



User Manual

Project: Garbage Collector

Authors:

Hayyan Serwer
Farees Farooq Ismail
Sahil Hardasani
Hussain Ahmed
Mohsin Siddiqui

Creation Date: 25.05.2025

1. Introduction.....	3
2. Game Overview.....	3
3. Game Modes.....	3
Single Player.....	3
Multiplayer.....	4
4. Gameplay Mechanics.....	4
5. Scoring System.....	4
6. Controls.....	5
Single Player Controls.....	5
Multiplayer Controls.....	5
7. Home Menu.....	5
8. Options Menu.....	6
Audio Settings:.....	6
Resolution Settings:.....	6
9. Credits.....	6
10. Quitting the Game.....	7
11. Troubleshooting.....	7

1. Introduction

Welcome to Garbage Collector — a fun and educational game developed using the Godot engine that teaches players the importance of waste sorting. Play solo or with a friend to collect and sort trash into the right bins. Earn points, learn about waste types, and become the ultimate garbage collector!

2. Game Overview

You play as a garbage collector in a tiled environment where trash spawns randomly. Your mission is to pick up the trash and sort it correctly into one of four bins:

- *Brown Bin – Biomüll (Organic Waste)*
- *Blue Bin – Altpapier (Paper Waste)*
- *Yellow Bin – Plastic Waste*
- *Grey Bin – Restmüll (Residual Waste)*

Sort correctly to gain points — but beware, sorting incorrectly will cost you!

3. Game Modes

Single Player

- *Player spawns on the map.*
 - *Trash randomly appears on the map.*
 - *Your goal is to score 20 points by sorting trash correctly.*
-

- *Correct sorting: +1 point*
- *Incorrect sorting: -1 point*
- *Game ends when the score reaches 20.*

Multiplayer

- *Two players spawn on the same screen.*
 - *Trash spawns for both players to collect.*
 - *Players compete to be the first to score 20 points.*
 - *Each correct trash bin usage gives +1, incorrect gives -1.*
 - *First to reach 20 points wins.*
-

4. Gameplay Mechanics

- *Players move their avatars using the keyboard (controls listed below).*
- *Trash appears randomly around the map.*
- *Players must walk to the trash, pick it up, and carry it to the correct bin.*
- *Sorting is based on color-coding and waste type.*

Bins and Their Colors:

<i>Bin</i>	<i>Color</i>
<i>Type</i>	

Biomüll *Brown*
l *n*

Altpapier *Blue*
er

Plastic *Yellow*
 w

Restmüll *Grey*
üll

5. Scoring System

- *+1 Point for correct trash sorting*
 - *-1 Point for incorrect trash sorting*
 - *Single Player: Game ends at 20 points*
 - *Multiplayer: First to 20 points wins*
-

6. Controls

Single Player Controls

- *Movement: Arrow Keys or WASD*
- *Pick up/Drop Trash: **E** or **Space** (depending on configuration)*

Multiplayer Controls

- *Player 1:*

- Movement: WASD
 - Pick up: E
 - Drop: F
 - Player 2:
 - Movement: WASD
 - Pick up: E
 - Drop: F
-

7. Home Menu

Upon launching the game, the main menu displays the following options:

- Start Game– Start a game.
 - Tutorial– View Tutorial.
 - Options – Configure sound and resolution settings.
 - Credits – View team contributions.
 - Quit – Exit the game.
-

8. Options Menu

Audio Settings:

- Adjust volume via slider
-

- *Mute/Unmute toggle*

Resolution Settings:

- *Choose from the following display resolutions:*
 - *1920 x 1080 (Full HD)*
 - *1280 x 720 (HD)*
 - *800 x 600 (SD)*

Changes take effect immediately

9. Credits

In the Credits section, each team member is acknowledged based on their contributions, such as:

- *Collision Detection and Animations: Hussain Ahmed*
 - *UI: Farees Farooq Ismail*
 - *Networking and Multiplayer: Sahil Hardasani*
 - *Networking and Multiplayer: Hayyan Serwer*
 - *Assets: Mohsin Siddiqui*
-

10. Quitting the Game

To exit the game:

- *Select the Quit option from the home menu*
 - *Alternatively, press the OS's close window button*
-

11. Troubleshooting

<i>Issue</i>	<i>Solution</i>
<i>Game not launching</i>	<i>Check system requirements, try restarting</i>
<i>No sound</i>	<i>Check volume and mute settings in options</i>
<i>Lag or performance issues</i>	<i>Lower resolution via the Options menu</i>
<i>Controls not responsive</i>	<i>Ensure game window is focused and keyboard working</i>