COP-290

Assignment 2 Task 1

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Game theme and details

Developers' note

2100

Observing the rise in COVID-19 cases all over the globe, we wanted to create a game which would be a dystopian fiction of a world in an unrestrained strong virus growth. Background sound is also present in our game for better user experience. Our game also has an icon!
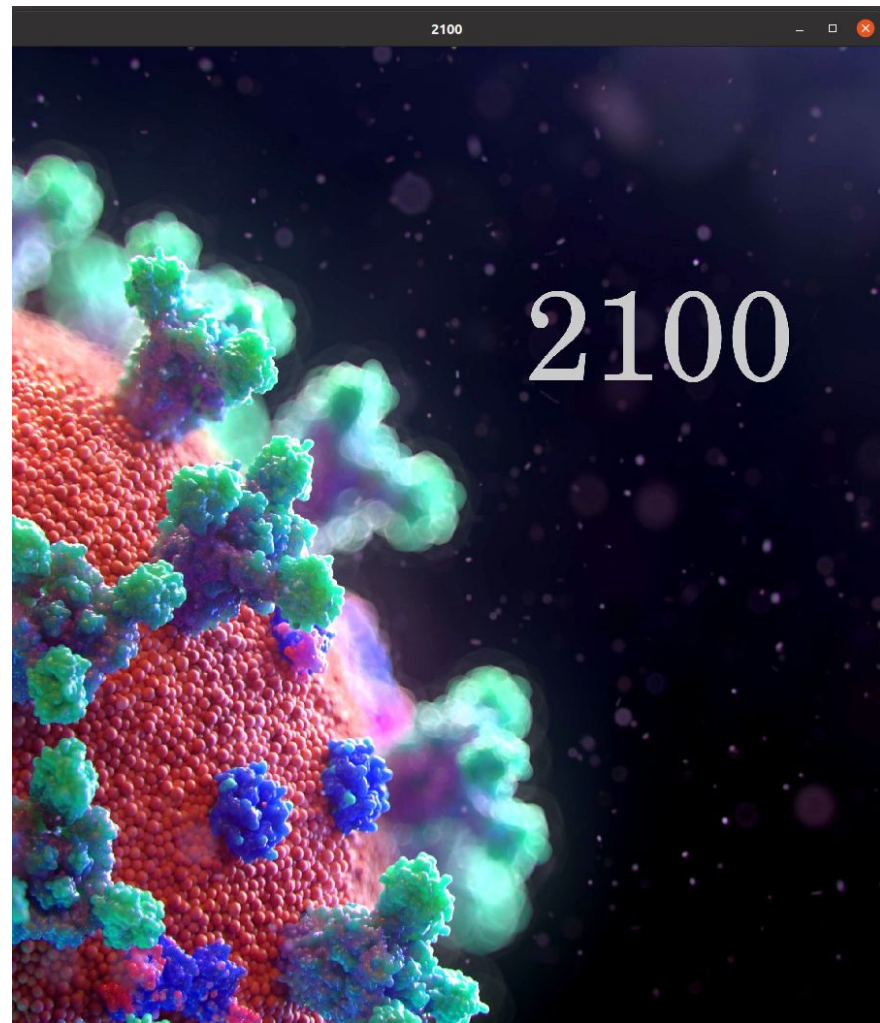
Plot

