
PLANT
VS
ZOMBIE
PLAY

MEMBER

- LÊ ĐỨC HUY - ITITIU23030
- TRẦN KIM VINH - ITITIU23029
- NGUYỄN THÀNH TÀI - ITITIU23023
- TRẦN QUỐC BẢO - ITITWE20033

AGENDA

INTRODUCTION

an overview of the ***Plant&Zombie*** game
and the goal of this project.

AGENDA

PROPERTIES

class diagram application of ***OOP GUI's***
explanationand extra features.

AGENDA

Q+A

It's time to ask and discuss about our project!

INTRODUCTION

START

Objectives

1. Learn how to program games
2. Apply OOP principles
3. Enhance problem-solving skills
4. Develop teamwork skills

Plant V Zombie

Content

In the game, plants protect their garden from zombie attacks. Throughout difficult stages, players battle progressively more dangerous zombies by using various plants with special powers.

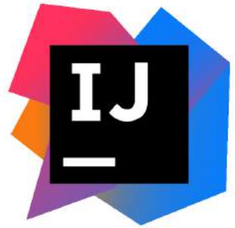
Plant V Zombie

Rule

In order to prevent zombie invasions, players must carefully grow plants, gather resources (such as coins and sun energy), and protect their garden through levels. Protecting your home base, eliminating all zombies, and finishing each level successfully are the goals, and players face ever more difficult tasks as the zombie waves change.

