

EPIC GAME

A java developed game



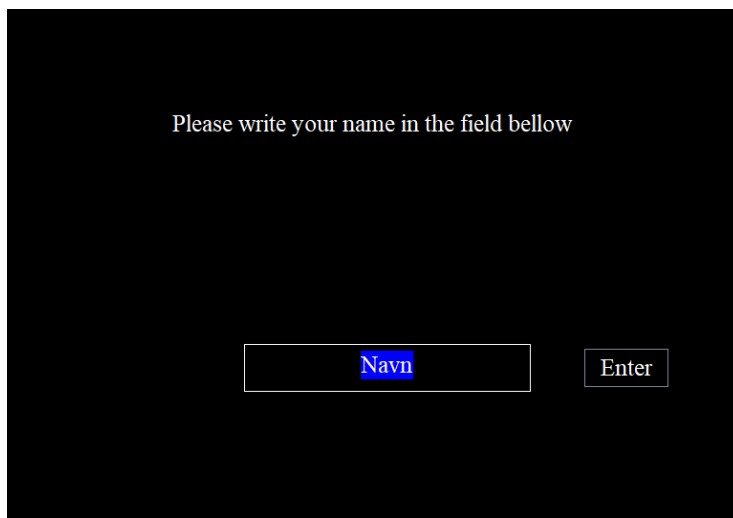
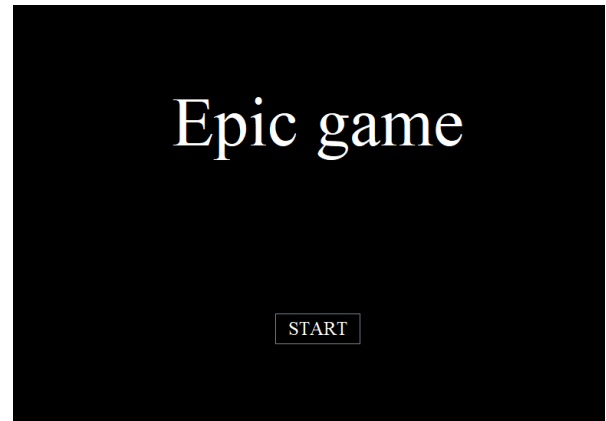
VÅR 2023

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Introduction

Epic Game is a single-player multiple choice game. Every decision and choice you make affect the ending you experience. The language used to create Epic Game is java, everything from the UI to the design are all written in one language. The game also has a built-in saving system that allows you to continue your progression later.

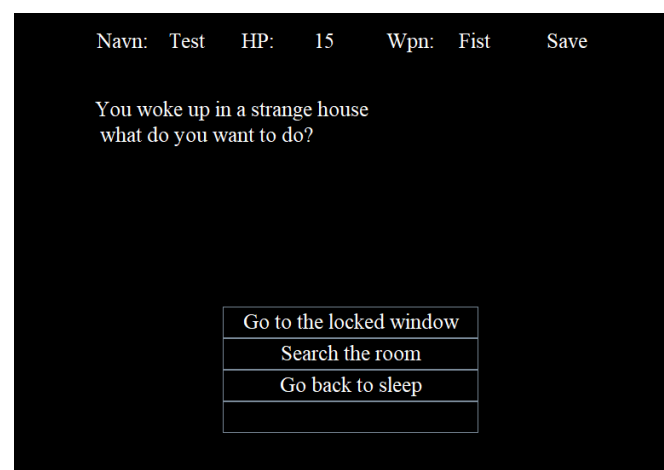


Save progression and Database

To enjoy everything the game has to offer, the game has built-in saving system. To get started, write in your desired name and press enter. Remember the name you wrote in, as it will be important to relocate your progress within the database.