IT IS THE YEAR 2100
COVID-19 IS GROWING STRONGER DAY BY DAY
SOCIETY HAS REACHED AN APOCALYPTIC SITUATION
DEMOCRACIES HAVE BEEN OVERTHROWN
THE WORLD IS NOW SPLIT INTO CHAOS
ULTIMATE CURE HAS BEEN DEVELOPED
BUT THERE'S A CATCH
THE CURE IS COSTLY AND HENCE HIGHLY LIMITED
MOREOVER IT WORKS ONLY ON THE STRONGEST
FOLLOWING SURVIVAL OF THE FITTEST
A CONTEST TO PROVE YOUR WORTH BEGINS
THE ONE TO GET 10 DOSES FIRST
OR KILL THE OPPONENT IS DEEMED WORTHY
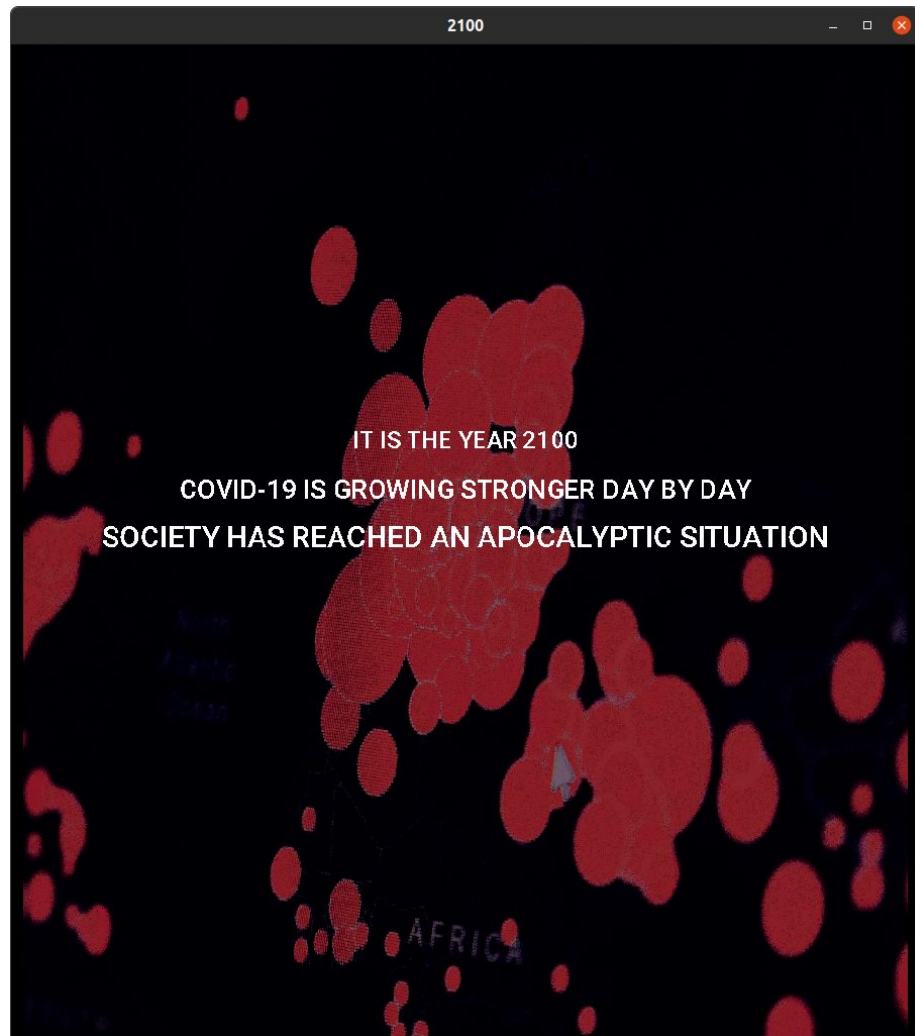OTHER IS EXECUTED UNLESS DEAD ALREADY
AVOID COVID INFESTED AREAS
AVOID YOUR RIVAL'S DEADLY CORONA SHOTS
MAINTAIN GOOD HEALTH
COLLECT THE DOSES QUICK
MAY THE ODDS BE EVER IN YOUR FAVOUR

