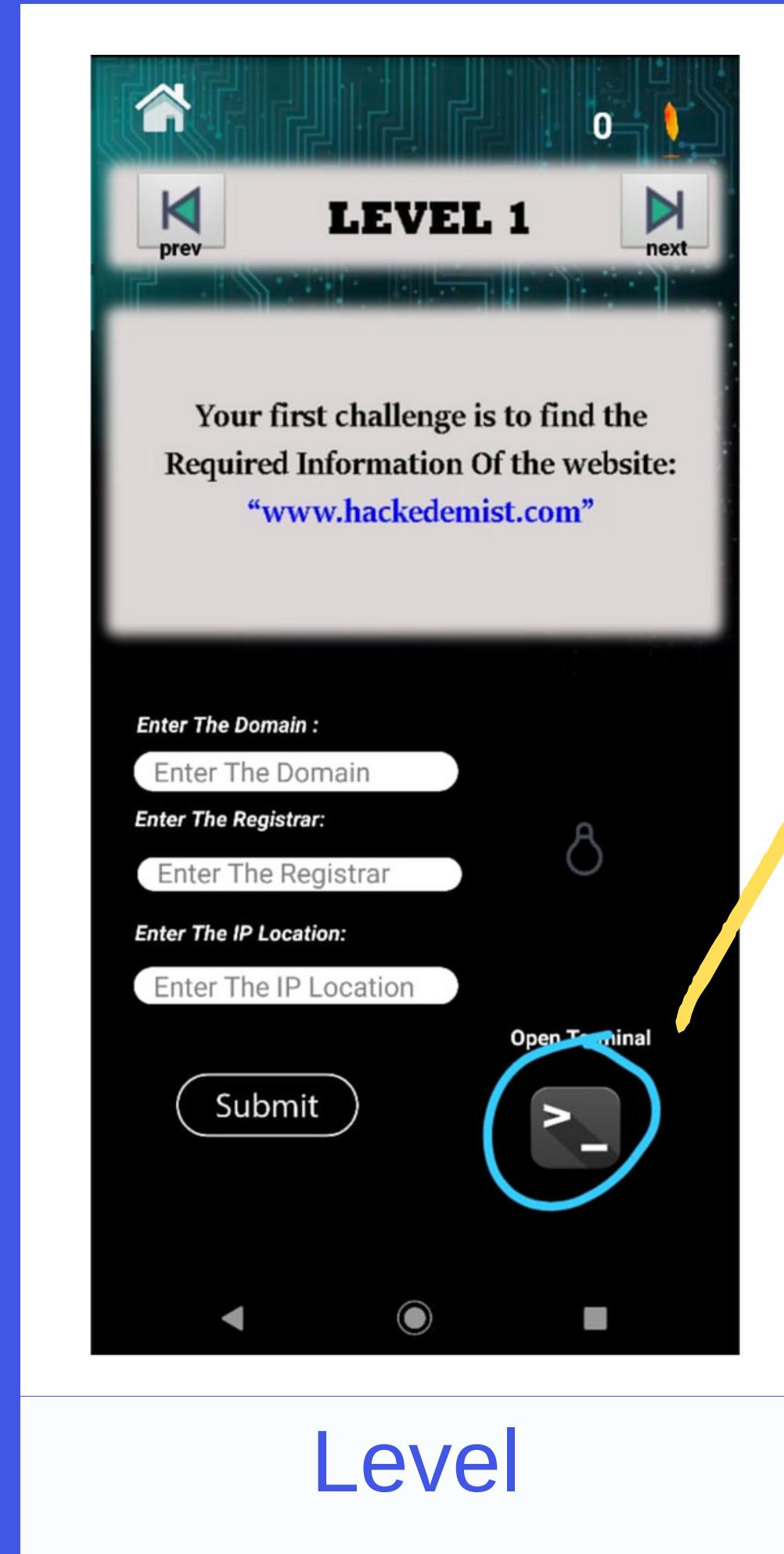




Levels Home Page



Level

