

# PROGETTO

## Traccia:

Familiarizzazione con OS linux, shell e Command Prompt:  
installeremo su Kali Linux un gioco per familiarizzare con i comandi linux: GameShell.

## Svolgimento:

Ho fatto gli screen di tutti i livelli che ho fatto, purtroppo per questioni di tempo non sono riuscito a farli tutti, il livello 13 siccome non erano presenti delle dipendenze, il gioco non mi ha permesso di risolvere il livelli saltandomi al livello successivo. Ecco di seguito i vari screen dei superamenti di ogni livello passato:

```
kali-linux-2024.4-virtualbox-amd64 [In esecuzione] - Oracle VirtualBox
File Macchina Visualizza Inserimento Dispositivi Aiuto
1 2 3 4

kali@epicode: ~
File Actions Edit View Help
Trash [use 'gsh help' to get a list of available commands]
[mission 1] $ cd Second_floor

[use 'gsh help' to get a list of available commands]
[mission 1] $ cd third_floor
bash: cd: third_floor: No such file or directory

[use 'gsh help' to get a list of available commands]
[mission 1] $ cd Third_floor
bash: cd: Third_floor: No such file or directory

[use 'gsh help' to get a list of available commands]
[mission 1] $ ls
Top_of_the_tower

[use 'gsh help' to get a list of available commands]
[mission 1] $ cd Top_of_the_tower

[use 'gsh help' to get a list of available commands]
[mission 1] $ gsk check
Command 'gsk' not found, did you mean:
  command 'gsi' from deb gambc
  command 'gs' from deb ghostscript
  command 'gsd' from deb python3-gsd
  command 'gsc' from deb gambc
  command 'gsa' from deb gwenhywfar-tools
  command 'gsl' from deb generator-scripting-language
  command 'gsf' from deb libgsf-bin
  command 'gk' from deb mrb
Try: sudo apt install <deb name>

[use 'gsh help' to get a list of available commands]
[mission 1] $ gsh check

Congratulations, mission 1 has been successfully completed!

[ progress was saved in /home/kali/gameshell-save.sh ]

|
|--+
| Use the command
|   $ gsh help
| to get the list of "gsh" commands.
|--+
|

[mission 2] $
```

```
kali@epicode: ~  
File Actions Edit View Help  
[use 'gsh help' to get a list of available commands]  
[mission 2] $ gsh goal  


Mission goal



Go the castle's cellar.



Secondary objective



Understand the difference between ``cd -`` and ``cd ..``.



Useful commands



cd -  
Jump back to the location you were in prior to your last move.



cd ..  
Move to the parent directory (one step back along the path to your current location).



pwd  
See the path to your current location.

  
[use 'gsh help' to get a list of available commands]  
[mission 2] $ pwd  
/home/kali/gameshell/World  
  
[use 'gsh help' to get a list of available commands]  
[mission 2] $ ls  
Castle Forest Garden Mountain Stall  
  
[use 'gsh help' to get a list of available commands]  
[mission 2] $ cd castle  
bash: cd: castle: No such file or directory  
  
[use 'gsh help' to get a list of available commands]  
[mission 2] $ cd Castle  
  
[use 'gsh help' to get a list of available commands]  
[mission 2] $ ls  
Cellar Great_hall Main_building Main_tower Observatory  
  
[use 'gsh help' to get a list of available commands]  
[mission 2] $ cd Cellar  
  
[use 'gsh help' to get a list of available commands]  
[mission 2] $ ls  
barrel_of_apples  
  
[use 'gsh help' to get a list of available commands]  
[mission 2] $ gsh check  
Congratulations, mission 2 has been successfully completed!
```

```
kali@epicoder: ~
File Actions Edit View Help

[use 'gsh help' to get a list of available commands]
[mission 3] $ cd

[use 'gsh help' to get a list of available commands]
[mission 3] $ cd Castle/Main_building/Throne_room

[use 'gsh help' to get a list of available commands]
[mission 3] $ gsh check

Congratulations, mission 3 has been successfully completed!

Well done!!!
From now on, the current location will be shown just before the command prompt.