Game UI

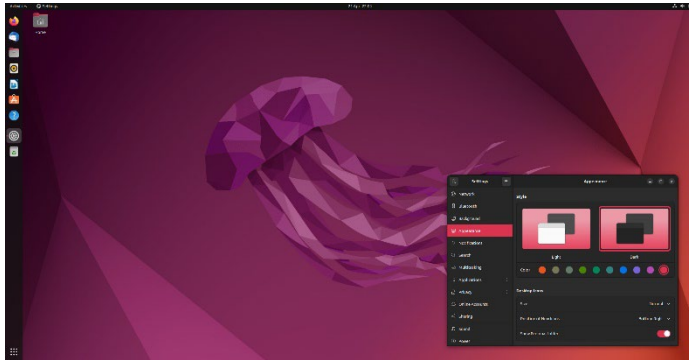
The start screen consists of Weapon, HP and several buttons that each have a function. The button on the top right corner saves the progression, it saves your name, your whereabouts, HP and weapon and saves it in the database. The other 4 aligned in the center are your choices. Each bring you to a room with different choices to choose from.



Player Panel

The player panel consist of Name, Hp, Weapon and the save button. The Hp and Weapon are bound to change throughout the game, you will gain and lose Hp. There are bosses/monsters that will drain your hp, aiming to kill you and there will be food and drinks that will help you recover.

Navn: Test HP: 15 Wpn: Fist Save

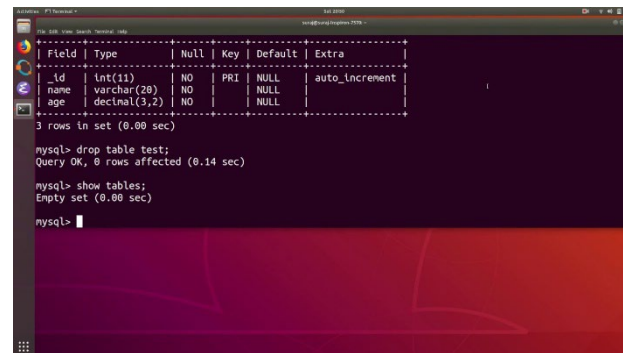


Setting up Linux

When February started, I decided to switch from XAMPP to LAMP. One of the reasons as to why, are for example the security Linux has, in comparison to XAMPP. LAMP not only provides more security but also allows for customizing and it is easy to set up.

Setting up a database

Setting up a database in Linux was quite simple, the only con of setting it up was the installation time and the problem solving. There were some difficulties to access the database from another pc, but by testing and some research, the problem therefore solved itself. The first thing I noticed when switching from XAMPP to LAMP, was the difference of how to access the database, although LAMP has a more difficult way to view your database, the OS, overlay, and security makes up for it. Overall, I would think that the switch would benefit me and my game way more, in comparison to XAMPP.



Index of /

Name	Last modified	Size	Description
Database test/	2022-11-15 13:04	-	
Loginsystem/	2023-02-03 10:52	-	
Nettside/	2023-02-03 13:08	-	
applications.html	2022-06-15 18:07	3.5K	
bitnami.css	2022-06-15 18:07	177	
dashboard/	2022-10-01 08:22	-	
favicon.ico	2015-07-16 17:32	30K	
img/	2022-10-27 10:58	-	
indexm.php	2015-07-16 17:32	260	
test/	2022-11-25 11:17	-	
webalizer/	2022-10-27 10:58	-	
xampp/	2022-10-27 10:58	-	

Apache/2.4.54 (Win64) OpenSSL/1.1.1 PHP/8.1.10 Server at localhost Port 80

Switching from Windows Apache to Linux

Now that I have decided to switch the OS to Linux, naturally I would have to switch over to Linux Apache as well. As of now, I would get no use in setting up Apache, the reasoning for that is simply because I utilize java to make my game. The goal is to eventually finish my website where I plan to store and change info, depending on who logs in.

