

# **LAPORAN TUGAS BESAR IF2121:LOGIKA INFORMATIKA**

Survival Adventure Game

Kelas 02/Kelompok 10

Oleh:

Manasye Shousen Bukit(13516122)

Ahmad Izzan(13516116)

William Juniarta Hadiman(13516026)

Juan Felix T(13516143)



SEKOLAH TEKNIK ELEKTRO DAN INFORMATIKA  
PROGRAM STUDI TEKNIK INFORMATIKA  
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# Bab 1

## Penjelasan *Command* dalam game

### 1.1 Menu Utama

start.	-> memulai permainan. Memilih antara memulai permainan baru atau meload game yang pernah disimpan.
new	-> memulai permainan baru.
load.(namafile)	-> me-load permainan yang sudah pernah disimpan, jika belum pernah disimpan, akan memunculkan pesan kesalahan jika belum pernah menyimpan permainan.
quit.	-> keluar dari permainan.

### 1.2 Dalam Permainan

help.	-> menampilkan semua command yang dibutuhkan dalam permainan.
look.	-> menampilkan keadaan pemain saat ini dalam map beserta sekelilingnya dalam map 3x3

```
| ?- look.
You're in forest
# # #
# P E
# ^ -
```

Gambar 1.1 : *command* look.

n. s. w. e.	-> perintah bergerak, n=utara, s=selatan, w=west, e=east.
take(Object).	-> mengambil objek disekitar pemain, memunculkan pesan kesalahan jika objek tidak ada atau inventory penuh.

```
| ?- take(medicalkit).
You took medicalkit !
```

no  
Gambar 1.2 : *command* take berhasil.

```
| ?- take(rice).
rice does not exist here or your inventory is full
```

no  
Gambar 1.3 : *command* take gagal.

drop(Object).	-> membuat suatu objek dari inventory pemain, memunculkan pesan kesalahan jika objek tidak ada di inventory.
---------------	--

```
| ?- drop(axe).  
You drop axe !
```

```
(16 ms) yes
```

Gambar 1.3 : *command* drop berhasil.

```
| ?- drop(rice).  
rice does not exist in your inventory
```

```
no
```

Gambar 1.4 : *command* drop gagal.

use(Object). -> menggunakan suatu objek dari inventory pemain, memunculkan pesan kesalahan jika objek tidak ada di inventory.

```
| ?- use(medicalkit).  
You treated your wounds with medicalkit.
```

```
yes
```

Gambar 1.5 : *command* use berhasil.

```
| ?- use(axe).  
axe does not exist in your inventory
```

```
no
```

Gambar 1.6 : *command* use gagal.

attack. -> menyerang musuh yang berada di satu tempat dengan pemain, memunculkan pesan kesalahan jika musuh tidak ada di sekitar.

status. -> menampilkan status pemain saat ini.

```
Health : 130  
Hunger : 96  
Thirst : 96  
Weapon : none  
Crap,take something already dude.Or do you want to die here?
```

```
(15 ms) yes
```

Gambar 1.7 : *command* status.

save(filename).-> menyimpan keadaan game saat ini kedalam file.

map. -> menampilkan keseluruhan map (membutuhkan objek radar di inventory untuk menggunakannya). Menampilkan pesan kesalahan jika tidak ada radar dalam inventory.

```
| ?- map.
s # # # # # # # # # # # # # # # # # # # # #
# ^ - ^ E ^ E ^ - ^ - ^ f ^ - ^ - ^ s ^ - ^ #
# ^ - ^ b w - ^ - ^ b ^ E m - ^ - ^ r m m - ^ #
# ^ P ^ ~ ^ s ^ ~ ^ ~ ^ ~ ^ ~ ^ ~ ^ w ^ ~ ^ ~ ^ #
# ^ m f w f f f ~ ^ ~ ^ ~ ^ ~ ^ ~ ^ ~ ^ m ~ ^ #
# ^ ~ ^ ~ ^ ~ E w ^ ~ ^ ~ ^ ~ ^ s ^ ~ ^ ~ ^ E #
# ^ s w ~ ^ m m b w m ^ w ^ E ^ ~ ^ ~ ^ ~ #
# s ~ ^ f ^ ~ ^ ~ ^ b ^ r ^ f ^ f s ~ ^ ~ #
# ^ ^ ^ ^ ^ E ^ ^ ^ ^ ^ ^ ^ m ^ E ^ ^ f s ^ #
# ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ #
# # # # # # # # # # # # # # # # # # # # #
```

Gambar 1.8 : *command* map.

expand(backpack) -> menambah ruang di inventory, harus memiliki item backpack terlebih dahulu.

nap. -> menambah health, dengan mengurangi hunger dan thirsty.

