

# Key features

The current state of the project.

# Game

The objective is to traverse through a group of checkpoints. The player who reaches the last checkpoint first, wins. There's a scoring system to challenge you.

Yulus increase the character's speed  
Amuls increase the character's health.  
The character drops dead if health drops to zero.  
Profs decrease the character's speed.  
Dogs decrease the character's health.

Look at appendix for chat

# SDL Library used

SDL is a low level library.

# Randomness

Random object generation

Random checkpoints

# Assets Used

Diverse media assets used in this game. All assets were chosen to be ones that don't require any licenses (not even CC).

# Documentation

Every single function has been documented and its purpose explained.

Web based Documentation has been generated and hosted online (subject to repository permissions).

# Multiplayer Network Game

The game uses a server client architecture for game state and events communication. This means that the game can easily scale to a large number of players.  
We've used UDP protocol combined with ENet for network communication.

The game was designed to ensure security and fairplay. The game state is controlled by the server, minimizing any chances of cheating, and the clients merely predict and mimic it. We've used client-side prediction to make the game appear instantaneous.

# Modular Object Oriented Code

We've used classes/structs for every game entity. The methods properly handle and abstract the object's management.

We've broken up our code into logical components that can easily work together. None of the components spans more than 200 lines.



# Incremental Build System

Makefile's incremental build system has been used to avoid compiling and building unchanged files repeatedly

# Chat System

We have an inbuilt player chat system for live chat communication.

# Inclusivity



# Animated Sprites

The sprites are animated.



# Appendix

The chat system.

The game has an inbuilt chat system.