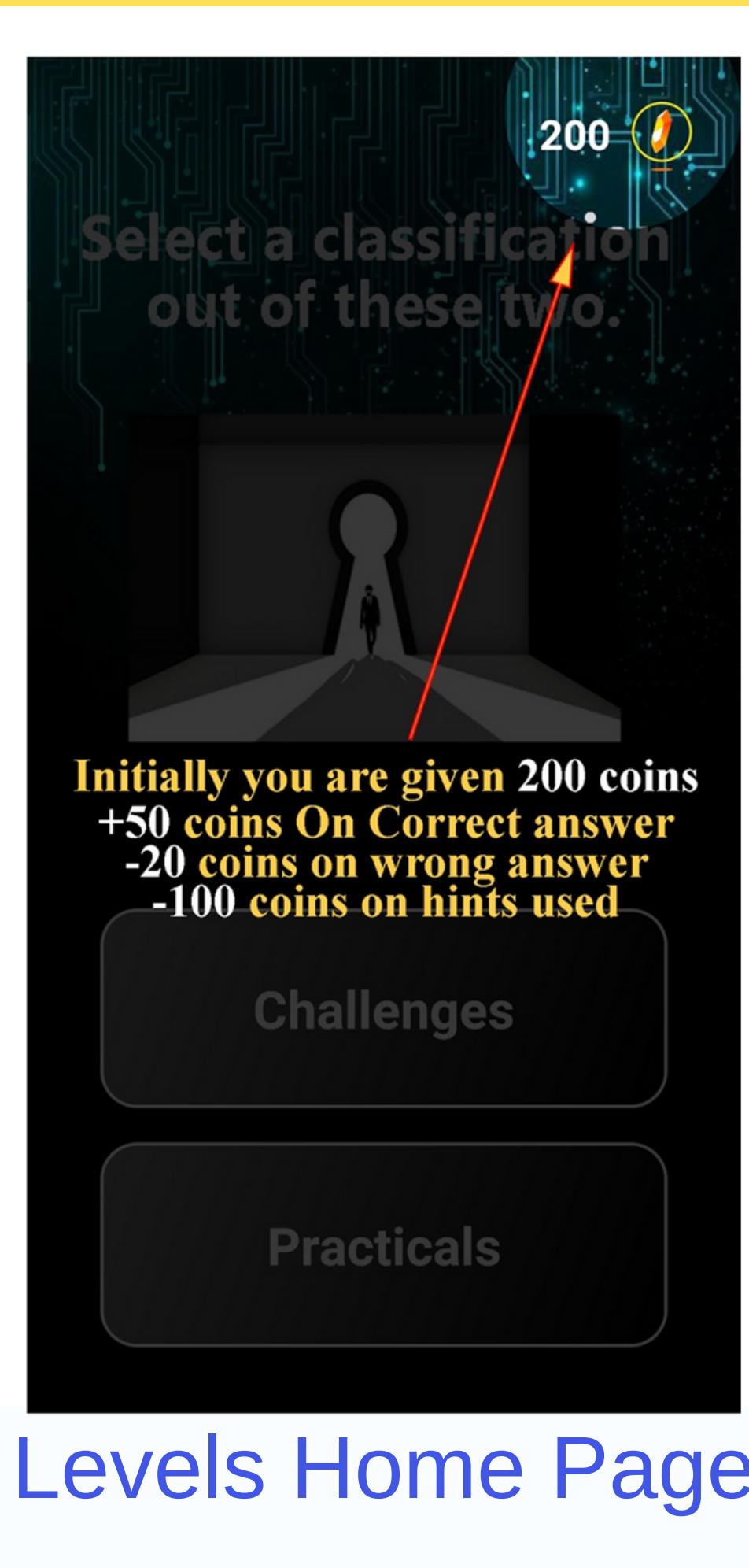


This button
will open
Termux (Linux
terminal)