# Bab 2

## Hasil Eksekusi Program

?- start.															
00	00	00	00	00000000	00000000	00000000	00000000	00000000	00000000	00	00	00000000	00000000		
00	00	00	00	00	00	00	00	00	00	00	00	0000	0000	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00000000	00	00	00	00	00	0000	00000000	00000000	00	0000	00000000	00	0	00	00000000
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00000	00	00	00000000	00000000	00	00	00000000	00	00	00	00000000	00000000	

Do you want to load,have a new game or quit from the game [load/new/quit] ?

Gambar 2.1 : Menu Utama

```
| ?- e.  
You're in open field  
You see enemy nearby!  
on your north there's fence  
on your west there's forest  
on your south there's open field  
on your east there's forest
```

```
You're in forest
on your north there's fence
on your west there's open field
on your south there's forest
on your east there's open field
```

## ကန

```
| ?- e.  
You're in open field  
You see enemy nearby!  
on your north there's fence  
on your west there's forest  
on your south there's open field  
on your east there's forest
```

Gambar 2.2 : move.

```
| ?- attack.  
You got no weapon tho  
You took 19 damage...
```

```
| ?- status.
Health : 81
Hunger : 97
Thirst : 97
Weapon : none
Crap,take something already dude.Or do you want to die here?
```

Gambar 2.3 : attack tanpa weapon.

```
| ?- look.
You're in open field
You see enemy nearby!
# # #
^ p ^
^ b w
```

Gambar 2.4 command look.

```
| ?- s.
You're in open field
theres backpack, extra storage for your inventory!
on your north there's open field
on your west there's forest
on your south there's open field
on your east there's forest
```

```
| ?- take(backpack).
You took backpack !
You took 19 damage...
```

no

Gambar 2.5 take namun masih satu petak dengan enemy.

```
| ?- e.
You're in forest
theres tea, could definitely cure yout thirst
on your north there's forest
on your west there's open field
on your south there's forest
on your east there's open field
```

```
| ?- look.  
You're in forest  
You see enemy nearby!  
theres tea, could definitely cure yout thirst  
- ^ -  
- P -  
- E s
```

```
| ?- e.  
You're in open field  
on your north there's open field  
on your west there's forest  
on your south there's open field  
on your east there's forest
```

no

```
| ?- w.  
You're in forest  
You see enemy nearby!  
on your north there's forest  
on your west there's open field  
on your south there's forest  
on your east there's open field
```

```
| ?- use(axe).  
You held axe in your hand .  
You took 19 damage...
```

Gambar 2.6 command use, namun masih satu tempat dengan enemy.

```
| ?- attack.  
attacking enemy nearby  
You took 19 damage...  
You kill 1 enemy
```

Gambar 2.7 : melakukan attack, musuh berkurang satu.



```

| ?- n.
You're in forest
theres tea, could definitely cure yout thirst
on your north there's forest
on your west there's open field
on your south there's forest
on your east there's open field

no
| ?- take(tea).
You took tea !

yes
| ?- use(tea).
Glad to have tea.Water is important to survive.

yes .

```

```

| ?- s.
You're in forest
theres rice, it seems like it's edible
on your north there's forest
on your west there's lake
on your south there's forest
on your east there's lake

no
| ?- take(rice).
You took rice !

no
| ?- use(rice).
Yummy.. I love rice.Food is important to survive.

no
| ?- status.
Health : 24
Hunger : 123
Thirst : 118
Weapon : axe
Inventory :
  o backpack
|
(16 ms) yes

```

Gambar 2.8 : command take and use makanan dan minuman, status hungry dan thirst bertambah

```

| ?- n.
You're in forest
theres medicalkit, cure yourself with it!
on your north there's forest
on your west there's lake
on your south there's forest
on your east there's lake

yes
| ?- take(medicalkit).
You took medicalkit !

(16 ms) no
| ?- use(medicalkit).
You treated your wounds with medicalkit.

no
| ?- status.
Health : 54
Hunger : 117
Thirst : 112
Weapon : axe
Inventory :
  o backpack
|
yes

```

Gambar 2.9 : command take and use medicalkit, health bertambah.

```

| ?- take(radar).
You took radar !

no
| ?- map.
# # # # # # # # # # # # # # # # # # # # # # # # # # # #
# ^ - ^ E ^ - ^ - ^ - ^ f ^ - ^ - ^ s ^ - ^ #
# ^ - ^ - ^ - ^ - ^ b ^ - E - E - r m m E #
# ^ - ^ - ^ s ^ - ^ - ^ b - ^ - ^ - ^ - ^ - ^ #
# ^ m ^ ~ ^ ~ ^ ~ ^ ~ ^ ~ ^ ~ ^ w ^ ~ ^ ~ ^ #
# ^ m f w ^ f f ~ ^ ~ ^ ~ ^ ~ ^ ~ ^ ~ ^ m ~ ^ #
# ^ ~ ^ ~ ^ ~ w w ^ ~ ^ E ^ s ^ ~ ^ ~ ^ ~ ^ #
# ^ s w ~ ^ m ^ b w m ^ w ^ ~ ^ ~ ^ ~ ^ ~ ^ #
# s ~ ^ f ^ ~ ^ E ^ b ^ P ^ f ^ f E ~ ^ ~ ^ #
# ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ m E ^ ^ ^ f s ^ ^ #
# ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ #
# # # # # # # # # # # # # # # # # # # # # # # #

