# SERAP KEREM

Unity Game Developer


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https://serap-kerem.github.io/webpages/

https://github.com/SERAP-KEREM


## EDUCATION

**Necmettin Erbakan Universitesi**
**Bilgisayar Mühendisliği**
**2019 - 2024**

## CERTIFICATES

- Unity İle Eğitici Oyunlar (BTK Akademi )
- Unity ile Dijital Oyun Geliştirmeye Giriş (BTK Akademi )
- Unity ile Oyun Geliştirme(KTO Karatay Universıty)

## SKILLS

- Unity Engine
- C#
- AdMob
- PHOTON
- Unity Netcode
- MongoDB
- Firebase
- Zenject
- GitHub

## REFERENCES

References available upon request.

## ABOUT ME

Passionate Unity Game Developer with 3+ years of experience specializing in game mechanics, performance optimization, and multiplayer systems. Proficient in C#, Unity, DOTween, and Zenject, with a strong understanding of OOP, SOLID principles, and game architecture. I thrive in collaborative environments, working closely with designers and artists to develop engaging gameplay experiences. Always eager to learn and integrate cutting-edge technologies to enhance game development workflows.

## WORK EXPERIENCE

Game Developer — 05/2023 -09/ 2023

**Umuly I Çorum**

- Game Development and Deployment: Developed and deployed hyper-casual games, focusing on creating engaging gameplay experiences and successfully launching them to the target platforms.
- Unity Expertise: Advanced my skills in Unity, achieving a high level of proficiency in game development and implementation.

Computer Engineer Intern — 07/2022 - 10/2022

**EL-Capitan Games I KONYA**

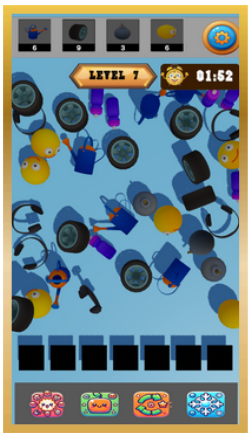
- Game Mechanics: Learned the mechanics of simple hyper-casual games, gaining hands-on experience in game design.
- Unity Development: Developed several small-scale games using Unity, applying game development principles and practices.

Computer Engineer Intern — 07/2021 - 06/2022

**Entegre Yazılım I KONYA**

- Coding Principles: Learned and applied SOLID principles for writing clean and maintainable code.
- Database Management: Gained experience with MySQL, including database management and query optimization.
- Algorithm Development: Enhanced my algorithmic thinking with guidance and practical experience.

# Tiny Merge: A Matching Adventure





Game Features

- Target Object Collection: Collect specific items to complete levels.
- Match-3 Mechanic: Align three of the same type of object to remove them.
- Time Management: Complete levels before time runs out.
- Tile System: Place objects on empty tiles; the game ends if all tiles are filled.
- Joker Powers: Destroy Triple, Item Shaker, Recycle Item, Freeze Time.

- Technologies Used

Unity, C#, DOTween, TriInspector, Zenject

👉 GitHub: https://github.com/SERAP-KEREM/TinyMerge

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# COLOR CHAINS

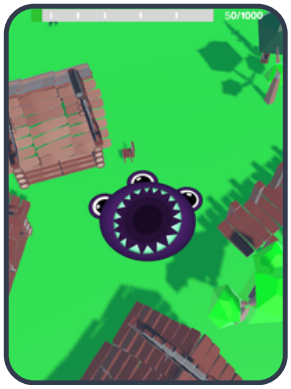


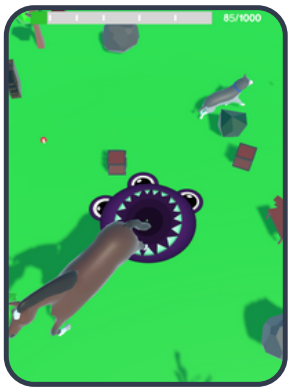
- ColorChains – Logic-Based Puzzle Game
- ColorChains is a strategic puzzle game where players must place keys into the correct sockets while managing chain constraints. The challenge is to avoid breaking the chains and complete the level within the move limit.
- 🔹 Physics-Based Chain Mechanics
- 🔹 Key & Socket Matching System
- 🔹 Limited Moves for Strategic Planning
- Technologies Used:

Unity, C#, DOTween, TriInspector, and SerapkeremGameTools.