Rules

PLAYERS START WITH 10 HEALTH AND ZERO DOSES
YOUR HEALTH AND DOSE BARS ARE DISPLAYED ON THE LEFT
THE OPPONENT'S BARS ARE DISPLAYED ON THE RIGHT
COLLECT 10 DOSES FIRST TO WIN
OR SIMPLY SHOOT AND KILL YOUR OPPONENT
USE ARROW KEYS OR W-S-A-D TO MOVE
UP DOWN LEFT OR RIGHT RESPECTIVELY
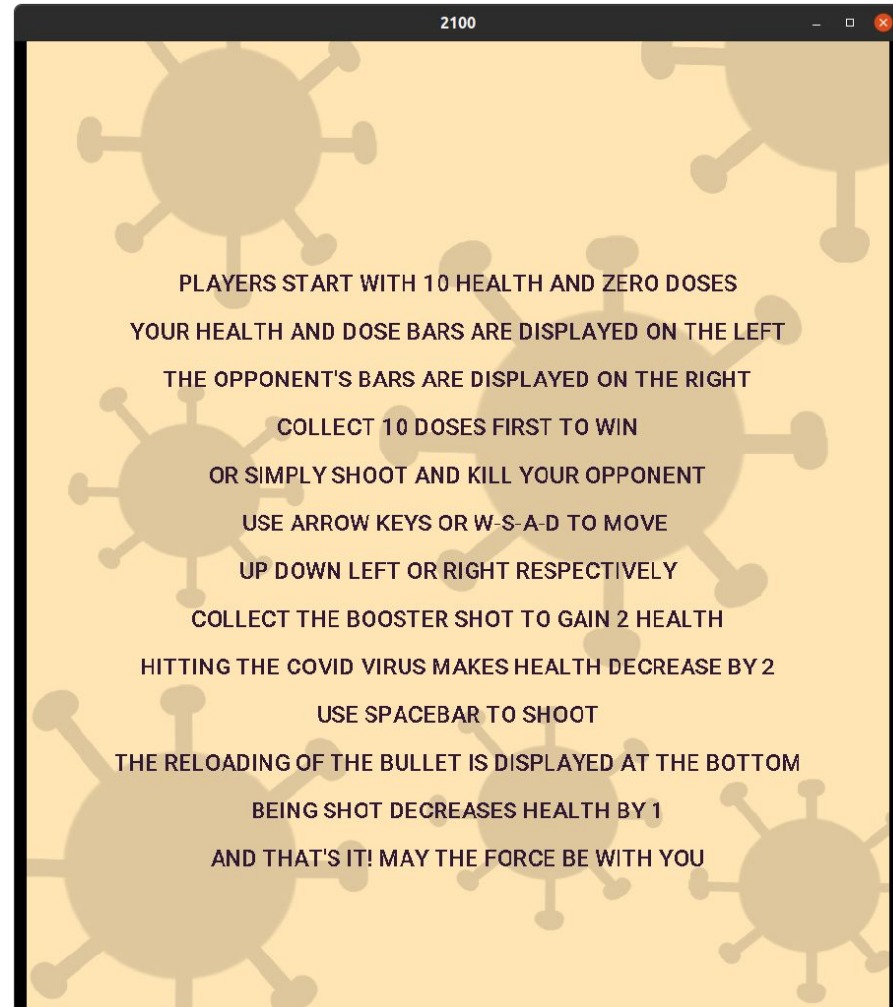COLLECT THE BOOSTER SHOT TO GAIN 2 HEALTH
HITTING THE COVID VIRUS MAKES HEALTH DECREASE BY 2
USE SPACEBAR TO SHOOT
THE RELOADING OF THE BULLET IS DISPLAYED AT THE BOTTOM
BEING SHOT DECREASES HEALTH BY 1
AND THAT'S IT! MAY THE FORCE BE WITH YOU

Game Logic

- The game is very similar to the game of "Capture the Flag" and has been modified to fit the story and make it more interesting
- We have two playing entities capable of harming each other in a maze
- Main goal is to collect 10 flags (vaccine doses)
- Health altering items (corona virus and booster shots) are "randomly" spawned to make the gameplay interesting
- Health, vaccines and exiting game in between are the deciding conditions for winning
- Key presses are used to select choices and escape to exit

Gameplay

Client-server

Choose player[1](server) or player[2](client)
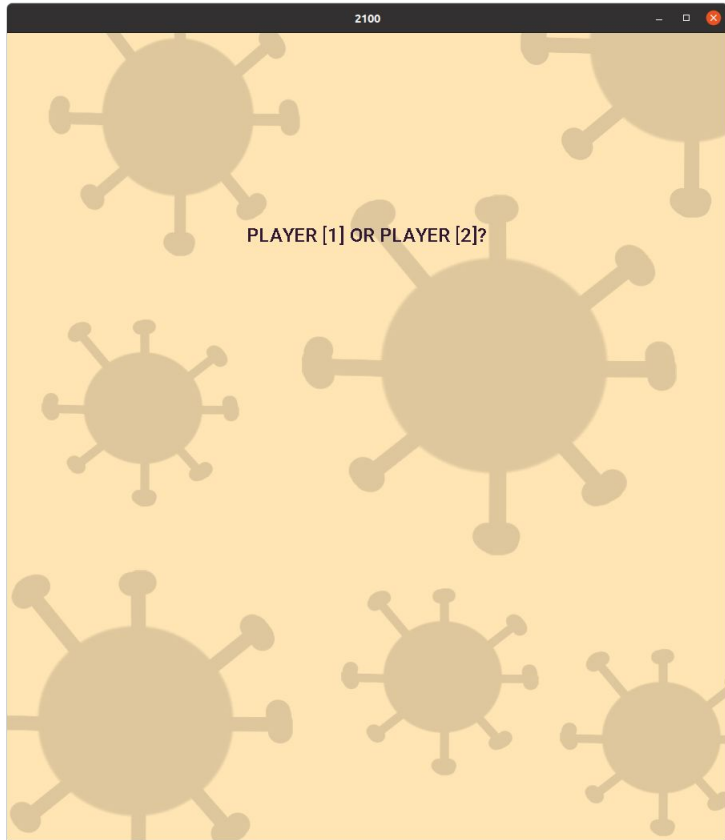
Enter the desired IP address for connection in case of player[2]