```

(32 ms) yes

Gambar 2.10 : command take radar, bisa menggunakan command map.

```

| ?- take(axe).
axe does not exist here or your inventory is full

```

```

| ?- expand(backpack).
Whoa, you upgrade your bag with backpack.

yes
| ?- status.
Health : 100
Hunger : 100
Thirst : 100
Weapon : none
Inventory :
  o axe
  o rice
  o rice
  o rice
  o rice
  o rice
  o rice
  o rice
  o rice
  o noodle
  o lotus
  o axe

(15 ms) yes

```

Gambar 2.11 : use backpack, memperluas inventory (bonus).

```

| ?- drop(axe).
You drop axe !

no
| ?- drop(rice).
You drop rice !

(15 ms) no
| ?- status.
Health : 100
Hunger : 100
Thirst : 100
Weapon : none
Inventory :
  o rice
  o rice
  o rice
  o rice
  o rice
  o rice
  o noodle
  o lotus
  o axe

```

Gambar 2.12 : command drop axe dan rice.

```
| ?- saveGame(tes2).
File has been saved!!
```

```
| ?- start.
```

```

00_00_00_00_00_0000000_00000000_00000000_00000000_00000000_00_00_0000000_00000000_
00_00_00_00_00_00_00_00_00_00_00_00_00_0000_0000_00_00_00_00_
00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_
00000000_00_00_00_00_00_00_0000_00000000_00_0000_0000000000_00_0_00_00000000_00000000_
00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_
00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_00_
00_00_00_0000_00_00_0000000_00000000_00_00_0000000_00_00_00_0000000_00000000_

```

Do you want to load,have a new game or quit from the game [load/new/quit] ?

load.

Input the name of the file with the format (ex : 'save')

tes2.

Load is success

Available commands:

```

start          --- start the game!
help           --- show available commands
quit           --- quit the game
look           --- look around you
n. s. e. w.    --- move
map            --- look at the map and detect enemies (need radar to use)
take(Object)   --- pick up an object
drop(Object)   --- drop an object
use(Object)    --- use an object
expand(Object) --- expand inventory if you have item backpack
attack         --- attack enemy that crosses your path
status         --- show your status
nap            --- take a nap to renew health but decrease hunger and thirst
saveGame(Filename) --- save your game
Legends:
m = medicine
f = food
w = water

```



```

s = weapon
P = player
E = enemy
~,^,f,- = accessible
# = fence(not accessible)
r = radar
b = backpack

```

```

(47 ms) yes
| ?- status.
Health : 100
Hunger : 100
Thirst : 100
Weapon : none
Inventory :

```

```

o rice
o rice
o rice
o rice
o rice
o rice
o rice
o noodle
o lotus
o axe

```

```
(31 ms) yes
```

```
| ?- status.
Health : 1
Hunger : 100
Thirst : 100
Weapon : none
Inventory :
o rice
o rice
o rice
o rice
o rice
o rice
o rice
o noodle
o lotus
o axe
```

yes .

Gambar 2.13 : Save and load.

```
yes
| ?- attack.
You got no weapon tho
You took 14 damage...You can not finish your mission ,let your soul be at peace:(. You are going to main menu...

__00__00__00__00__0000000__0000000__0000000__0000000__0000000__0000000__00__00__0000000__0000000__
__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__0000__0000__00__00__
__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__
__00000000__00__00__00__00__00__00000__00000000__00__0000__0000000000__00__0__00__00000000__00000000__
__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__
__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__
__00__00__00000__00__00__00000000__00000000__00__00__00000000__00__00__00__00000000__00000000__

Do you want to load,have a new game or quit from the game [load/new/quit] ?
|
```



Gambar 2.14 : Game logic ketika kalah.

```
| ?- attack.
attacking enemy nearby
You took 7 damage...
You kill 1 enemy
You defeat all enemy . Glorious triumph await for you :)). You are going to main menu...

__00__00__00__00__0000000__0000000__0000000__0000000__0000000__0000000__00__00__0000000__0000000__
__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__0000__0000__00__00__
__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__
__00000000__00__00__00__00__00__00000__00000000__00__0000__0000000000__00__0__00__00000000__00000000__
__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__
__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__
__00__00__00000__00__00__00000000__00000000__00__00__00000000__00__00__00__00000000__00000000__

Do you want to load,have a new game or quit from the game [load/new/quit] ?
```