Time Schedule

Årsoppgave UKE	5	6	7	8	9	10	11	12	13
Prosjektrapport									
Innlogging									
Autentisering av bruker									
Autorisering av tilgang									
Finish story java									
Feilsøk og fiks problem med kode									
Instruksjonsvideo Opplæringsmateriale									
FAQ NETTSIDE									
Risikoanalyse og tiltaksplan									
Back-up rutiner									
Skjema av lovverk									
Oppdater gammeldokumentasjon									
Passord for javaspill									
LAMP									
Sett opp Linux ubuntu?									
Planlagt									
Om det er plass for det									

Epic Game

Epic game

Opplæringsmateriale til IT-lærling

Github

For å få ned koden på redigeringsprogrammet trykk på git-lenken gitt: <https://github.com/Viet-Uy/Arsoppgave> . Trykk på code og koper github lenken de gir deg.

For framtidig bruk, lager vi en bruker på git bash, om git bash ikke er lastet ned, last den ned via denne lenken: <https://gitforwindows.org/>

Lag dermed bruker ved å gjøre dette:

- Open the command line.
- Set your username: `git config --global user.name "FIRST_NAME LAST_NAME"`
- Set your email address: `git config --global user.email "MY_NAME@example.com"`

Bytt ut, first_name Last_name med navn og eposten under med eposten du vil bruke.

```
Viet-Uy@L14YLA232 MINGW64 ~  
$ git config --global user.name "navn etternavn"  
  
Viet-Uy@L14YLA232 MINGW64 ~  
$ git config --global user.email "navn@email.com"
```

Cd fram til mappen du vil at prosjektet skal ligge, jeg lagde en git mappe for dette, men det har ikke like mye å si.

```
Viet-Uy@L14YLA232 MINGW64 ~  
$ cd git  
  
Viet-Uy@L14YLA232 MINGW64 ~/git  
$
```

Git clone lenken du kopiert istad.