PLAYER [1] OR PLAYER [2]?

ENTER IP ADDRESS

127.0.0.1
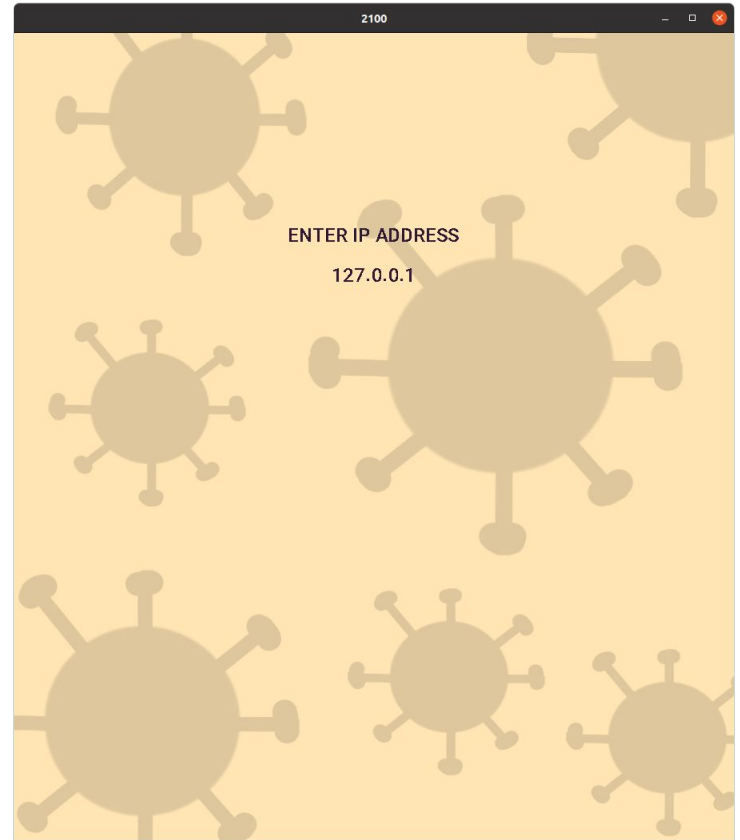
Menu: Main menu offers the choices for the client server sides as shown below