- 👉 GitHub: https://github.com/SERAP-KEREM/ColorChains

# FOREST HOLE ADVENTURE




Game Features:

- Hole grows and consumes objects using shaders.
- Smooth movement powered by NavMesh with joystick and keyboard support.
- Animals roam the map and try to escape from the hole.
- Dynamic camera tracking using Cinemachine.
- Level customization with ScriptableObjects for target score, time, and object properties.

Technologies Used:
Unity, C#, DOTween, Cinemachine, NavMesh, SerapkeremGameTools, TriInspector.

GitHub: https://github.com/SERAP-KEREM/ForestHoleAdventure

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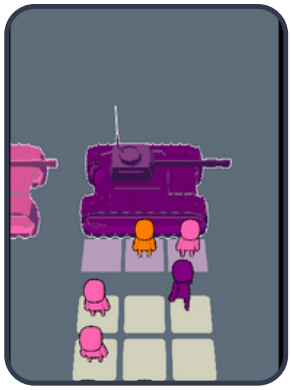
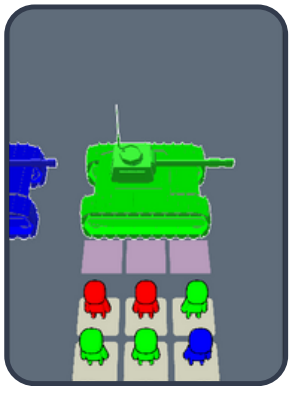
# Stickman Tank Rush



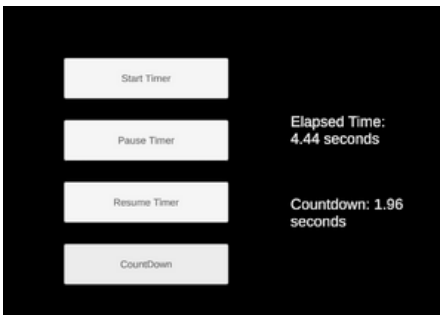


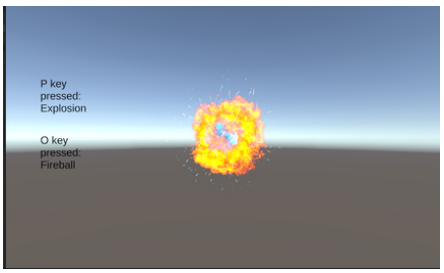
Developed a hyper-casual puzzle game.
Technologies Used:
Unity, C#, DOTween, Array2D, ColorType, GridPathfinder, TriInspector, SerapkeremGameTools.
Key Features:

- Color matching mechanics for tank and stickman interactions.
- Grid-based dynamic pathfinding and movement system.
- Level designs created using ScriptableObjects.
- Minimalist and user-friendly interface.
- Optimized for mobile devices.

GitHub: https://github.com/SERAP-KEREM/StickmanTankRush

# SerapKeremGameTools





I A modular Unity package offering reusable components and tools for optimized game development.

- Singleton System: MonoSingleton & NonMonoSingleton for global instance management.
- AudioManager: Simplified sound pooling and control.
- ParticleManager: Efficient particle effect pooling and customization.
- TimeManager: In-game time control with pause and countdown features.
- InputManager: Mouse input and object interaction management.
- ObjectPool: Performance-focused object reuse system.
- SaveLoadSystem: Easy game state persistence with PlayerPrefs.
- FPSCharacterSystem: Movement, interaction, and health management for FPS games.