[ progress was saved in /home/kali/gameshell-save.sh ]

+-----+
| Use the command |
| $ gsh help      |
| to get the list of "gsh" commands. |
+-----+

~/Castle/Main_building/Throne_room
[mission 4] $
```

```
kali@epicode: ~  
File Actions Edit View Help  
(  
( Build a "Hut" in the forest, and then build a "Chest" in the hut. (  
(  
( Useful commands (  
(  
( mkdir DIRECTORY (  
( Create a new directory inside the current directory. (  
( Remark: "mkdir" is an abbreviation for "make directory". (  
(  
( ..... (  
( )>=====(< )=(0)  
~  
~/Castle/Main_building/Throne_room  
[mission 4] $ cd  
~  
[mission 4] $ cd  
~  
[mission 4] $ ls  
Castle Forest Garden Mountain Stall  
~  
[mission 4] $ cd Forest  
~/Forest  
[mission 4] $ mkdir Hut  
~/Forest  
[mission 4] $ ls  
Hut  
~/Forest  
[mission 4] $ cd  
~  
[mission 4] $ cd Forest/Hut  
~/Forest/Hut  
[mission 4] $ mkdir Chest  
~/Forest/Hut  
[mission 4] $ gsh check  
Congratulations, mission 4 has been successfully completed!  
[ progress was saved in /home/kali/gameshell-save.sh ]  
+-----+  
| Use the command  
| $ gsh help  
| to get the list of "gsh" commands. |  
+-----+  
~/Forest/Hut  
[mission 5] $
```

```
kali@epicode: ~
File Actions Edit View Help
~/Forest/Hut
[mission 5] $ gsh goal

Mission goal
Go back to the cellar and get rid of all the spiders. Leave the bats alone: they appear on the castle's coat of arms and are said to confer luck.

Useful commands
rm FILE1 FILE2 ... FILEn
Delete the files (permanently).
Remark: `rm` is an abbreviation for "remove".

~/Forest/Hut
[mission 5] $ cd
~
[mission 5] $ cd Castle
~/Castle
[mission 5] $ ls
Cellar Great_hall Main_building Main_tower Observatory
~/Castle
[mission 5] $ cd Cellar
~/Castle/Cellar
[mission 5] $ ls
barrel_of_apples bat_1 bat_2 spider_1 spider_2 spider_3
~/Castle/Cellar
[mission 5] $ rm spider_1 spider_2 spider_3
~/Castle/Cellar
[mission 5] $ ls
barrel_of_apples bat_1 bat_2
~/Castle/Cellar
[mission 5] $ gsh check
Congratulations, mission 5 has been successfully completed!
[ progress was saved in /home/kali/gameshell-save.sh ]

Use the command
$ gsh help
to get the list of "gsh" commands.

~/Castle/Cellar
[mission 6] $
```

```
kali@epicode: ~  
File Actions Edit View Help  
| Move the files to the directory.  
| Remark: "mv" is an abbreviation of "move".  
|  
| The "-" symbol is an abbreviation for the initial directory.  
| Example: wherever you are, "~/Tavern" denotes the directory (or file) "Tavern" in the initial directory.  
|  
|-----|  
()=( @=()  
.  
~  
~/Garden  
[mission 6] $ ls  
coin_1 coin_2 coin_3 Flower_garden Maze Shed  
~/Garden  
[mission 6] $ mv coin_1 coin_2 coin_3 ~/Castle  
~/Garden  
[mission 6] $ mv coin_1 coin_2 coin_3 ~/Hut/Chest  
mv: target '/home/kali/gameshell/World/Hut/Chest': No such file or directory  
~/Garden  
[mission 6] $ ls  
Flower_garden Maze Shed  
~/Garden  
[mission 6] $ cd  
~  
[mission 6] $ ls  
Castle Forest Garden Mountain Stall  
~  
[mission 6] $ castle  
castle: command not found  
~  
[mission 6] $ cd Castle  
~/Castle  
[mission 6] $ mv coin_1 coin_2 coin_3 ~/Hut/Chest  
mv: target '/home/kali/gameshell/World/Hut/Chest': No such file or directory  
~/Castle  
[mission 6] $ mv coin_1 coin_2 coin_3 ~/Forest/Hut/Chest  
~/Castle  
[mission 6] $ gsh check  
Congratulations, mission 6 has been successfully completed!  
