

# Project Design Document

07/14/2021  
NuduN

## Project Concept

1

### Player Control

You control a

*capsule*

in this

*top Down*

game

where

*Keyboard input*

makes the player

*Move and shoot.*

2

### Basic Gameplay

During the game,

*Enemies, obstacles and powerups*

appear

at

*Random positions.*

and the goal of the game is to

*Shoot the enemies.*

3

### Sound & Effects

There will be sound effects

*When shooting and when bullets hit something*

and particle effects

*Bullets hit something*

[optional] There will also be

*description of any other expected special effects or animation in the project.*

4

### Gameplay Mechanics

As the game progresses,

*More enemies are spawned*

making it

*harder.*

[optional] There will also be

*description of any other gameplay mechanic(s) and their effect on the game.*

5

### User Interface

The

*score*

will

*increase*

whenever

*Enemy is hit.*

At the start of the game, the title

*Shoot at things*

will appear

and the game will end when

*Player is hit.*

6

### Other Features

*Enemies will be used to demonstrate OOP concepts (same base with Move() and Attack() overridden (Inheritance & Polymorphism)), data (speed/health/...) is stored as properties with getters and setters (Encapsulation), base has commonly used functions (Abstraction)*

- 1) *Moves toward player, does not shoot*
- 2) *Keeps at distance from player, shoots*
- 3) *...*

## Project Timeline

Milestone	Description	Due
#1	- <i>Basic objects and scripts</i>	07/14
#2	- <i>Title screen</i>	mm/dd
#3	- <i>OOP concepts on Enemies</i>	mm/dd
#4	- <i>Score counter, game over, restart</i>	mm/dd
#5	- <i>obstacles , levels, sounds. Particle effects, animated prefabs</i>	mm/dd
Backlog	- <i>Feature on backlog - not a part of the minimum viable product</i> - <i>Feature on backlog - not a part of the minimum viable product</i> - <i>Feature on backlog - not a part of the minimum viable product</i>	mm/dd

**Project Sketch**

