

PČOZ – Hra pre Android JumpAround

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Obsah

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Godot Engine

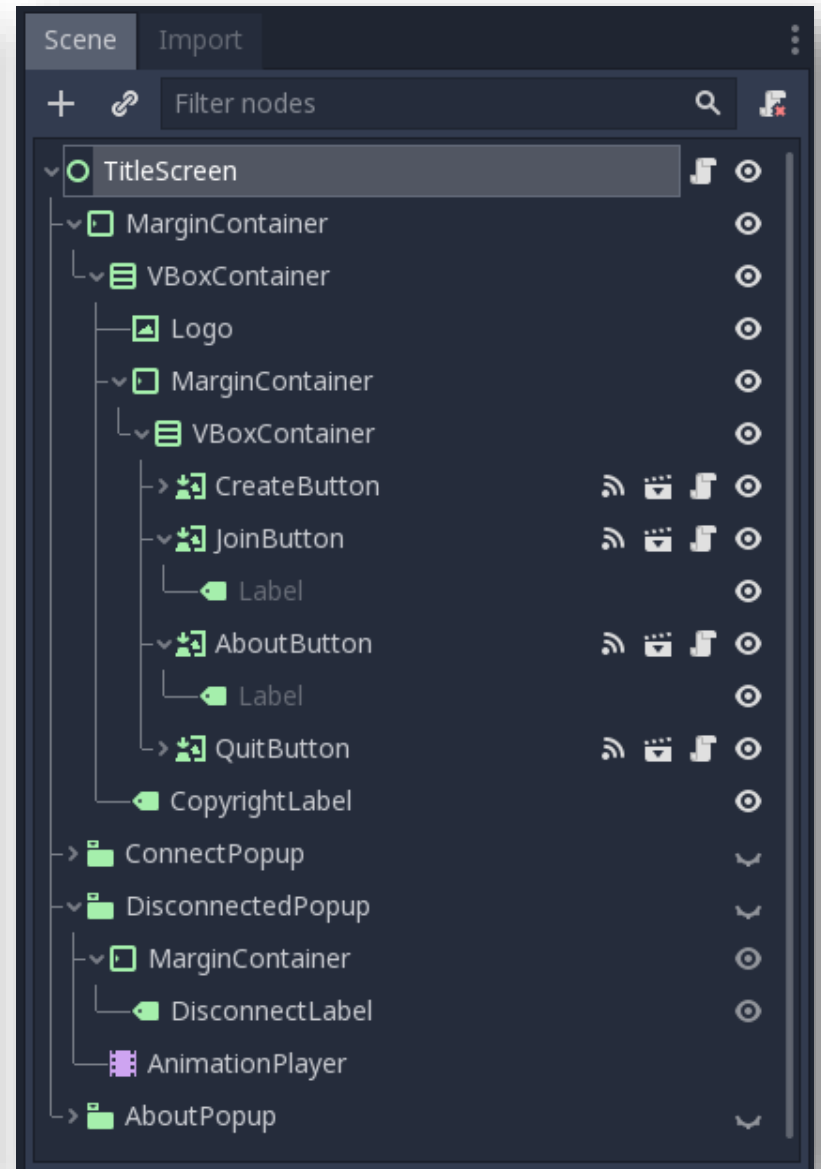
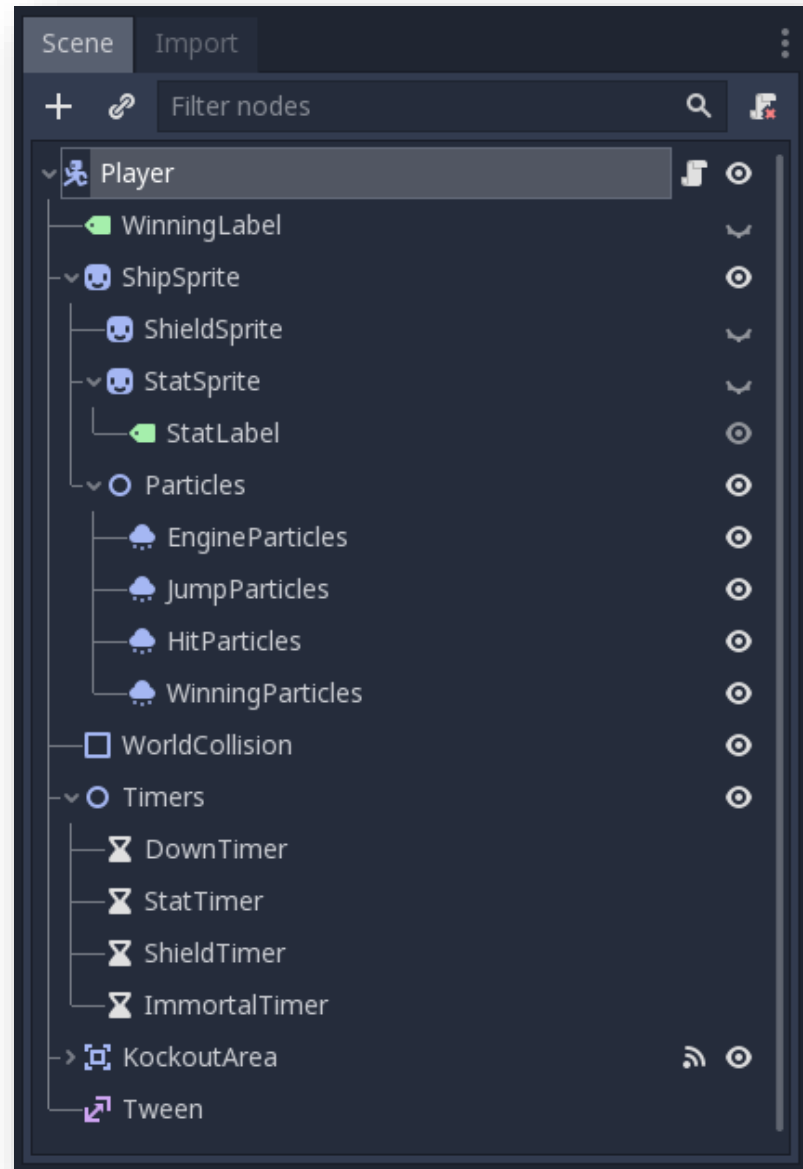
- cross-platform
- 2D a 3D
- MIT licencia
- Export (Windows, Linux, macOS, Android, iOS)