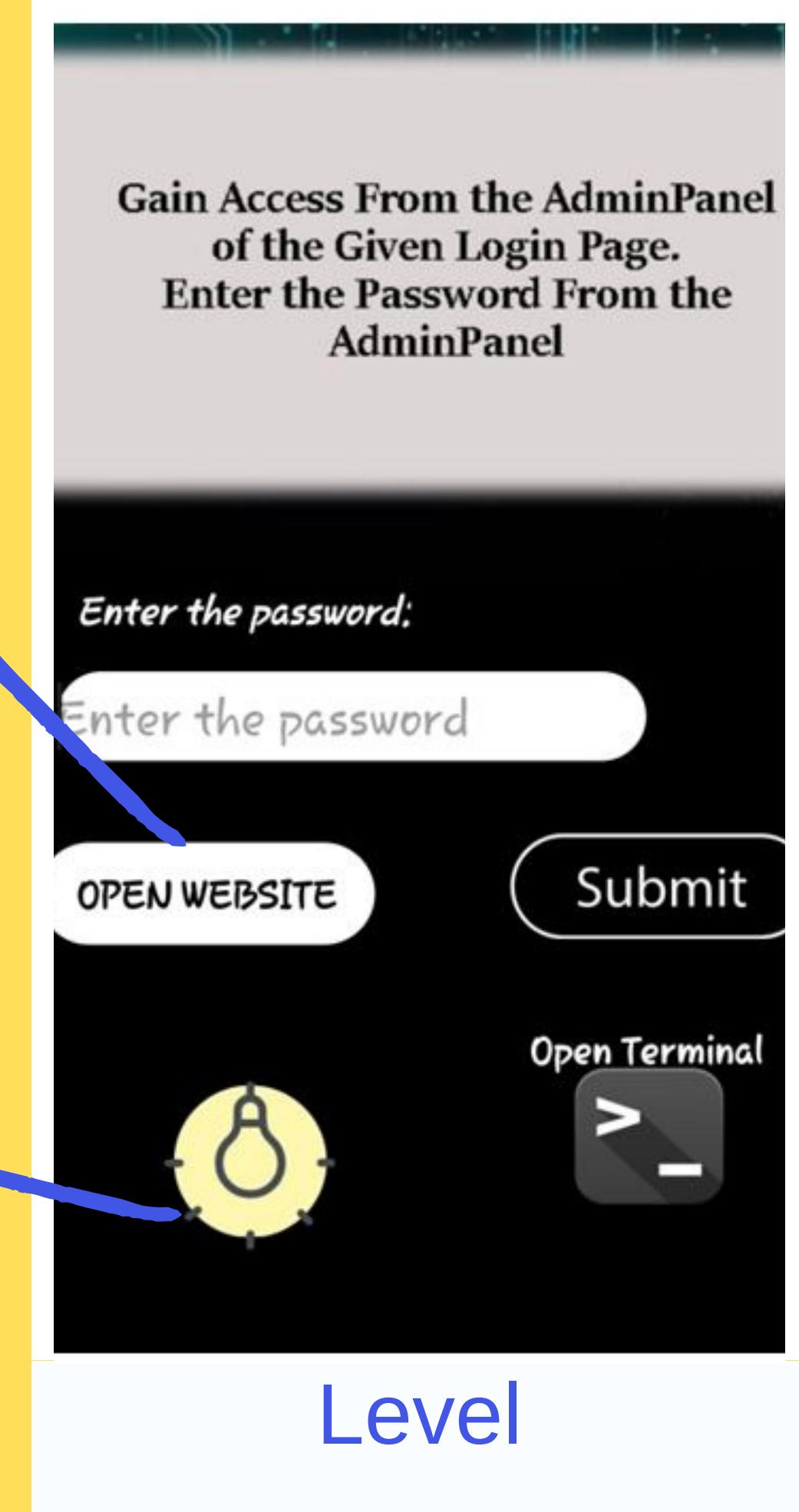
The purpose of
Adding Linux
Terminal is for
connecting to
Server and
performing
Challenges.

```
Welcome to Termux!  
  
Wiki: https://wiki.termux.com  
Community forum: https://termux.com/community  
Gitter chat: https://gitter.im/termux/termux  
IRC channel: #termux on freenode  
  
Working with packages:  
* Search packages: pkg search <query>  
* Install a package: pkg install <package>  
* Upgrade packages: pkg upgrade  
  
Subscribing to additional repositories:  
* Root: pkg install root-repo  
* Unstable: pkg install unstable-repo  
* X11: pkg install x11-repo  
  
Report issues at https://termux.com/issues  
$
```