[ progress was saved in /home/kali/gameshell-save.sh ]  
|-----|  
| Use the command  
| $ gsh help  
| to get the list of "gsh" commands.  
|-----|  
~/Castle  
[mission 7] $
```

```
kali@epicode: ~  
File Actions Edit View Help  
~avahi ~dnsmasq/ ~irc ~miredo ~polkitd/ ~rtkit/ ~sync/ ~www-data/  
~backup/ ~_galera ~kali/ ~mosquitto/ ~postgres/ ~saned/ ~sys/  
~bin/ ~games/ ~lightdm/ ~mysql ~proxy/ ~speech-dispatcher/ ~systemd-network/  
~colord/ ~geoclue/ ~list ~news ~pulse ~sshd/ ~systemd-timesync/  
~cups-pk-helper ~gophish/ ~lp ~nm-openconnect/ ~redis/ ~ssls ~tcpdump  
~daemon/ ~gvmm/ ~mail/ ~nm-openvpn/ ~redsocks ~statd/ ~tss/  
~Debian-snmpp/ ~inetsim/ ~man/ ~nobody ~root/ ~strongswan/ ~usbmux  
~/Garden  
[mission 7] $ mv .44633_coin_2 .54011_coin_1 .54561_coin_3 ~  
~ apt ~dnscpd/ ~iodine/ ~messagebus ~ntpdsec ~rpc/ ~stunnel4 ~uucp  
~avahi ~dnsmasq/ ~irc ~miredo ~polkitd/ ~rtkit/ ~sync/ ~www-data/  
~backup/ ~_galera ~kali/ ~mosquitto/ ~postgres/ ~saned/ ~sys/  
~bin/ ~games/ ~lightdm/ ~mysql ~proxy/ ~speech-dispatcher/ ~systemd-network/  
~colord/ ~geoclue/ ~list ~news ~pulse ~sshd/ ~systemd-timesync/  
~cups-pk-helper ~gophish/ ~lp ~nm-openconnect/ ~redis/ ~ssls ~tcpdump  
~daemon/ ~gvmm/ ~mail/ ~nm-openvpn/ ~redsocks ~statd/ ~tss/  
~Debian-snmpp/ ~inetsim/ ~man/ ~nobody ~root/ ~strongswan/ ~usbmux  
~/Garden  
[mission 7] $ mv .44633_coin_2 .54011_coin_1 .54561_coin_3 ~/Castle  
~/Garden  
[mission 7] $ cd  
~  
[mission 7] $ ls  
Castle Forest Garden Mountain Stall  
~  
[mission 7] $ cd Castle  
~/Castle  
[mission 7] $ ls  
Cellar Great_hall Main_building Main_tower Observatory  
~/Castle  
[mission 7] $ ls -A  
.44633_coin_2 .54011_coin_1 .54561_coin_3 Cellar Great_hall Main_building Main_tower Observatory  
~/Castle  
[mission 7] $ cd  
cd cd-create-profile cd-fix-profile cd-iccdump cd-it8  
~/Castle  
[mission 7] $ mv .44633_coin_2 .54011_coin_1 .54561_coin_3 ~/Forest/Hut/Chest  
~/Castle  
[mission 7] $ gsh check  
Congratulations, mission 7 has been successfully completed!  
[ progress was saved in /home/kali/gameshell-save.sh ]  
+-----+  
| Use the command |  
| $ gsh help |  
| to get the list of "gsh" commands. |  
+-----+  
~/Castle  
[mission 8] $
```



```
kali@epicode: ~
File Actions Edit View Help

Shell patterns

*
The "*" character stands in for any sequence of characters
(including an empty sequence).

?
The "?" character stands in for any single character.

Those wildcards can be used to denote lists of existing files / directories in the current working directory.

For example: if the current folder contains
file-1 Folder-1 file-14 potato
then
*      -> file-1 Folder-1 file-14 potato
*1     -> file-1 Folder-1
*0*    -> Folder-1 potato
x*     -> error, no matching file
*-?    -> file-1 Folder-1
*-??   -> file-14

~/Castle/Cellar
[mission 8] $ ls -A
10096_spider_43 1224_spider_35 2076_spider_13 22816_spider_21 2853_spider_50 32178_spider_47 6299_spider_11 8594_spider_19
10257_spider_31 13710_spider_1 21442_spider_45 2549_spider_9 28622_spider_33 3337_spider_32 7098_spider_15 8826_spider_10
10297_spider_38 15462_spider_12 21767_spider_28 26464_bat_1 29213_spider_2 3356_spider_41 7258_spider_6 9195_spider_49
10657_spider_4 176_spider_17 21776_spider_7 26685_spider_16 29705_spider_24 3639_spider_34 7611_spider_18 919_bat_2
11066_bat_4 18001_bat_5 21952_spider_39 27124_spider_22 29727_spider_3 4367_spider_20 7937_spider_26 9933_spider_29
11924_spider_30 18410_spider_5 21969_spider_44 27927_spider_40 3001_spider_36 458_spider_25 8152_spider_42 9994_bat_3
12146_spider_14 19715_spider_48 22672_spider_23 28094_spider_46 31211_spider_8 5975_spider_27 8189_spider_37 barrel_of_apples

~/Castle/Cellar
[mission 8] $ rm *_spider_*

~/Castle/Cellar
[mission 8] $ ls
11066_bat_4 18001_bat_5 26464_bat_1 919_bat_2 9994_bat_3 barrel_of_apples

~/Castle/Cellar
[mission 8] $ gsh check

Congratulations, mission 8 has been successfully completed!