GDScript

- High-level
- Dynamicky písaný
- Podobný Pythonu
- Integrovaný s Godotom

```
27 # Refresh player list and take care of name colors and avatars
28 func refresh_lobby():
29     var players = Lobby.players
30     player_list.clear()
31     var item_idx = 0
32     for p in players:
33         if p == my_unique_id:
34             player_list.add_item(players[p][0] + ' (You)')
35             my_item_list_idx = item_idx
36         else:
37             player_list.add_item(players[p][0])
38             if players[p][1]:
39                 player_list.set_item_custom_fg_color(item_idx, Color(0.0, 1.0, 0.0))
40             else:
41                 player_list.set_item_custom_fg_color(item_idx, Color(1.0, 0.0, 0.0))
42             item_idx += 1
43     avatar_texture.set_texture(load('res://Sprites/ships/' + players[my_unique_id][2]))
```

Uzly, scény a signály



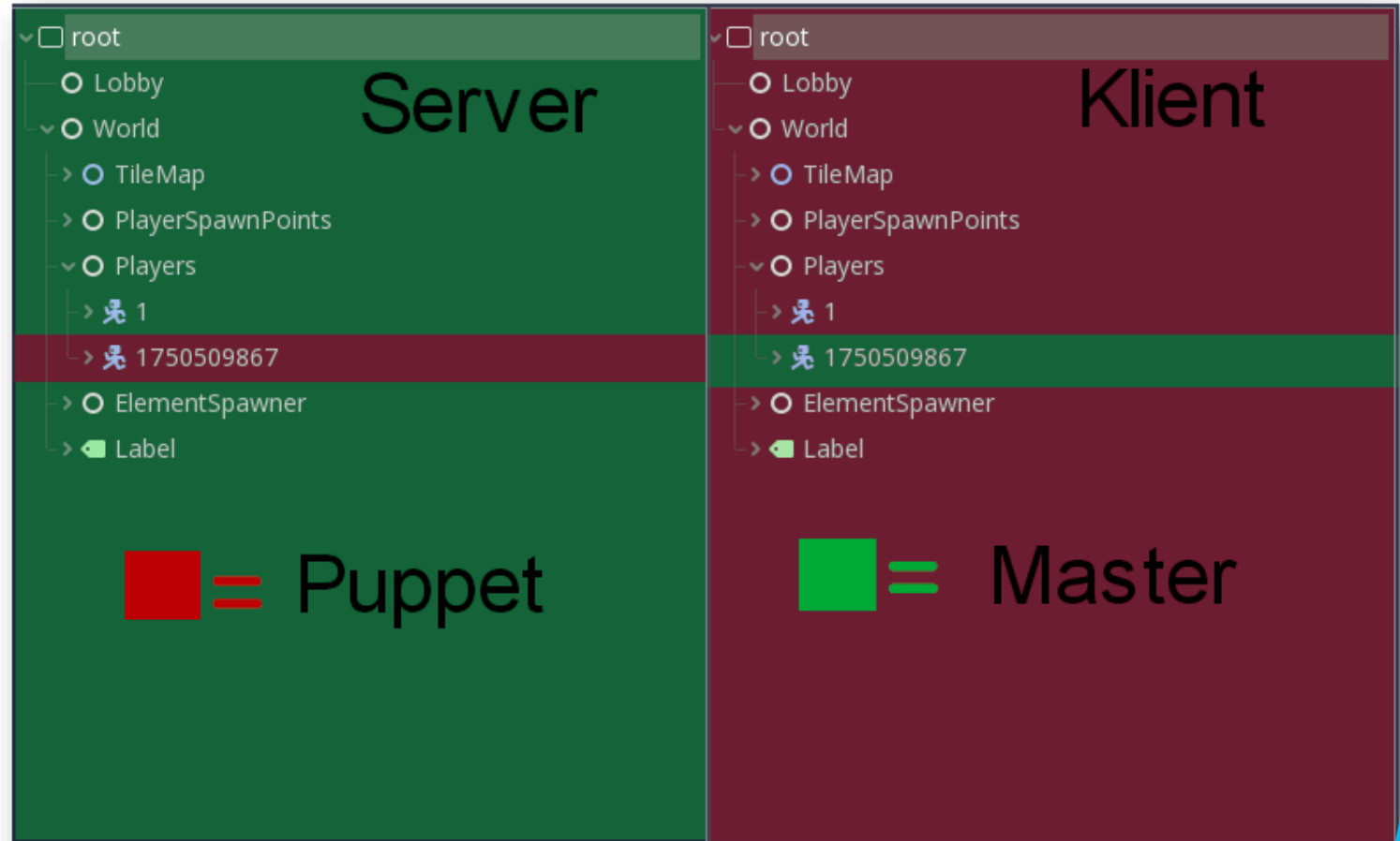


Networking

Klient/Server

Peer to peer

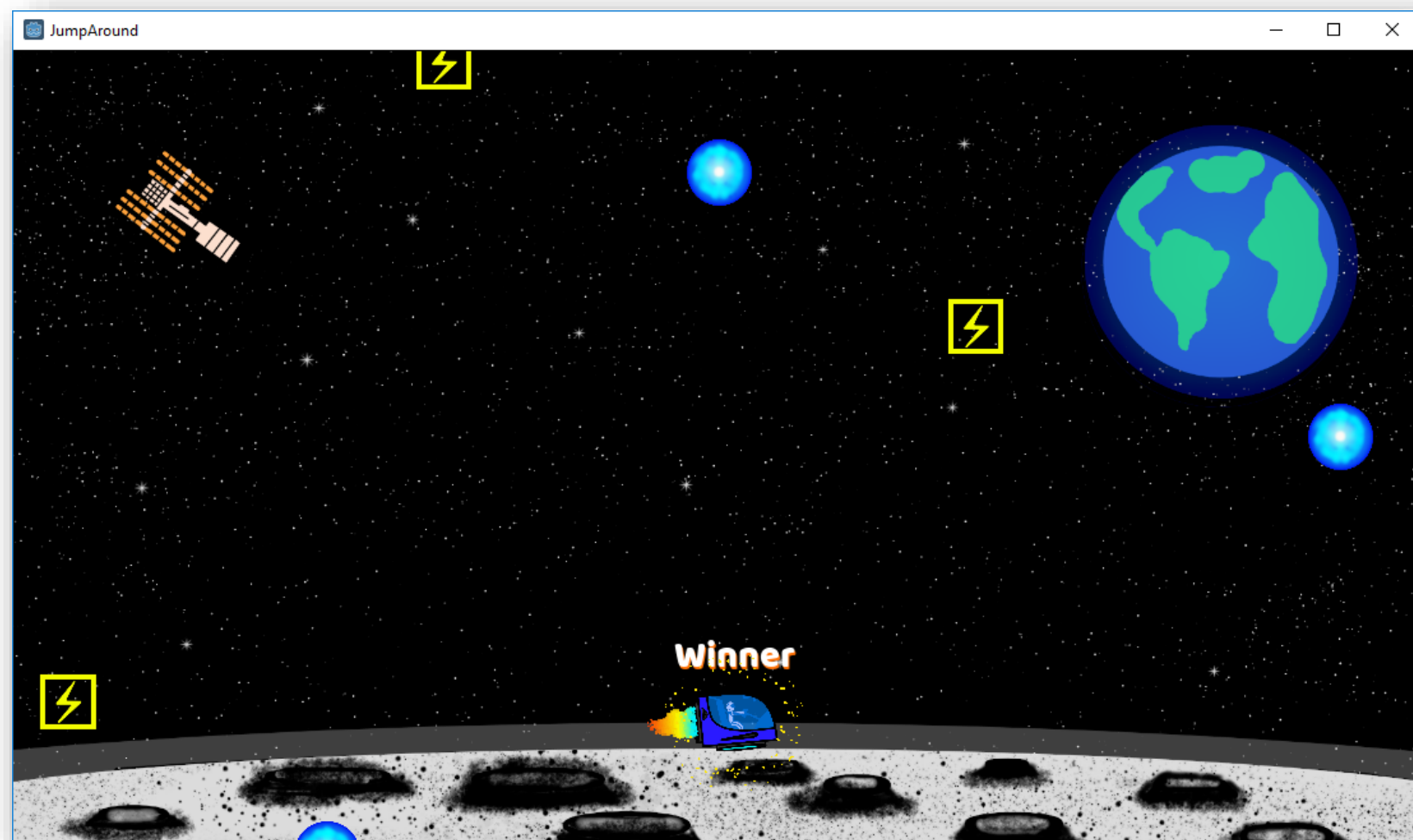
Synchronizácia



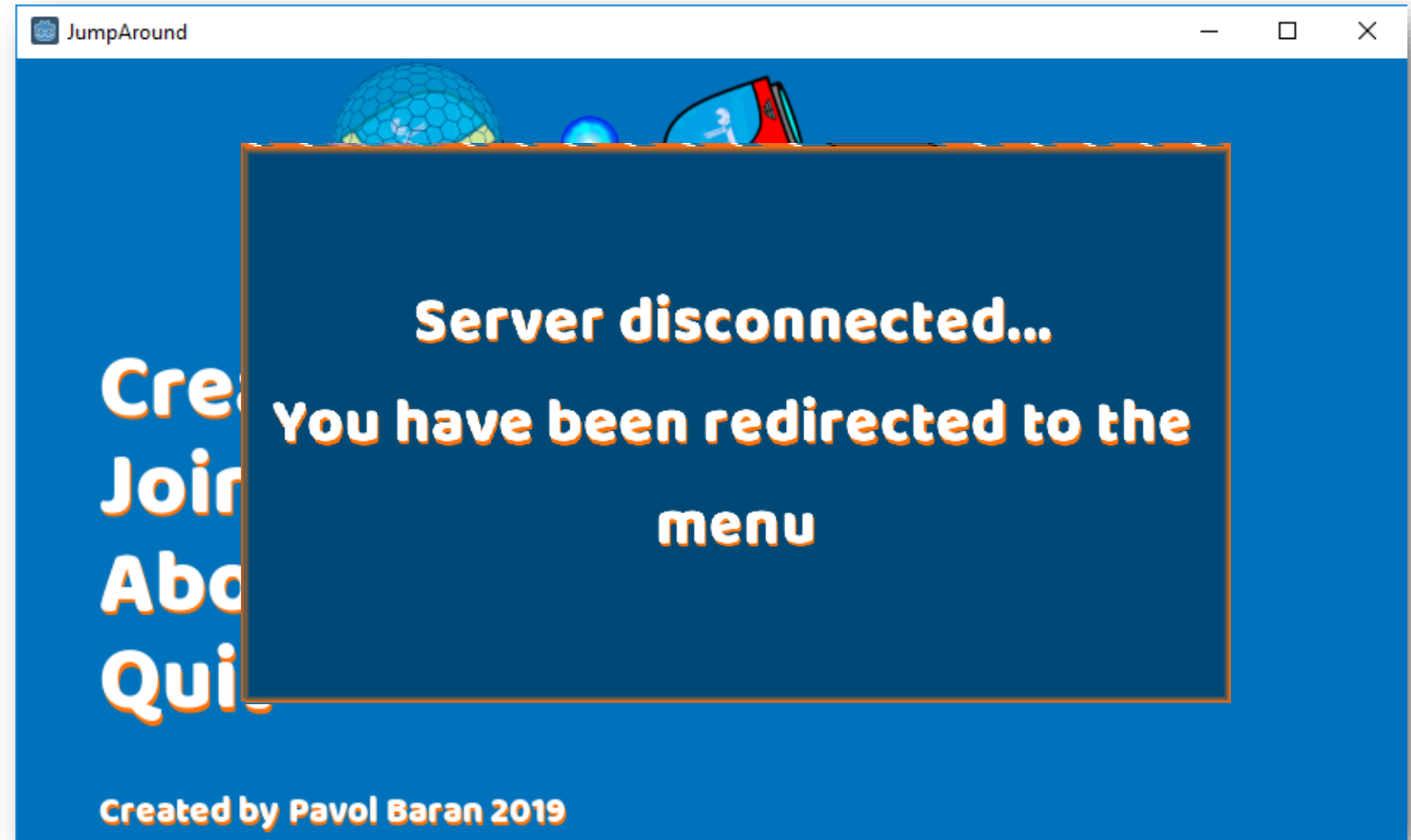
Ukážka kódu

```
42 ▾ remotesync func add_coin():
43   ▸ orbs = orbs + 1
44 ▾ ▸ if orbs >= 3:
45   ▸   ▸ health = health + 1
46   ▸   ▸ orbs = 0
47   ▸ set_stat_visible()
48   ▸ Lobby.players[self.get_network_master()][4] += 1
49
50
51 ▾ remotesync func hit():
52 ▾ ▸ if is_down:
53   ▸   ▸ return
54   ▸ set_collision_mask_bit(2, false)
55   ▸ health = health - 1
56   ▸ motion.x = 0
57 ▾ ▸ if health < 1: ▸
58   ▸   ▸ rpc('knock_out')
59   ▸ is_down = true
60   ▸ can_jump = false
61   ▸ engine_particles.emitting = false
62   ▸ hit_particles.set_emitting(true)
63   ▸ set_immortal()
64   ▸ set_stat_visible()
65   ▸ down_timer.start()
66   ▸
67 ▾ remotesync func initial_jump():
68   ▸ motion.x = SPEED if direction else -SPEED
69   ▸ is_down = false
70   ▸ set_collision_mask_bit(2, true)
71   ▸ engine_particles.emitting = true
72   ▸ enable_shield()
73   ▸ set_immortal()
74   ▸
75 ▾ remotesync func jump():
76   ▸ jump_particles.emitting = true
77   ▸ jump_particles.restart()
78   ▸ motion.y = -jump_index
79   ▸ jump_index += JUMP_HEIGHT
80   ▸ motion = move_and_slide(motion, Vector2(0,-1))
81
82 ▾ remotesync func bounce():
83   ▸ motion.y = -JUMP_HEIGHT / 2
```