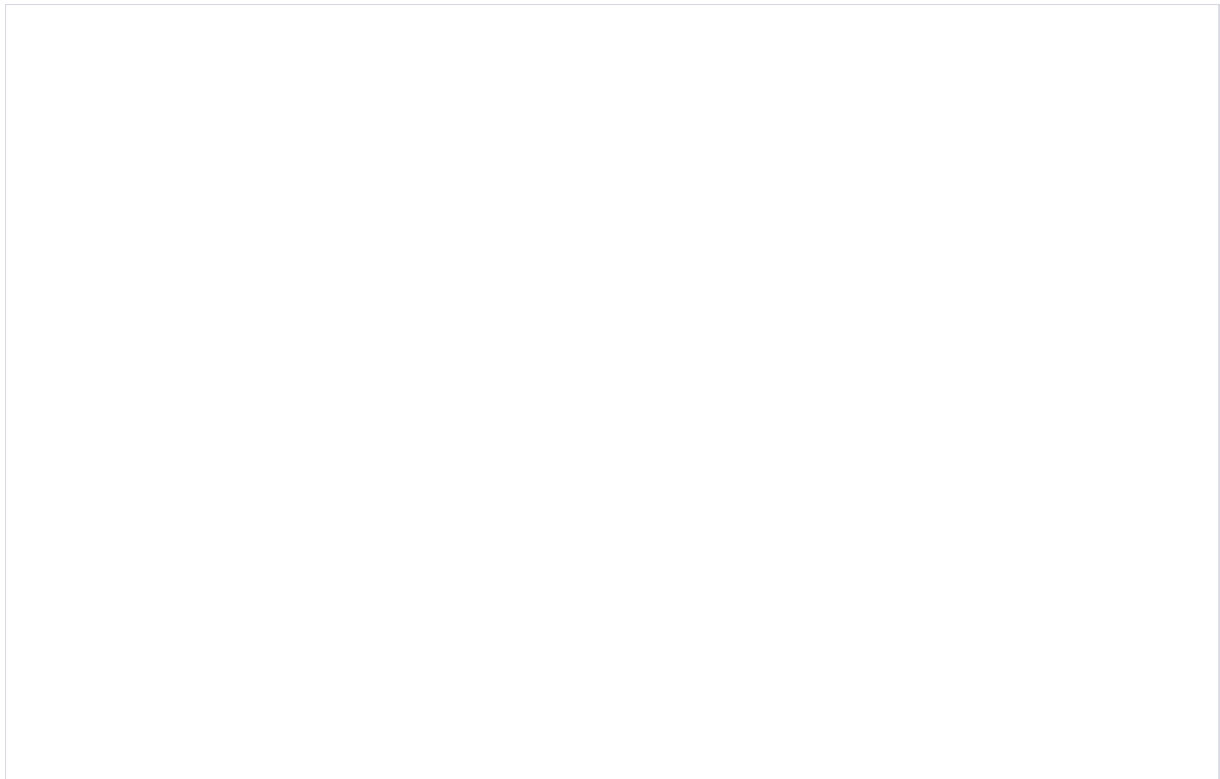
Network diagram



Nettverksdiagram.pdf

Project

Epic game



Setting up SSH

By setting up SSH, I'm able to save myself some time. I can access my server pc without having to connect the server pc to a screen and keyboard. With SSH installed, I can log into the server pc and use the terminal within my own pc. To further save time, I've decided to make a .bat file and run the commands used to start the connection between the computers.

```
cd ../  
ssh uylinuxdb@10.2.2.23|
```

Errors with installing SSH

When I tried to install SSH, I met some long-lasting problems. The error message I kept getting was bad owner or permission in the folder where SSH lies. Even though I tried to search up the problem and fix the problem, there was nothing that helped. The way I

```
C:\Users\Viet-Uy\Desktop>cd ../  
  
C:\Users\Viet-Uy>ssh uylinuxdb@10.2.2.23  
uylinuxdb@10.2.2.23's password:
```

solved this was by deleting the existing files.
By deleting the existing files, I am enabling a new start and new host.

Changing static ip-address via terminal

To change your ip-address, I did the

following. Enter `ls /etc/netplan/` in the terminal and memorize it. Accessed the ethernet by doing `ip a` and paying attention to the word in the middle of the red circle. Therefore, entered and change the ip address by copying the line starting with `sudo nano`. By doing this, I accessed the network file, making it possible to change my ip address and such. When entering the `sudo nano` command I access this display.

```
uylinuxdb@uylinuxdb-HP-260-G3-DM:~$ ls /etc/netplan
01-network-manager-all.yaml
uylinuxdb@uylinuxdb-HP-260-G3-DM:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp2s0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether b0:5c:da:20:3d:49 brd ff:ff:ff:ff:ff:ff
    inet 10.2.2.24/8 brd 10.255.255.255 scope global noprefixroute enp2s0
        valid_lft forever preferred_lft forever
    inet6 fe80::b25c:daff:fe20:3d49/64 scope link
        valid_lft forever preferred_lft forever
uylinuxdb@uylinuxdb-HP-260-G3-DM:~$ sudo nano /etc/netplan/01-network-manager-all.yaml
```

```
# Let NetworkManager manage all devices on this system
network:
  version: 2
  renderer: NetworkManager
  ethernet:
    enp2s0:
      dhcp4: no
      addresses: [10.2.2.24/8]
      gateway4: 10.0.0.1
      nameservers:
        addresses: [0.0.0.0]
```

Read 11 lines

^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark
 ^X Exit ^R Read File ^_ Replace ^U Paste ^J Justify ^_ Go To Line M-E Redo M-6 Copy

When I entered the command, I got this display. Most of the things here were already empty, therefore copied what I was supposed to write. The only exception is, that I paste my own ethernet name under ethernets and customized everything else to my own need. For instance, I want my IP address to be 10.2.2.24 and use 255.0.0.0 as a netmask, I do so by changing the numbers in addresses and doing / either 8 16 or 32 depending on my desired netmask.

PHP website

To further build my semester task, I've chosen to make a website to display my database information. If you have access to the database, you can choose who has access and who doesn't. If you do have access, you can look at how many users have created an account on your website and the number of users that have saved their game progression. If you don't have access on the other hand, you can only access the game progression of different players.


