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**CS99 – final game project**

**Programming Concepts**

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TEAM NAME:

GAME NAME:

NAME: MINKI CHO, MINJAE YU

PROGRAMING LANGUAGE: Java Script(p5.js)

GAME DESCRIPTION: It is Zombie Defense Game  
The game requires players and AI survivors to survive until rescue teams come, destroying the approaching zombies. Since there is not much food and supplies left, you, the main character, and a military-turned-leader, must choose one victim every day when you survive, so everything depends on your choice.

URL: [Rudy-Castan-DigiPen-Teaching/CS099\_game\_project\_minjae\_yu\_minki\_cho: Make 2d game with p5.js (github.com)](https://github.com/Rudy-Castan-DigiPen-Teaching/CS099_game_project_minjae_yu_minki_cho)

**Work Done**

**Shapes**

When the mouse cursor is on the ai, it is used as an expression to know it. There are some circles for this.

if ( ai\_1.x - 30 < mouseX && mouseX < ai\_1.x + 30 && ai\_1.y - 30 < mouseY && mouseY < ai\_1.y + 30 )

        {

            circle( ai\_1.x, ai\_1.y, 10 );

        . . .

**Colors**

It was mainly used to change the color of text. I used it for more noticeable.

                textSize( 20 );

                fill( "black" );

                text( "Choose one survivor to sacrifice to survive your next day.", width / 3, height / 2 );

**Variables**

There so many variables that we used.

These variables are for Sketch.js.

//This is for wall usually it is for set position for ai, bullets and zombies.

//To use these variables it is easier to know the value compare with magic number.

let line\_size = 100;

//This is for wall class

let game\_wall;

//ai

let ai;

let ai\_1, ai\_2, ai\_3, ai\_4;

let ai\_1\_lastTalk = false;

let ai\_2\_lastTalk = false;

let ai\_3\_lastTalk = false;

let ai\_4\_lastTalk = false;

//game\_mode

let game\_mode;

const MAIN\_MENU = 0;

const GAME\_START = 1;

const CREDIT = 2;

const INTERMISSION = 3;

const GAME\_OVER = 4;

const HOW\_TO\_PLAY = 5;

const STORY = 6;

//bullet\_zombie\_distance

let x\_dis;

let y\_dis;

let distance;

//score

let score = 0;

//damage

const gun\_damage = 1;

//preload hit sound

let hit\_sound;

//background

let bg;

let bg1;

let bg2;

//left bullet

let left\_bullet\_img;

//ai\_bullet

let ai\_bullets = [];

let ai\_bullet\_1 = new Array;

let ai\_bullet\_2 = new Array;

let ai\_bullet\_3 = new Array;

let ai\_bullet\_4 = new Array;

//check for it is okay for next day.

let ready\_for\_day1 = false;

let ready\_for\_day2 = false;

let ready\_for\_day3 = false;

let ready\_for\_day4 = false;

let ready\_for\_day5 = false;

let ready\_for\_day6 = false;

//frameCount works when game\_mode is GAME\_START from 0

let count\_start = false;

//player gun magazine

let player\_gun\_bullet = 7;

//day1,2,3,4 img

let day1\_img, day2\_img, day3\_img, day4\_img, day5\_img;

//check AI is picked or not once

let ai\_picked = false;

let check\_keyIsPressed = false;

//This is for ai\_bullet

let ai\_1\_isShoot = true;

let ai\_2\_isShoot = true;

let ai\_3\_isShoot = true;

let ai\_4\_isShoot = true;

**Conditional Statements**

**Loops**

**Functions**

**Classes**

**Arrays**

**Notes**