Introduction:

This project begins with the game engine which is built from the ground up called IO.

IO has the following features.

Engine design

See umlngine.pdf

Diagram, schematic

Description automatically generated

Game:

I created a game a called escape. The objective of this game is to get past obstacles to get to a door getting to the door gets you to the next level. the game consist of three controllable character and getting one of the characters to the door means the level has been

The characters

The game consists of three characters blue, white and pink. All three characters have can jump up, move left or right. All character also has an attack move which throws a projectile each character’s projectiles does different things. If any one of the characters gets to the door that level has been beaten

pink’s projectile kills a target and moves until it hits a wall.

blue’s projectile hits another character that character is frozen and turned into an ice block.

White’s projectile hits another character that character thrown into the air for a moment.

Game design

See umlgame.pdf

Diagram

Description automatically generated

Transition state

See stateTransition.pdf

Diagram, schematic

Description automatically generated

User instruction

W -> jump up

A -> move left

D -> move right

K -> to throw projectile

J -> to change character

Number buttons changes the level

Installation

Type py main.py or python main.py depending on the machine in the root directory (important)