Player 1: server

Player 2: client

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[T]HEME
[M]AP
[C]ONNECT WITH CLIENT
[P]LAY
[S]TORY
[R]ULES

2100

[T]HEME
[C]ONNECT TO SERVER
[P]LAY
[S]TORY
[R]ULES
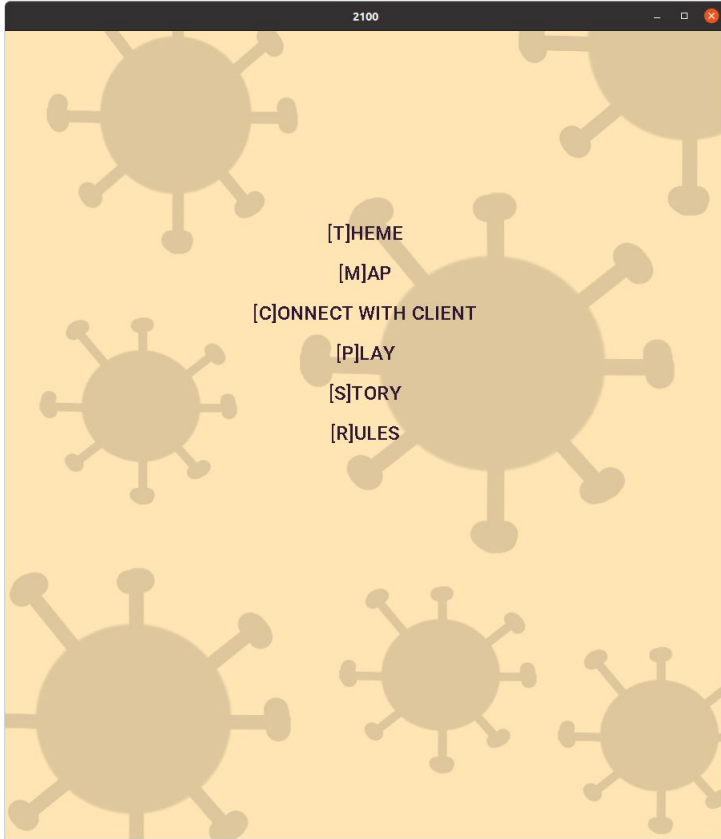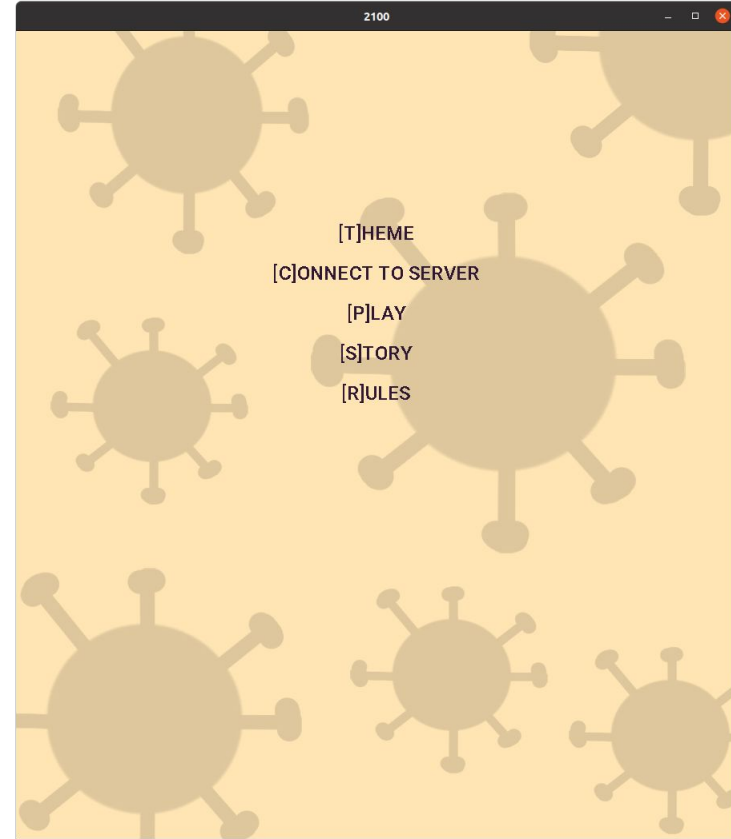
Theme: Three themes are available in our program as shown below

