



Individual Performance Mapping

Project: Garbage Collector

Authors:

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Team Members & Primary Responsibilities

Sahil Hardasani & Hayyan Serwer - Networking & Multiplayer

- Implemented client-server architecture using Godot's ENetMultiplayerPeer
- Developed RPC system for player action synchronization
- Created host/join functionality with IP-based connections
- Handled network state management and player data synchronization
- Ensured real-time multiplayer experience with minimal lag

Hussain Ahmed - Collision Detection & Animation System

- Implemented collision detection for player-trash interactions
- Created pickup/drop mechanics using Area2D nodes
- Developed animation systems for player movement and item handling
- Integrated physics-based interactions for trash sorting
- Optimized collision boundaries for smooth gameplay

Mohsin Siddiqui - Audio & Visual Assets

- Added sound effects for game actions (pickup, drop, scoring)
- Created and integrated sprite assets for trash items and players
- Developed visual feedback systems for player interactions
- Contributed to overall visual polish and user experience
- Assisted with sprite animations and visual indicators

Farees Farooq Ismail - User Interface & Menu System

- Designed and implemented main menu interface
- Created game connection screens (host/join functionality)
- Developed score display and UI elements
- Implemented user input handling for menu navigation
- Designed intuitive user experience flow

Collaborative Efforts

Documentation (All Team Members)

- Architectural document creation
- Requirements specification
- Acceptance documentation
- Individual contributions to technical writing

Integration & Testing (Team Effort)

- Code integration across different components
- Multiplayer testing and debugging
- Performance optimization
- Bug fixing and quality assurance

Key Skills Demonstrated

- **Teamwork:** Effective role-based collaboration
- **Technical Skills:** Game development, networking, UI design
- **Communication:** Clear documentation and code coordination
- **Problem Solving:** Debugging multiplayer and integration issues
- **Project Management:** Following waterfall methodology with defined deliverables