Gambar 2.15 : Game logic ketika menang.

```
| ?- status.
Health : 100
Hunger : 100
Thirst : 100
Weapon : none
Crap,take something already dude.Or do you want to die here?

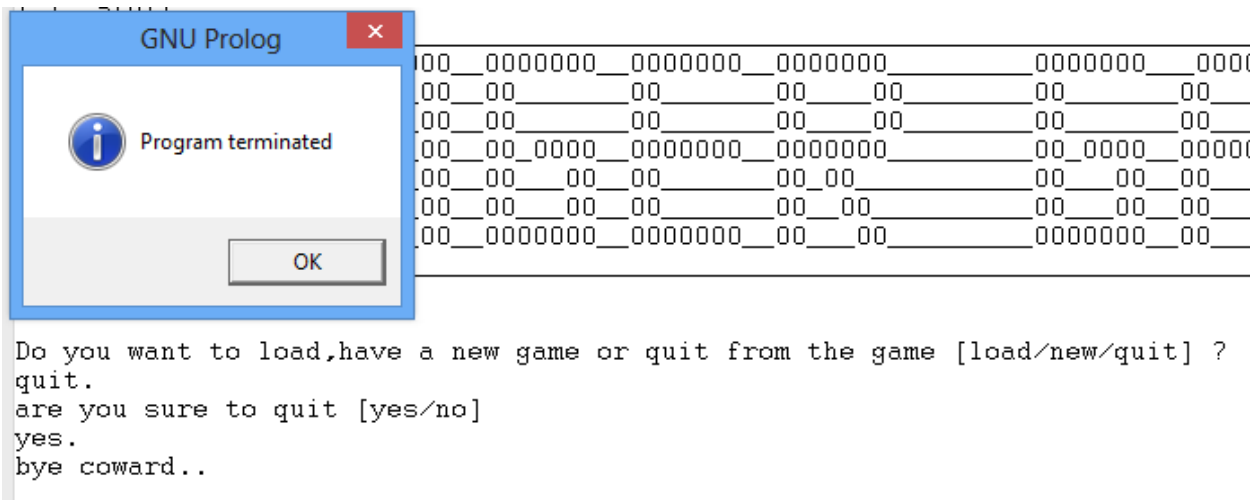
yes
| ?- nap.
You have treated your wounds by take a nap.But hmmm ,I feel more hungry and thirsty

yes
| ?- status.
Health : 120
Hunger : 85
Thirst : 85
Weapon : none
Crap,take something already dude.Or do you want to die here?

yes
```

Gambar 2.16 : nap (bonus).

```
Do you want to load,have a new game or quit from the game [load/new/quit] ?
quit.
are you sure to quit [yes/no]no.
Do you want to load,have a new game or quit from the game [load/new/quit] ?
|
```



Gambar 2.17 : quit( pada main menu).

```

| ?- e.
You're in open field
theres rice, it seems like it's edible
on your north there's fence
on your west there's forest
on your south there's open field
on your east there's forest

yes
| ?- e.
You're in forest
on your north there's fence
on your west there's open field
on your south there's forest
on your east there's open field

(16 ms) yes
| ?- quit.

__00__00__00__00__0000000__0000000__0000000__0000000__0000000__0000000__00__00__0000000__0000000__
__00__00__00__00__00__00__00__00__00__00__00__00__00__00__0000__0000__00__00__00__00__00__00__
__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__00__
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__00__00__000000__00__00__00000000__00000000__00__00__00000000__00__00__00__00__00__00__00000000__00000000__

Do you want to load,have a new game or quit from the game [load/new/quit] ?

```

Gambar 2.17 : quit( pada in game).

## Bab 3

### Pembagian Kerja

<b>Nama</b>	<b>Nim</b>	<b>Tugas</b>
William Juniarta Hadiman	13516026	Membuat command saveGame dan loadGame.  Melakukan debugging dan fixing.
Ahmad Izzan	13516116	Membuat command yang berhubungan dengan Map,enemy,move, ,attack dan membuat game logic.  Melakukan debugging dan fixing.
Manasye Shousen Bukit	13516122	Membuat command yang berhubungan dengan player dan objek seperti use,take,dan drop,serta membuat command bonus.  Melakukan testing,debugging,fixing
Juan Felix Parsaoran Tarigan	13516143	Membuat command yang berhubungan dengan main,storyline,effect,  Melakukan testing, debugging dan fixing.  Membuat laporan