Theme 1

Theme 1

Theme 1

Map

- There are 5 pre-made maps available with names describing their arrangement
- Option to randomly choose out of these 5 maps is available
- A random map generator is also available which instantly generates a new random map
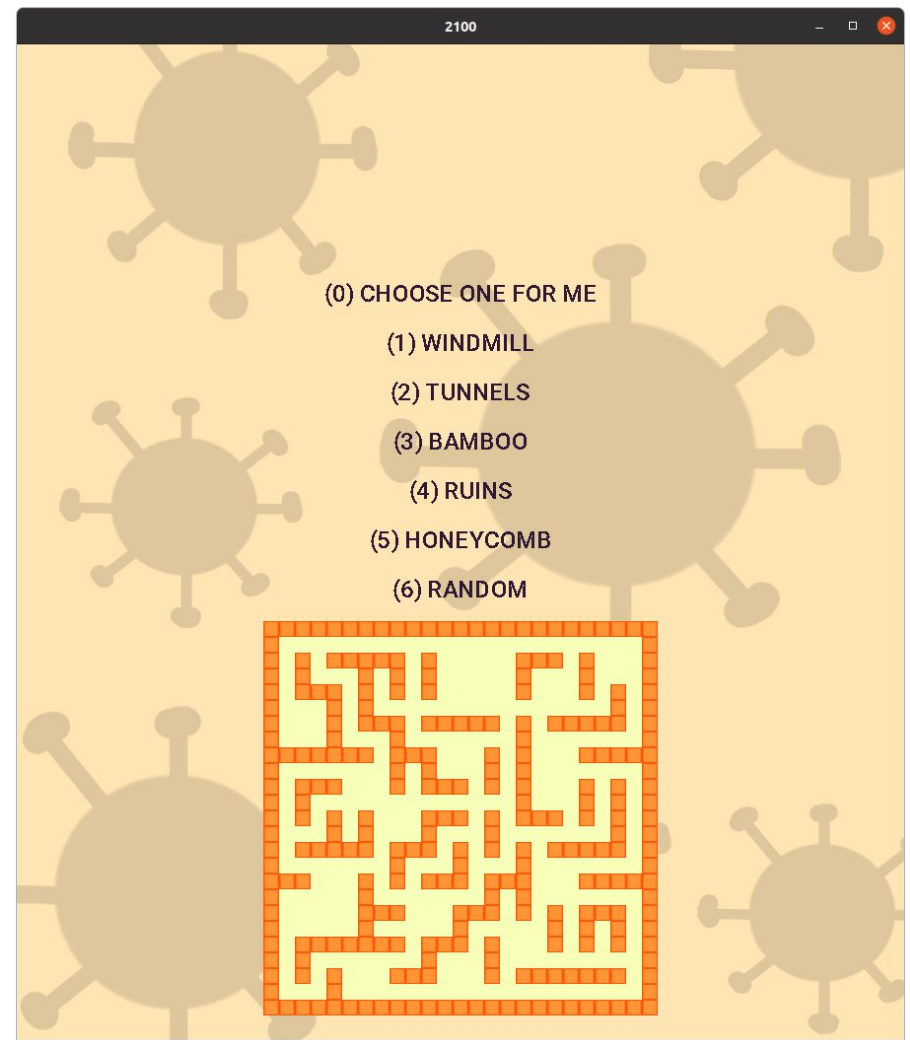
Game