Termux



Opens Website



Opens Hints

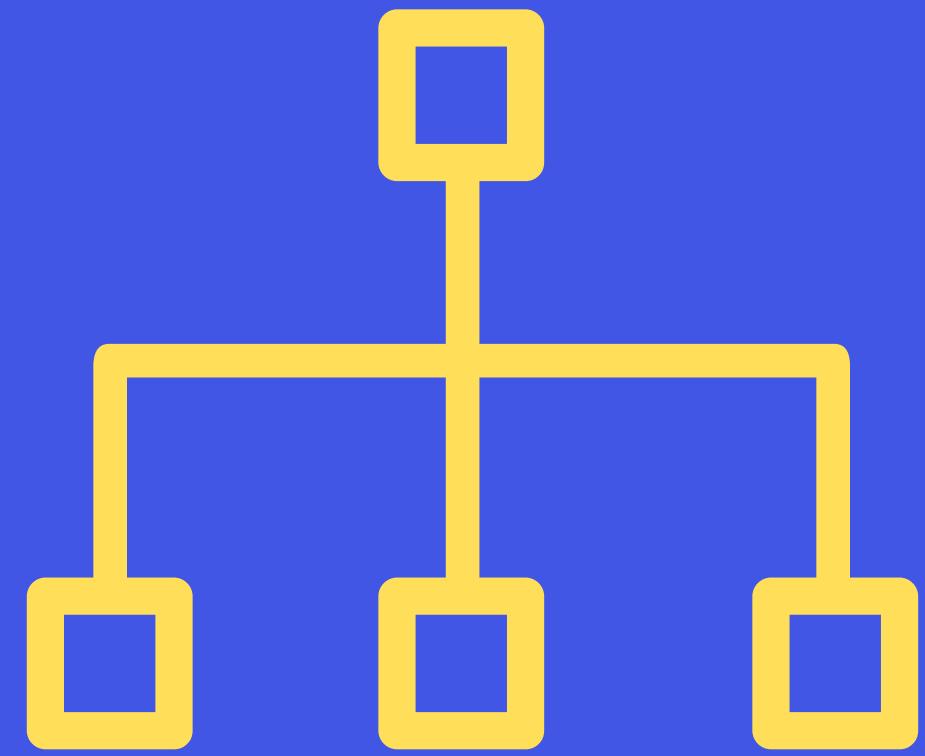
The terminal window shows two steps:

- 1 Skip this if already done**
\$ pkg install openssh
Do you want to continue? [Y/n] Y
- 2**
\$ ssh fb_level01@3.130.189.3
fb_level01@3.130.189.3's password:
Here before @ is the username for each level
eg. fb_level01 for Level 01
To connect to each level you need to type
username@3.130.189.3
Change 01 to 02 for level 02 and so on
The password is level username