Kartlegging av lovverk

Click on the following picture:

	Hva handler dette lovverket om?	Hvilke paragrafer er relevante for mitt system?	Hvordan kan systemet risikere å bryte loven?	Hvilke konsekvenser kan det ha om systemet bryter denne loven?	Hva må jeg gjøre for å sørge for å ikke bryte denne loven?
Arbeidsmiljøloven	Arbeidsmiljøloven regulerer arbeidsmiljøet på norske arbeidsplasser og har som formål å beskytte arbeidstakerne mot skadevirkninger og sikre et helsefremmende og meningsfylt arbeidsmiljø. Loven omfatter arbeidstid, ferie, vern mot diskriminering og trakassering, helseskadelig arbeidsmiljø og sosial dumping.	Med tanke på at dette spillet er selvutviklet og har ingen funksjoner som kan være for trakassering eller diskriminering så kan den fortsatt være relevant. Om du jobbet som en spillutvikler så er arbeidsmiljøloven veldig relevant for deg, du har krav på arbeidstid, pauser, ferie og vern mot diskriminering og trakassering	For mye arbeidstid Utsatt for helseskadelig forhold, spillutviklere blir utsatt for støy og dårlig ergonomi. Trakassering og diskriminering Brudd på feriebestemmelser	Bøter, straffeforfølges	Sørge for å følge loven og gi nok ferie, vern og arbeidstid.

Risikoanalyse og tiltaksplan

Click on the following picture:

NTNU	Risikovurdering	utarbeidet av	Nummer
		HMS-avd.	HMSRV
HMS/KS		godkjent av	side
		Rektor	1 av 3

Enhet:

Dato: 28.04.

Linjeleder: Viet-Uy

Deltakere ved risikovurderingen (m/ funksjon):

Mulig uønsket hendelse/ belastning	Vurdering av sannsynlighet (1-5)	Vurdering av konsekvens:				Risiko-verdi	Kommentarer/status Forslag til tiltak
		Menneske (A-E)	Ytre miljø (A-E)	Øk/ materiell (A-E)	Om-dømme (A-E)		
Brukeropplysning blir stjålet av en hacker	4	D	A	A	C	C	Øke sikkerheten til nettverket og serverne, implementere sterke passordkrav og totrinsverifisering, kryptere brukerdata.
Spillet krasjer under bruk	3	B	B	B	C	B	Utføre systematiske tester og kvalitetssikring før lansering, løpende vedlikehold og oppdateringer for å sikre stabilitet.
Feilinformasjon gis til spilleren	2	B	A	B	B	B	Teste og kvalitetssikre spillet grundig, ha en redaksjonsgruppe som gjennomgår og godkjenner alle informasjon før publisering.
Spillet har en negativ påvirkning på spillerens mentale helse eller velvære	3	D	A	B	B	B	Utføre testing og undersøkelser på hvordan spillet påvirker spillerne, implementere beskyttelsesmekanismer som tidsbegrensninger og muligheter for å avslutte spillet når som helst.
Spillet inneholder støtende eller diskriminerende innhold	2	D	C	B	B	C	Implementere en rapporteringsfunksjon, Overvåkning, implementere filtre, Opplæring og bevisstgjøring,

Egen evaluering

Throughout this project, I've been met with several complications and problems. All the errors and complications I've been met with, I've searched up and or asked for helped from my classmates. By doing this, I'm not only learning but I've grown to understand it as well.

In this project, I've learned how to set up a LAMPP server and host it in a separate machine with another OS. I've done so by hosting my website and saving my database in a separate machine. I think this will make it easier for me longer down the road.

I would say that my overall performance in this project would be quite good. I've finished all the necessary work and developed my game and website to my fullest extent. Although I didn't completely focus for several days in a row, I still managed to finish it as best as possible.

If I was to do my project all over again, I would start documenting earlier so I could catch on faster. I found myself a little lost after some time of not going through the code. I should've worked evenly throughout the year so I wouldn't struggle so much with catching up to my work.

Kilder

www.stackoverflow.com

www.w3schools.com