- Player 1 is a black sprite which spawns at top left
- Player 2 is a white sprite which spawns at bottom right
- There are 5 health related spawnables and one vaccine dose present on map at a time
- When hit, the sprite blinks red
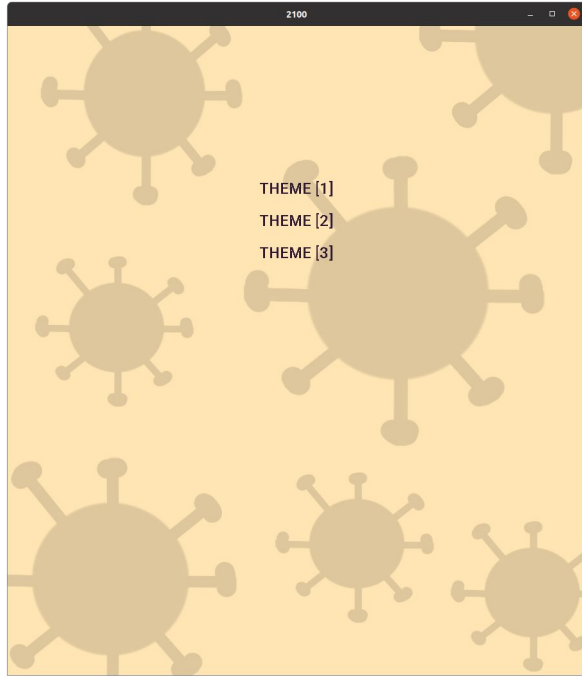- Player's health bar is shown on left and opponent's health bar on right
- Bullet reload time is displayed as red dashes in the bottom of the screen
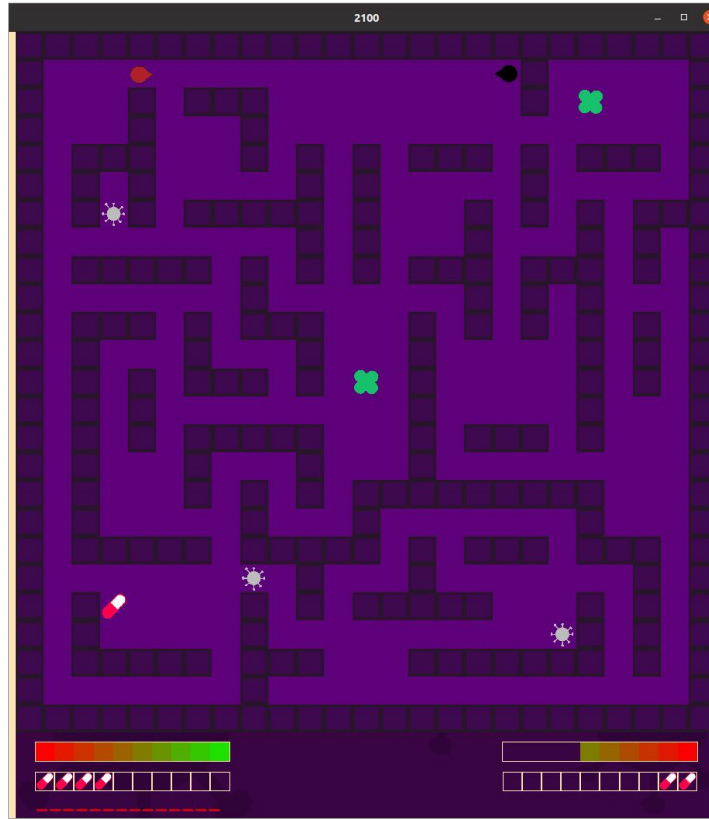
Player 1 view: Opponent looks red because they were hit but a bullet
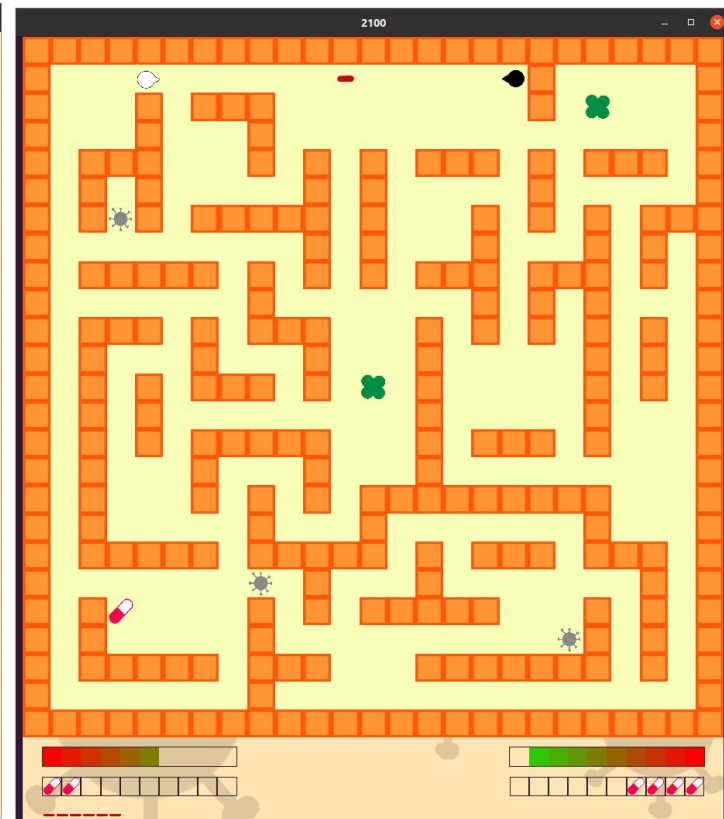
Player 2 view: Bullet is visible