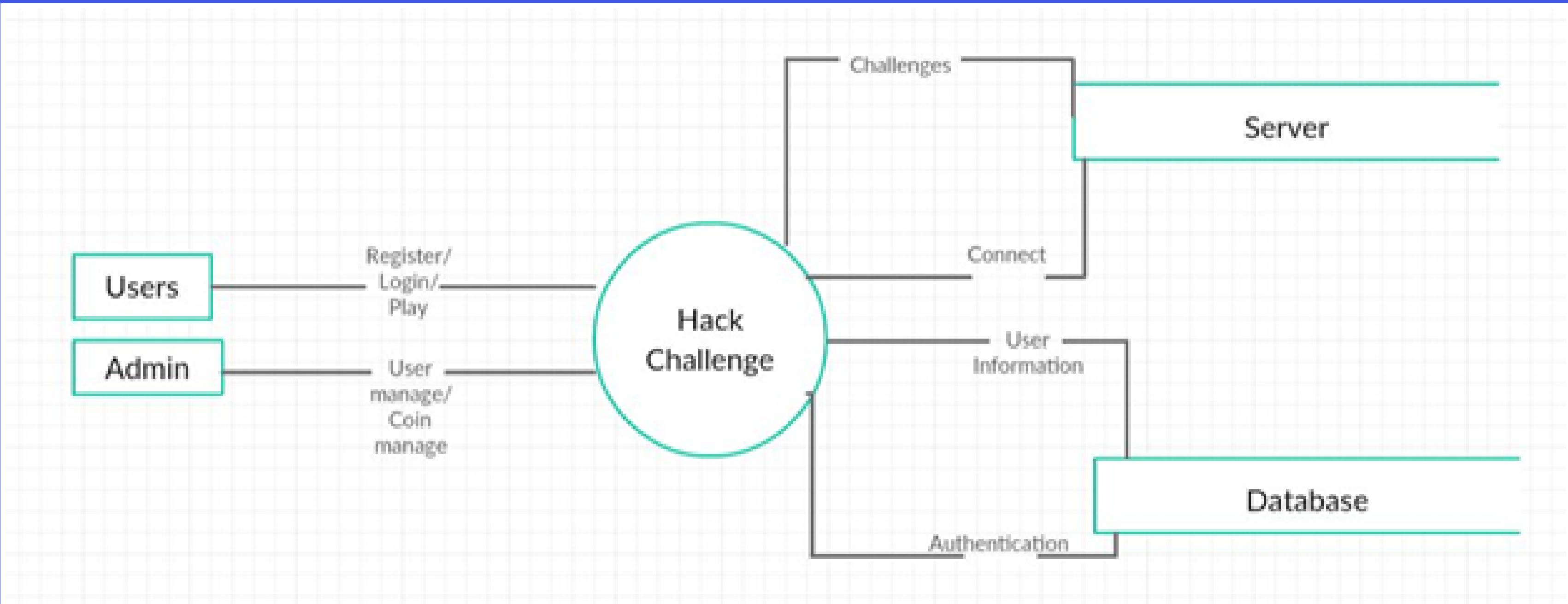
Levels Home Page

We have Integrated a linux terminal through which we can connect to the AWS server using ssh command . ssh(secure shell) command is a protocol is used to connect to remote/server system.

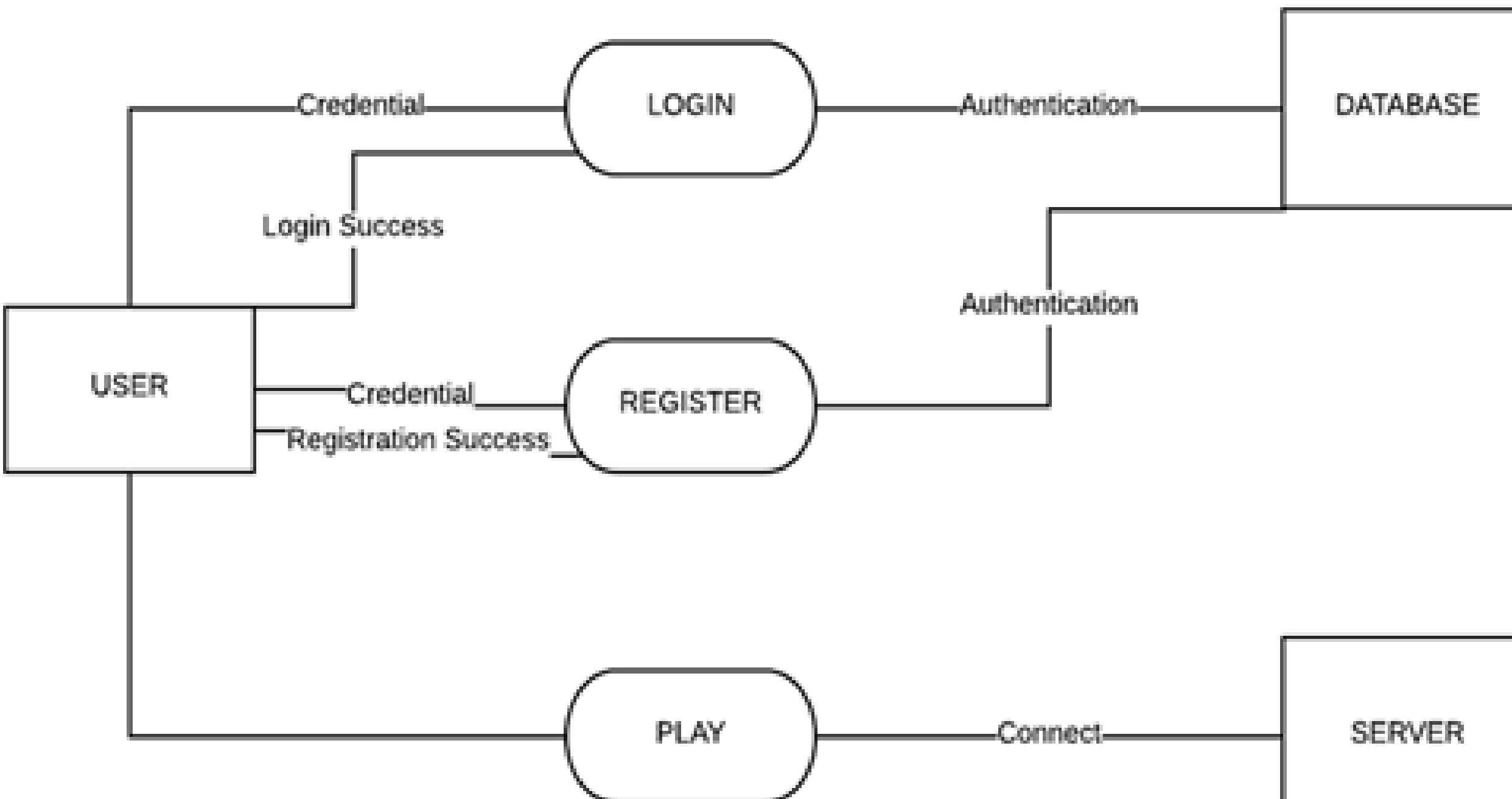
command :-ssh hostname command.
Eg. like if u want to perform one and u need to connect to server using terminal then u need to type : ssh fb_level01@3.130.189.3