Plant V Zombie

The techiques and tools used



JETBRAINS INTELLIJ

IDE

for programming

GOOGLE DOCS

Project management

GITHUB

Code version management

ADOBE PHOTOSHOP

Graphics design

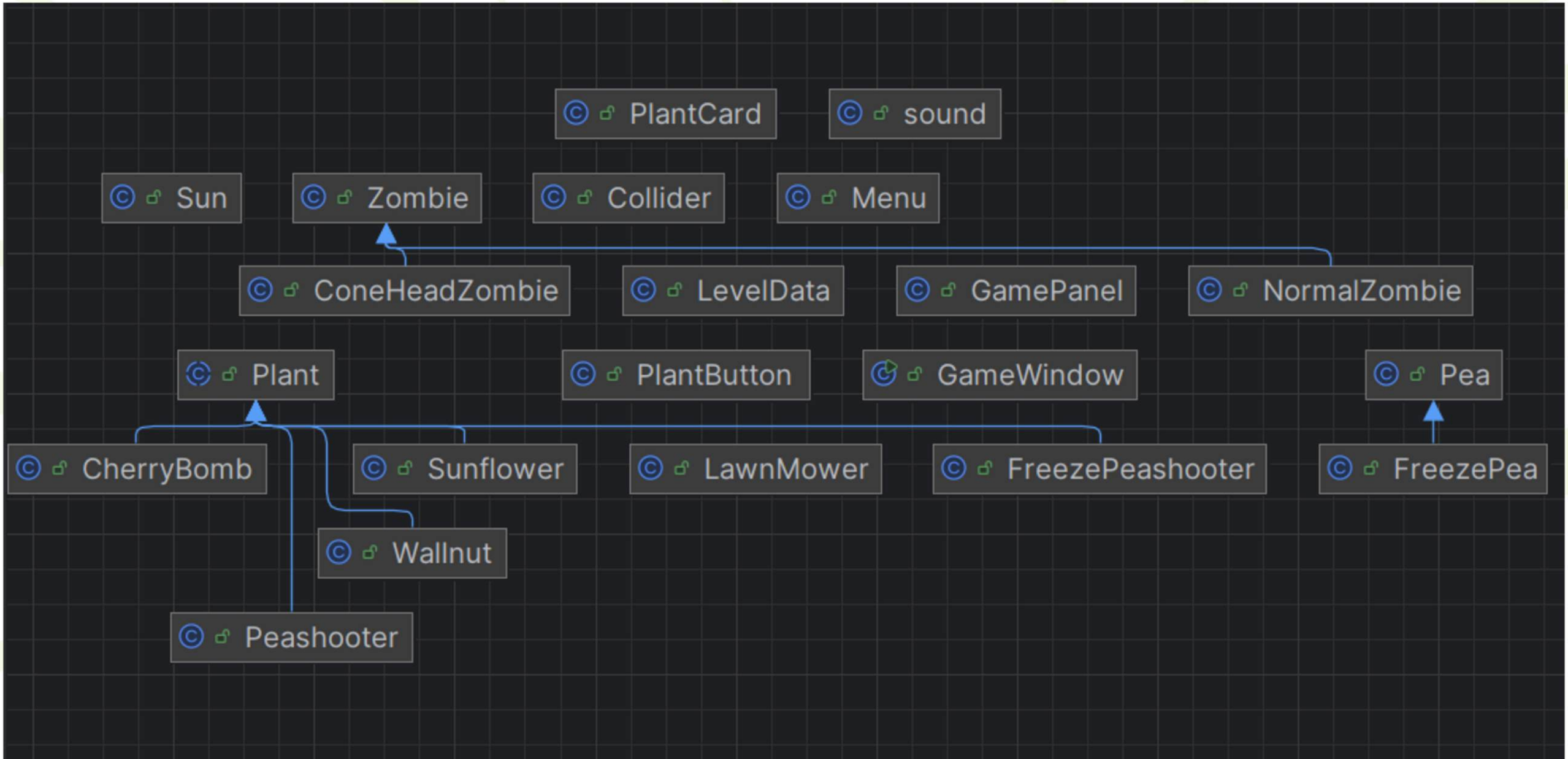
PROPERTIES OF GAME CLASS DIAGRAM

START

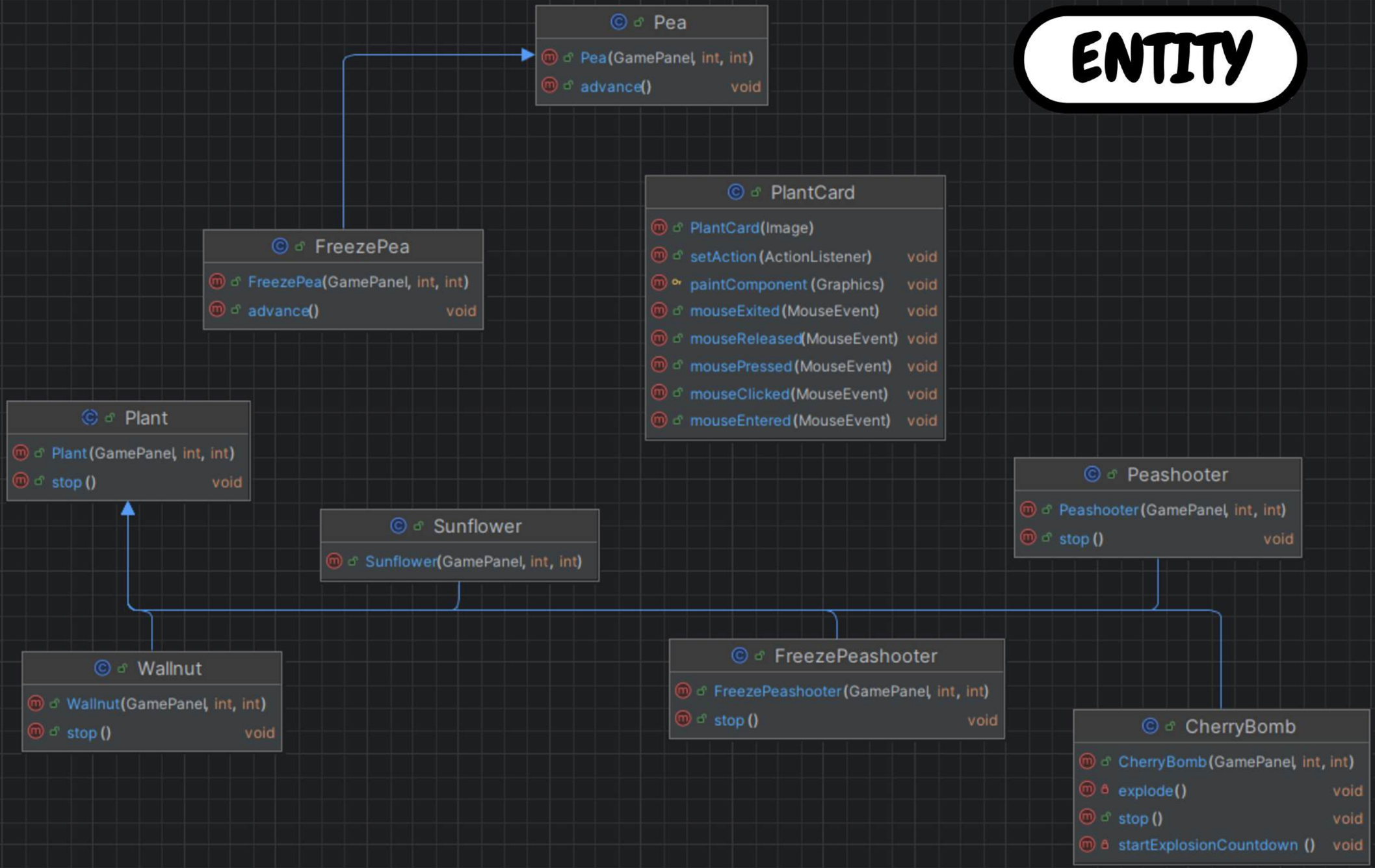
Plant V Zombie

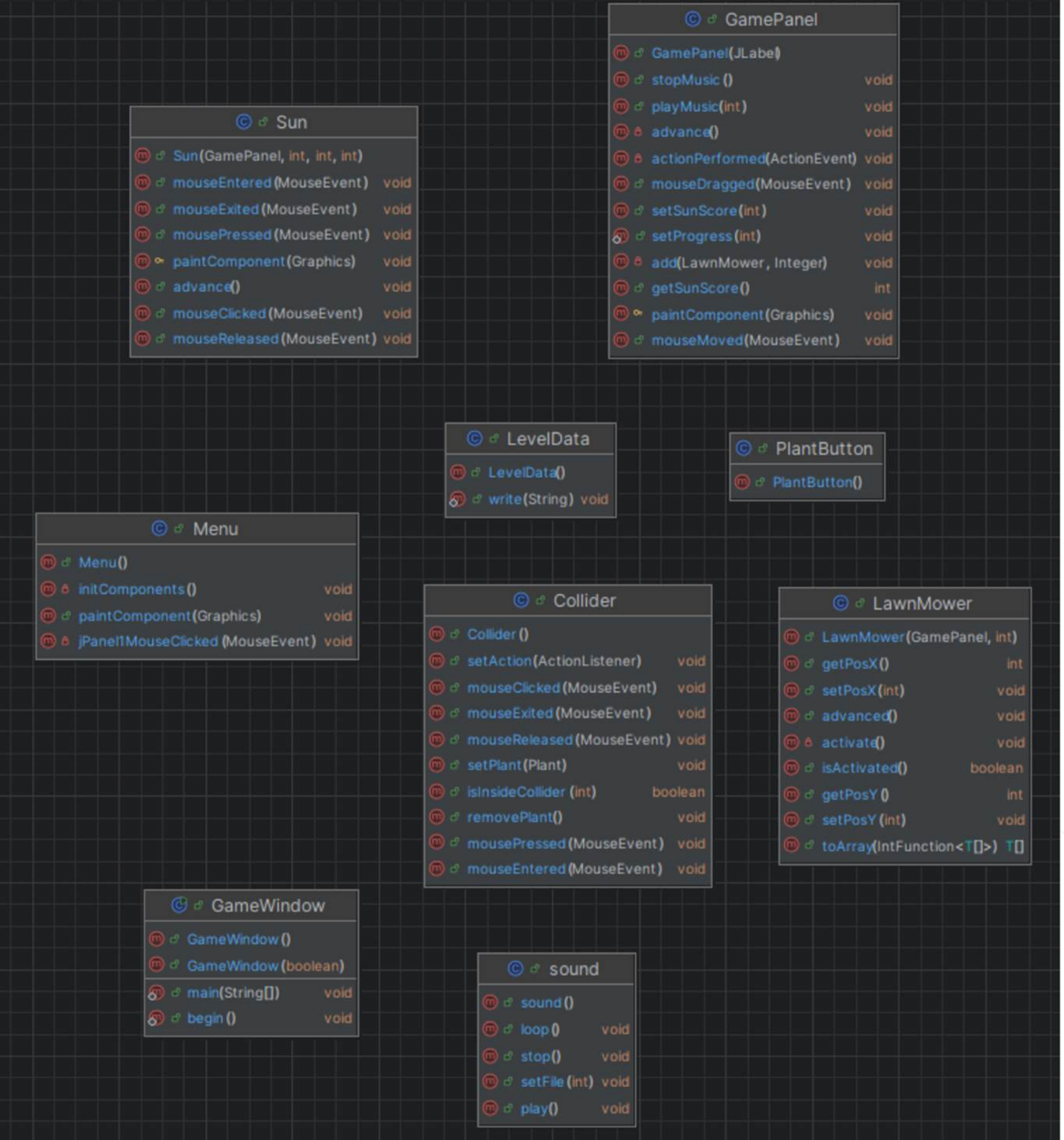
UML

THE OVERALL


PlantCard
sound
Sun
Zombie
Collider
Menu
ConeHeadZombie
LevelData
GamePanel
NormalZombie
Plant
PlantButton
GameWindow
Pea
CherryBomb
Sunflower
LawnMower
FreezePeashooter
FreezePea
Wallnut
Peashooter

ENTITY


Pea
Pea(GamePanel, int, int)
advance() void
FreezePea
FreezePea(GamePanel, int, int)
advance() void
PlantCard
PlantCard(Image)
setAction(ActionListener) void
paintComponent(Graphics) void
mouseExited(MouseEvent) void
mouseReleased(MouseEvent) void