GitHub: https://github.com/SERAP-KEREM/SerapKeremGameTools

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# Third Person Multiplayer Shooter

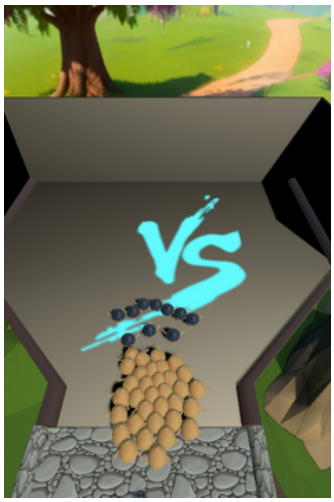


- Multiplayer Support: Real-time multiplayer battles powered by Unity Netcode.
- Third-Person Perspective: Dynamic third-person camera for a wider battlefield view.
- Weapon Switching: Switch between multiple weapons for adaptable combat strategies.
- Ammo & Health Systems: Realistic ammo and health management for strategic depth.
- Inventory Collection: Collect items like weapons and health packs for survival.
- Character Selection: Choose from a roster of visually unique characters with similar abilities.
- NPC Characters: Non-player characters add challenges and immersive elements.

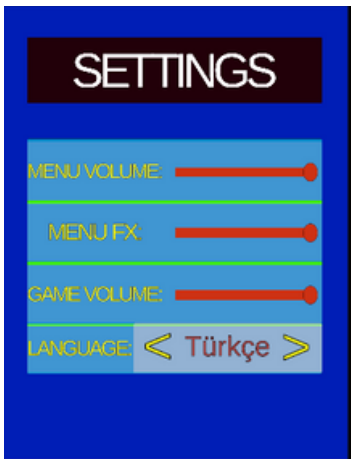
Technologies Used: Unity, C#, Unity Netcode.

GitHub: https://github.com/SERAP-KEREM/ThirdPerson

# Adrenaline Dash






Implemented a character collection mechanic where the main character collects others on the road, increasing the group size. Developed the movement system and used object pooling to manage multiple characters. Designed obstacles that challenge characters and cause them to be lost. Added numeric blocks to modify the group size. Implemented a point system, main menu, and level selection for better navigation. Created enemy objects for battles at the end of each level. Developed an item shop for purchasing upgrades with earned points. Added multilingual support for a broader audience.

Game Play Video: https://serap-kerem.github.io/webpages/

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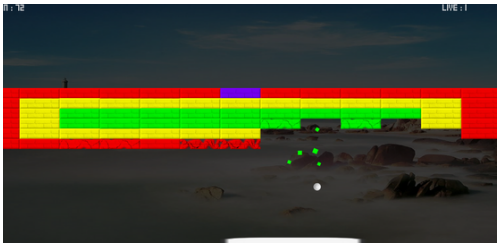
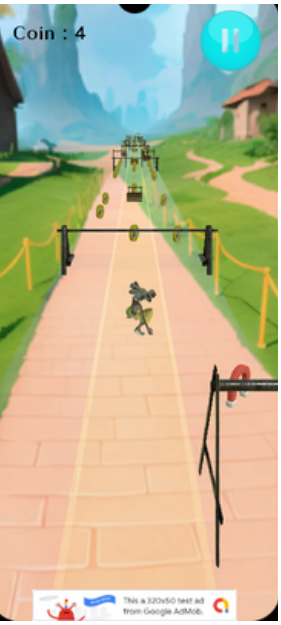
# Block Breaking



Added a ball with realistic physics that bounces off surfaces. Implemented a movable paddle for precise ball control. Introduced blocks with varying difficulty and bonus blocks that grant extra lives. Designed multiple levels with unique block arrangements and increasing difficulty. Created win/lose conditions, such as dropping the ball or breaking all blocks.

GitHub: https://github.com/SERAP-KEREM/BlockBreaking

# Speed Streak





Added a controllable character with running, jumping, and sliding abilities. Created a path spawner system for an endless running experience. Placed obstacles to challenge players and added coins to collect, with a magnet system to attract them. Developed a shop system for purchasing new characters. Adapted the game for mobile devices and integrated AdMob for in-game ads, boosting revenue.

Game Play Video: https://serap-kerem.github.io/webpages/

# Ball Runner



Implemented a character that runs on top of balls, rising as more are collected and lowering when lost. Designed randomly appearing obstacles of varying difficulty. Players navigate through obstacles to reach the finish line, collecting coins and balls. The game features progressively harder levels and endless play. Integrated AdMob for in-game ads to generate revenue.

Game Play Video: https://serap-kerem.github.io/webpages/