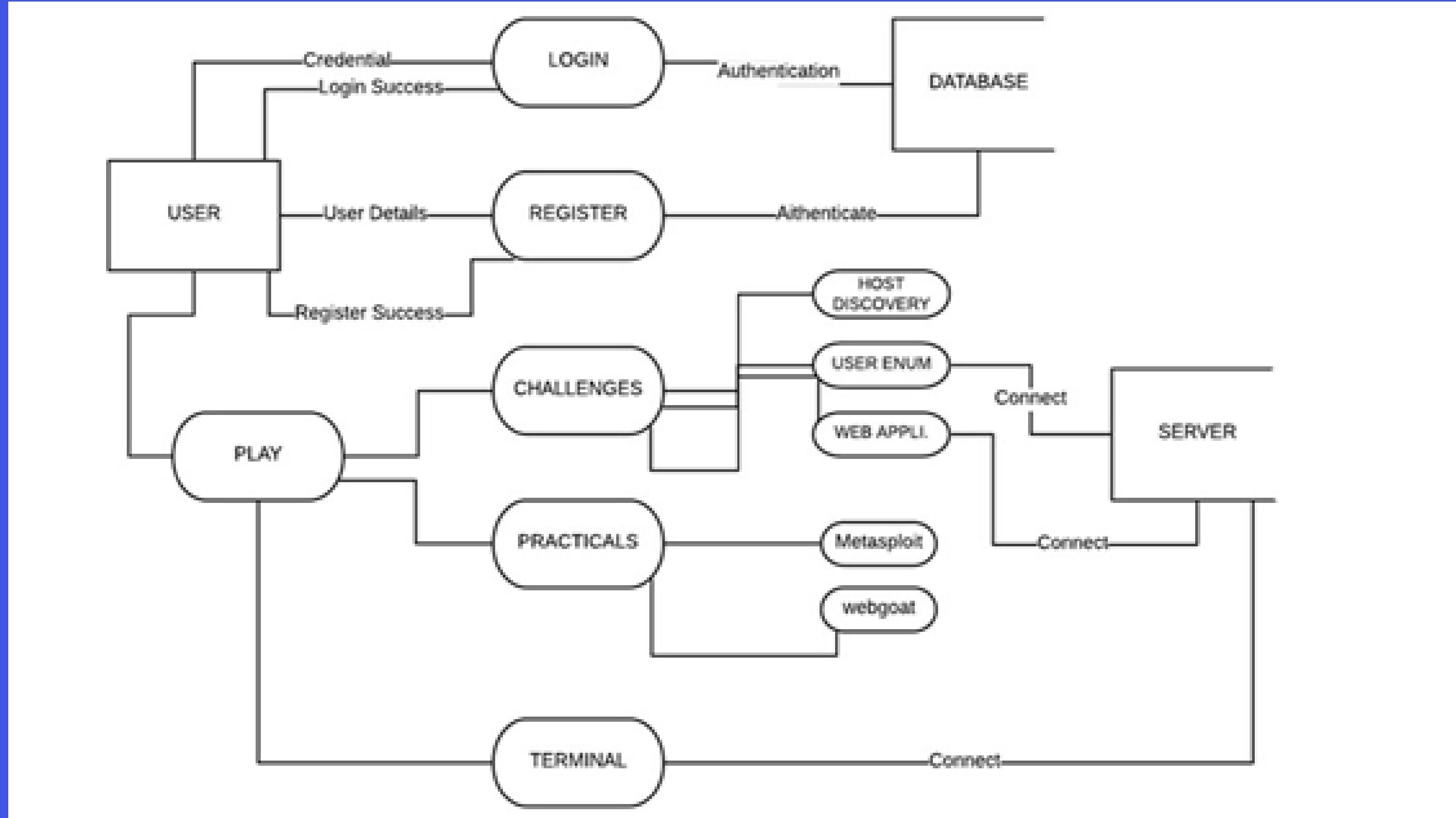
Detail Structure



DFD Level 0



DFD Level 1



DFD Level 2

IMPEDIMENTS

Working with new technologies made a lot of obstacles come in my way. Problems like Resizing the application for all the smart phones with different screen size was a bit tricky thing.

The main difficulty faced during my internship period was Terminal part .We needed a full code of Terminal into our project as the Terminal is one of the integral part of our application. Every Android app has a unique application ID that looks like a Java package name, such as com.example.myapp. This ID uniquely identifies your app on the device and in Google Play Store.



TERMUX

```
defaultConfig {  
    applicationId "com.termux.api"  
    minSdkVersion 21  
    targetSdkVersion 28  
    versionCode 32  
    versionName "0.32"  
}
```

HACK CHALLENGE

```
defaultConfig {  
    applicationId "com.termux.api"  
    minSdkVersion 21  
    targetSdkVersion 28  
    versionCode 66  
    versionName "1.0"  
}
```

Future Aspect of the Project

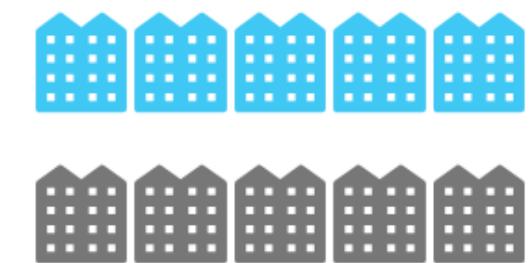


CYBER ATTACKS

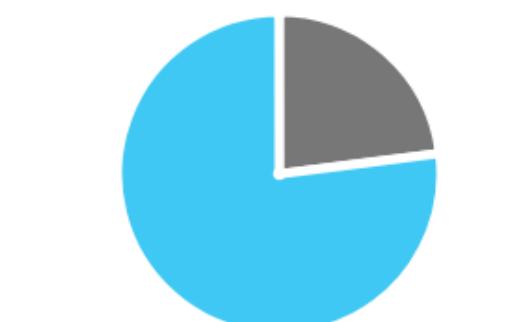
Since there are a great deal of digital assaults and rupturing of private data, we need individuals to think about it and to maintain a strategic distance from such unfriendly actions. We have made this gaming application under H@ckedemist with the sole reason for creating awareness so individuals can safeguard their selves against these flawed plans.

Cyber Security Statistics in 2019

Almost half of all companies have over 1,000 sensitive pieces of information that are not protected



The biggest cost from a cyber attack is productivity



● Attack Cost 23% ● Productivity Cost 77%

Attacks on healthcare are expected to increase by

400%

in 2020



The cost of cyber crime is expected to exceed

\$6 Trillion

Annually by 2021



This android gaming application is purely based on the syllabus of CEH (Certified Ethical Hacker), an individual can get some insight about the same examination.



This is a qualification obtained by demonstrating knowledge of assessing the security of computer systems by looking for weaknesses and vulnerabilities in target systems, using the same knowledge and tools as a malicious hacker, but in a lawful and legitimate manner to assess the security posture of a target system.

Conclusion

- This application has discussed few of the vulnerabilities an individual can face during a cyber attack at anytime.
- It has gone through the steps of different domains of cyber security, like host discovery, file based attacks, web application attacks etc. The game has explained the importance of few of the vulnerabilities and how each should be carried out.
- Playing this game would help individuals to find out about breaching and endangerment of cyber world so in future on the off chance that they are experienced by a digital risk, they will have some learning to handle it.

THANK
YOU