mousePressed(MouseEvent) void
mouseClicked(MouseEvent) void
mouseEntered(MouseEvent) void
Plant
Plant(GamePanel, int, int)
stop() void
Sunflower
Sunflower(GamePanel, int, int)
Peashooter
Peashooter(GamePanel, int, int)
stop() void
Wallnut
Wallnut(GamePanel, int, int)
stop() void
FreezePeashooter
FreezePeashooter(GamePanel, int, int)
stop() void
CherryBomb
CherryBomb(GamePanel, int, int)
explode() void
stop() void
startExplosionCountdown() void



GAMEPLAY AND GUI

Plant V Zombie

MAIN CHARACTER

Plant V Zombie

Coneheadzombie

Normalzombie

- Movement
- Interact with the objects

Plant V Zombie

FreezePeashooter

Peashooter

- Use this to attack incoming zombie

Plant V Zombie

Cherry bomb

Sun flower

- Cherry Bomb: Explodes and destroys zombies within a 3x3 square area.
- Sun flower: Create sunlight to grow more trees

Plant V Zombie

Wallnut

- **Walnut: Wall to block zombies**


DEMO
START

TITLE SCREEN

GAME PLAY


ACHIEVEMENT


Message
Level Completed !!!
Starting next Level
OK

GAME OVER

CONCLUSION

START

1. Game development is more than just coding – it requires combining technical skills with creative elements like storylines, environments, and visuals to create an engaging player experience.
2. The project enhanced our debugging and troubleshooting skills while assisting us in applying the OOP and problem-solving knowledge we learned in class.
3. We learned that success in Computer Science requires continuous self-learning and exploring beyond course materials.
4. This experience provided valuable insights into collaborative development, game design, and user experience. We aim to expand the project to mobile platforms in the future.

THANKS FOR LISTENING

UNTIL NEXT TIME