[ progress was saved in /home/kali/gameshell-save.sh ]

+-----+
| Use the command |
| $ gsh help      |
| to get the list of "gsh" commands. |
+-----+

~/Castle/Cellar
[mission 9] $
```

```
kali@epicode: ~
File Actions Edit View Help
The "?" character stands in for any single character.
Remark
The wildcards "*" and "?" don't see hidden files, you need to add an explicit dot at the start of the pattern.

~/Castle/Cellar
[mission 9] $ rm *_spider *_spider_*
rm: cannot remove '*_spider_*': No such file or directory

~/Castle/Cellar
[mission 9] $ rm .*_spider_*
rm: cannot remove '.*_spider_*': No such file or directory

~/Castle/Cellar
[mission 9] $ ls -A
.10593_bat_3 .11066_bat_4 .18001_bat_5 .24274_bat_4 .25287_bat_2 .25692_bat_1 26464_bat_1 .31306_bat_5 919_bat_2 9994_bat_3 barrel_of_apples

~/Castle/Cellar
[mission 9] $ gsh check
Congratulations, mission 9 has been successfully completed!

Congratulations !
From now on, the "ls" command will automatically show a "/" character at the end of directories.

[ progress was saved in /home/kali/gameshell-save.sh ]

+-----+
| Use the command |
| $ gsh help      |
| to get the list of "gsh" commands. |
+-----+

~/Castle/Cellar
[mission 10] $
```

```
kali@epicode: ~  
File Actions Edit View Help  
  
( )=(  
Mission goal  
  
You have taken a fancy to the four standards in the great hall of the castle. As stealing them would not go unnoticed, put a copy (same name, same content) of each in your chest.  
  
Useful commands  
  
cp FILE DIRNAME  
Copy the file to the directory.  
Remark: "cp" is an abbreviation of "copy".  
( )=(  
  
~/Castle/Cellar  
[mission 10] $ ls  
11066_bat_4 18001_bat_5 26464_bat_1 919_bat_2 9994_bat_3 barrel_of_apples  
  
~/Castle/Cellar  
[mission 10] $ cd  
  
~  
[mission 10] $ cd Castle  
  
~/Castle  
[mission 10] $ ls  
Cellar/ Great_hall/ Main_building/ Main_tower/ Observatory/  
  
~/Castle  
[mission 10] $ cd Great_hall  
  
~/Castle/Great_hall  
[mission 10] $ ls  
19862_decorative_shield 41171_suit_of_armour 63429_stag_head standard_1 standard_2 standard_3 standard_4  
  
~/Castle/Great_hall  
[mission 10] $ cp standard_1 standard_2 standard_3 standard_4 ~/Forest/Hut/Chest  
  
~/Castle/Great_hall  
[mission 10] $ gsh check  
  
Congratulations, mission 10 has been successfully completed!  
  
[ progress was saved in /home/kali/gameshell-save.sh ]  
  
| |  
+-----+  
| Use the command |  
| $ gsh help |  
| to get the list of "gsh" commands. |  
+-----+  
| |  
  
~/Castle/Great_hall  
[mission 11] $
```

```
kali@epicode: ~  
File Actions Edit View Help  
~/Castle/Great_hall  
[mission 11] $ gsh goal  
  
Mission goal  
The tapestries in the castle's great hall are also particularly beautiful. Put a copy of each in your chest.  
  
Useful commands  
cp FILE1 FILE2 ... FILEn DIRNAME  
Copy the files to the directory.  
Remark: "cp" is an abbreviation of "copy".  
  
Shell patterns  
*  
The "*" character stands in for any sequence of characters  
(including an empty sequence).  
?  
The "?" character stands in for any single character.  
  
~/Castle/Great_hall  
[mission 11] $ ls  
10289_tapestry_07 12278_tapestry_10 27165_tapestry_03 29301_stag_head 3669_decorative_shield 54337_tapestry_05 64955_tapestry_06 standard_2 standard_4  
10424_tapestry_04 17838_tapestry_02 28535_tapestry_01 31085_tapestry_09 39615_tapestry_08 59814_suit_of_armour standard_1 standard_3  
  
~/Castle/Great_hall  
[mission 11] $ cp *_tapestry_* ~/Forest/Hut/Chest  
  
~/Castle/Great_hall  
[mission 11] $ gsh check  
  
Congratulations, mission 11 has been successfully completed!  
