

Project Ethos : Spezifikationen

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1 What is Ethos?

Project Ethos is a fast-paced multiplayer game for up to 4 player. The player will battle each other for a final winner.

2 Main Target

The main target is to create a shortwhile and fun experience for the player. Its not to ment to be competitive.

3 User

A fun game for all Users.

Targetgroup: User of all ages.

Platform: Desktop-Pc, Mobile Devices.

4 Functional Conditions

4.1 Server

A Server is a Object that manages all connections between Server and Client.

- managing clients
- managing connections
- passes relevant data to GameServer

4.2 GameServer

Manages relevant data for the game.

- managing entitys
- managing Physics
- managing Input
- responsible for provoding all neccessary information for entitys
- updates entitys
- updates physics
- updates input
- validating incoming packages

4.3 Physics

Managing all physics relevant data and responsible for all physical calculations

- calculates all physics
- calculates collision and informs colliding entitys
- does not save any data about entitys

5 Ablauf

User starts game, everything is nice. Like Bob Ross did it.

5.1 Server

- Server gets booted
- Server waits for enough player to connect
- as soon as a lobby gets started Server creates a GameServer
- GameServers starts and loads a map
- GameServer loads UiOall connected player into map

5.2 Client

- User starts Client
- Client displays a connection screen
- Client connects to Server
- After successful connection Client show GameState

5.2.1 Timing

Server starts and inits gameserver (t=0)gameserver sets the time=0 at init and updates it (a function getTime that calculates current time)

(t=1200)client logs in and requests welcome package

(t=1200)server send current time(t=1200) to client (with 30ms delay)

(t=1230)client receives currentTime(1200) and saves it for server communication (pos 1)

(t=1300)client updates its state, logs his old state(t=1300, pos1) and sends input data to server(time = 1300)

(t=1300)server updates state and sends pos data to client(t=1300, pos = 1)

(t=1330)server receives client package and sets input of player(t=1300)

(t=1330)client receives pos data from server(t=1300, pos 1) and compares it to logged data

5.2.2 Recieving Data

The client receives data in realtime. This data contains: EntityData The client updates its state with the entity data. data for the player that belogns to the client will checks if the