YOU COLLECTED 10 MEDICINES FIRST! YOU WIN :D

[G]O BACK TO MAIN MENU

[Q]UIT

YOUR OPPONENT COLLECTED 10 MEDICINES BEFORE YOU! YOU LOST :(

[G]O BACK TO MAIN MENU

[Q]UIT

YOU DIED! YOU LOST :(

[G]O BACK TO MAIN MENU

[Q]UIT

YOUR OPPONENT DIED! YOU WIN :D

[G]O BACK TO MAIN MENU

[Q]UIT

CLIENT DISCONNECTED FROM THE GAME

[G]O BACK TO MAIN MENU

[Q]UIT

YOU LEFT THE GAME

[G]O BACK TO MAIN MENU

[Q]UIT

Exit screen

When escape is pressed, exit window is shown which gives the player two choices-

1. Go to main menu screen/previous screen
2. Exit game
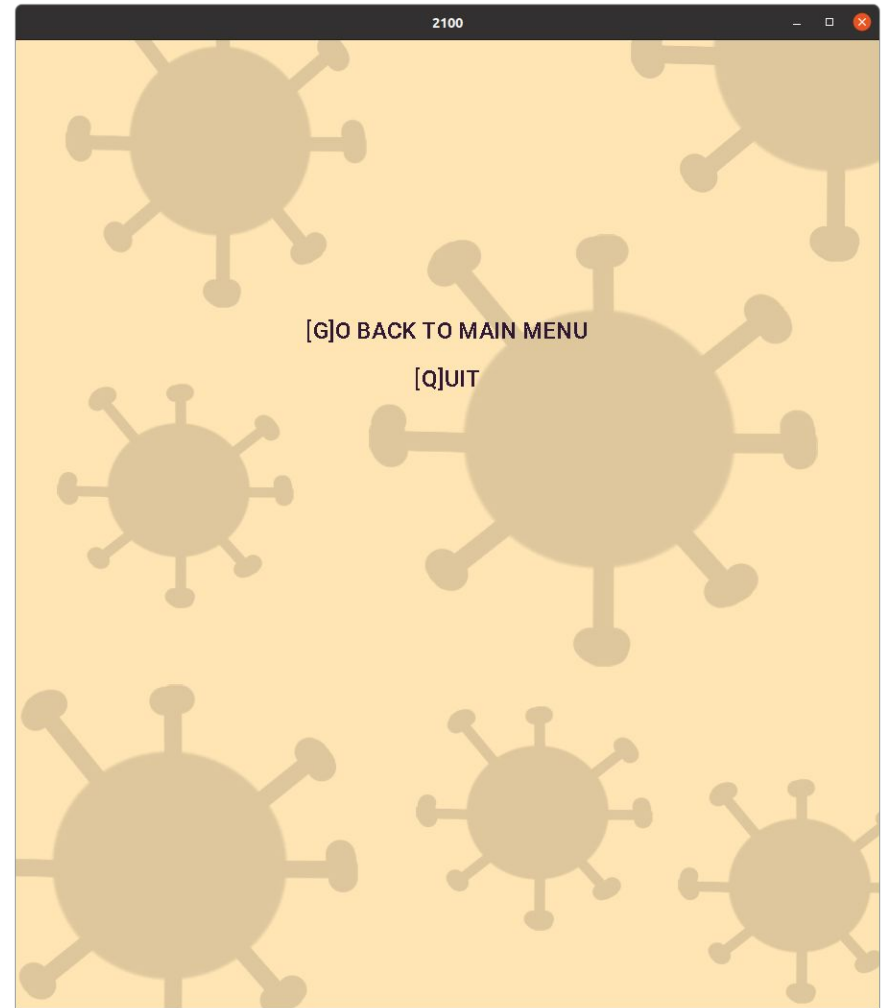
Resources and sources

Images and .tif files

1. Credit for all the .tif files used: us {created using software- Krita (ubuntu)}
2. Credits for the introduction page image {edited}
3. Credits for plot page image {edited}
4. Credit for the common background {Rules, menu, etc}: us {created using software- Krita (ubuntu)}

Font

Font used: Roboto {all schemes}

Font source: Roboto

Glyphs

A	B	C	Č	Ć	D	Đ	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Š	T	U	V	W	X	Y	Z	Ž	a	b
c	č	ć	d	đ	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	š	t	u	v	w	x	y	z	ž	A	Б	В	Г
Ѓ	Д	Ђ	Е	Ё	Є	Ж	З	Ѕ	И	I	Ї	Й	J	К	Л	Љ	М	Н	Њ	О	П	Р	С	Т	Ћ	У	Ў	Ф	Х	Ц	Ч	Џ
Ш	Щ	Ъ	Ы	Ь	Э	Ю	Я	а	б	в	г	ѓ	д	ђ	е	ё	є	ж	з	ѕ	и	і	ї	й	ј	к	л	љ	м	н	њ	о
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Ξ	O	Π	P	Σ	T	Y	Φ	X	Ψ	Ω	α	β	γ	δ	ε	ζ	η	θ	ι	κ	λ	μ	ν	ξ	ο	π	ρ	σ	τ	υ	φ	χ
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Sounds

All the sounds used were open source

Source website: [Free Sound](#)

File names: bomb_hit.wav, flag_hit.wav, game_win.wav, loop.wav, spawn_spawnable.wav, bullet_hit.wav, game_lose.wav, health_hit.wav, shoot.wav, correct_click.wav, game_start.wav, incorrect_click.wav, spawn_flag.wav