[ progress was saved in /home/kali/gameshell-save.sh ]  
  
Use the command  
$ gsh help  
to get the list of "gsh" commands.  
  
~/Castle/Great_hall  
[mission 12] $
```

```
kali@epicode: ~
File Actions Edit View Help
()=(
Mission goal
While wandering around the first floor of the main tower, some magnificent paintings catch your eye. Add a copy of the oldest one to your chest.
Secondary objectives
Take a moment to admire the sheer beauty of the paintings.
Useful commands
ls -l
Print the list of files of the current directory, with additional information including last modification date.
cat FILE
Display the contents of the file.
()=(

~/Castle/Main_tower/First_floor
[mission 12] $ ls
painting_EkHyMnxX painting_gJlrbDaY painting_ITgvDuZs Second_floor/

~/Castle/Main_tower/First_floor
[mission 12] $ ls -l
total 16
-rw-rw-r-- 1 kali kali 1455 Feb 19 2010 painting_EkHyMnxX
-rw-rw-r-- 1 kali kali 1503 May 13 2001 painting_gJlrbDaY
-rw-rw-r-- 1 kali kali 1055 Aug 28 1981 painting_ITgvDuZs
drwxrwxr-x 3 kali kali 4096 Apr 17 14:57 Second_floor/

~/Castle/Main_tower/First_floor
[mission 12] $ cp painting_ITgvDuZs ~/Forest/Hut/Chest

~/Castle/Main_tower/First_floor
[mission 12] $ gsh check

Congratulations, mission 12 has been successfully completed!

[ progress was saved in /home/kali/gameshell-save.sh ]
The command 'cal' is required for mission misc/01_cal_nostradamus/init.sh.
(Debian / Ubuntu: install package 'ncal')
Error: mission 13 is cancelled because some dependencies are not met.

|
| Use the command
| $ gsh help
| to get the list of "gsh" commands.
|

~/Castle/Main_tower/First_floor
[mission 14] $
```

```
kali@epicoder: ~  
File Actions Edit View Help  
|| Define the synonym ||  
|| la ||  
|| for the command ||  
|| ls -A ||  
|| and check that it works as expected. ||  
|| How fortunate, there is a nice rock hidden just where you are. ||  
|| Useful commands ||  
|| alias STRING='COMMAND' ||  
|| Create a synonym for a string, that will stand for a command. ||  
/8\~  
( \8/  
\ \ /  
~/Castle/Main_tower/First_floor  
[mission 14] $ la='ls -A'  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ la  
la: command not found  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ alias la  
bash: alias: la: not found  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ alias la='ls -A'  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ alias  
alias la='ls -A'  
alias ls='ls --literal -p'  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ la  
.nice_rock painting_EkHyMnXX painting_gJIrbDaY painting_ITgvDuZs Second_floor/  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ gsh check  
  
Congratulations, mission 14 has been successfully completed!  
  
[ progress was saved in /home/kali/gameshell-save.sh ]  
  
| |  
--+--+  
| Use the command |  
| $ gsh help |  
| to get the list of "gsh" commands. |  
--+--+  
| |  
  
~/Castle/Main_tower/First_floor  
[mission 15] $
```

```
kali@epicode: ~  
File Actions Edit View Help  
~/Castle/Main_tower/First_floor  
[mission 15] $ gsh goal  
  
Mission goal  
Create a file named "journal.txt" in your chest and write a short message in it.  
You can use this file to record your notes and solutions for the upcoming missions.  
  
Details  
`nano` is a command-line text editor. You can use it whenever you need to edit a file from the shell.  
  
Useful commands  
nano FILE  
Edit the file from the shell.  
(If the file does not exist, it will be created.)  
  
Keybindings are listed at the bottom of the screen (the ^^ symbol means "Control"). The most important ones are:  
Control-x quit  
Control-o save  
Control-w search for a string  
  
Remark: do not use Control-s or Control-z!  
  
~/Castle/Main_tower/First_floor  
[mission 15] $ cd  
~  
[mission 15] $ cd Forest/Hut/Chest  
~/Forest/Hut/Chest  
[mission 15] $ nano journal.txt  
~/Forest/Hut/Chest  
[mission 15] $ gsh check  
Congratulations, mission 15 has been successfully completed!  
[ progress was saved in /home/kali/gameshell-save.sh ]  
  
Use the command  
$ gsh help  
to get the list of "gsh" commands.  
  
~/Forest/Hut/Chest  
[mission 16] $
```

[illegible]