FH | JOANNEUM
University of Applied Sciences

Dock & Roll

https://github.com/maguitaria/dock-roll.git

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Endless Runner Game 🧢

Collect coins 🪙

Jumping or running into **Obstacles** deducts 1 life. 🖤

Press Left and Right arrows ◀▶

Press Up arrow to Jump 🤸

Technique in Focus: Centralized Global State Management with Global.gd

To streamline level generation, resource spawning, and game state saving/loading, we implemented a Global.gd singleton autoload script. This file is the backbone of the game's logic.

It manages:
- Resource preloading for platforms, obstacles, collectibles
- Level difficulty scaling and time calculation
- Player progression
- Persistent saving/loading system

```gdscript
# Level Pass
func level_up():
    # Increase level and spawn chances
    level += 1
    obstacle_spawn_chance = min(obstacle_spawn_chance + obstacle_spawn_increase_per_level * (level - 1), 1.0)
    advanced_obstacle_spawn_chance += obstacle_spawn_increase_per_level
    # Check if the score in the previous level met the requirement
    if score >= score_requirement:
        score_requirement_reached = true
    # Reset for next level
    reset_default_values()
    # Save game
    save_game()
```
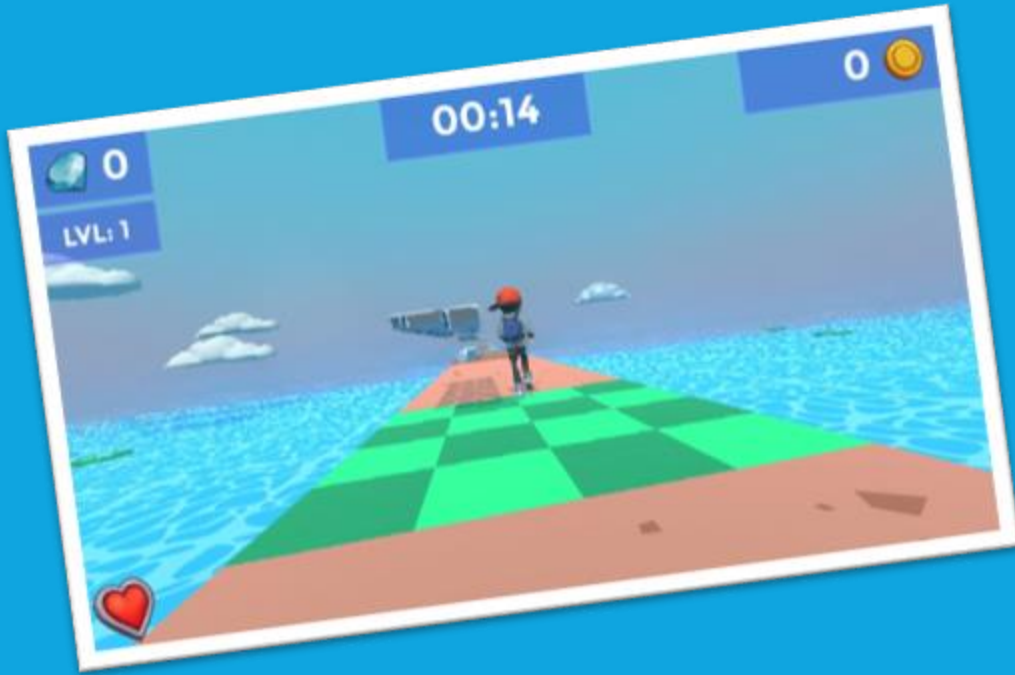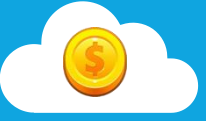
Assets

dalton5000/Godot-Fontpack
Mixamo (AJ Character)
3D Leap Land Asset Pack by Essssam (itch.io)
Free Fantasy Game GUI by pzUH (itch.io)
Mobile Casual Video Game Music | Royalty-free Music - Pixabay
Resonant Victory - GLBML | Royalty-free Music - Pixabay
Abydos_Musichttps://pixabay.com/users/abydos_music-27178115/

Link for Download : Project_demo.mov

Thank you!