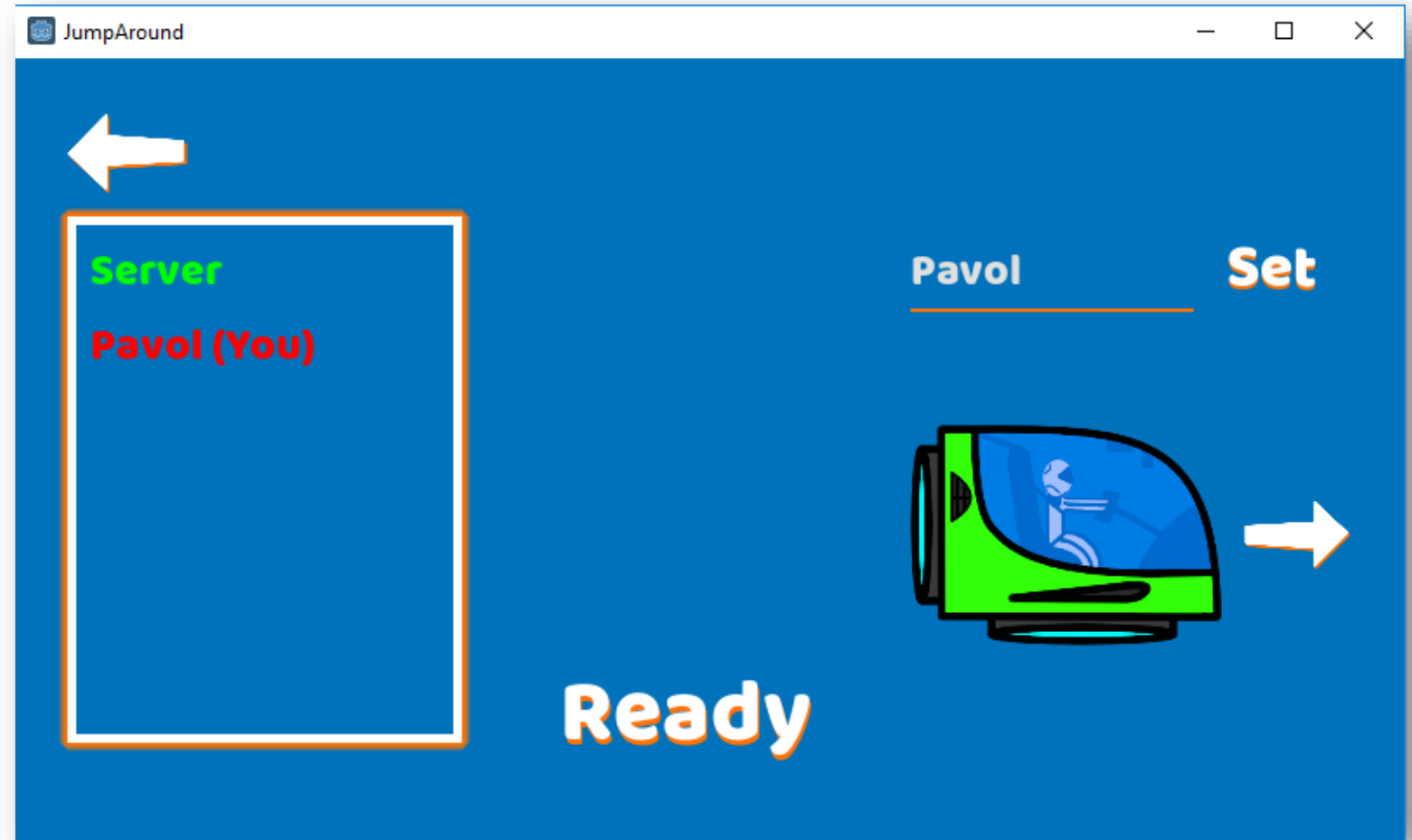

Ciel'hry



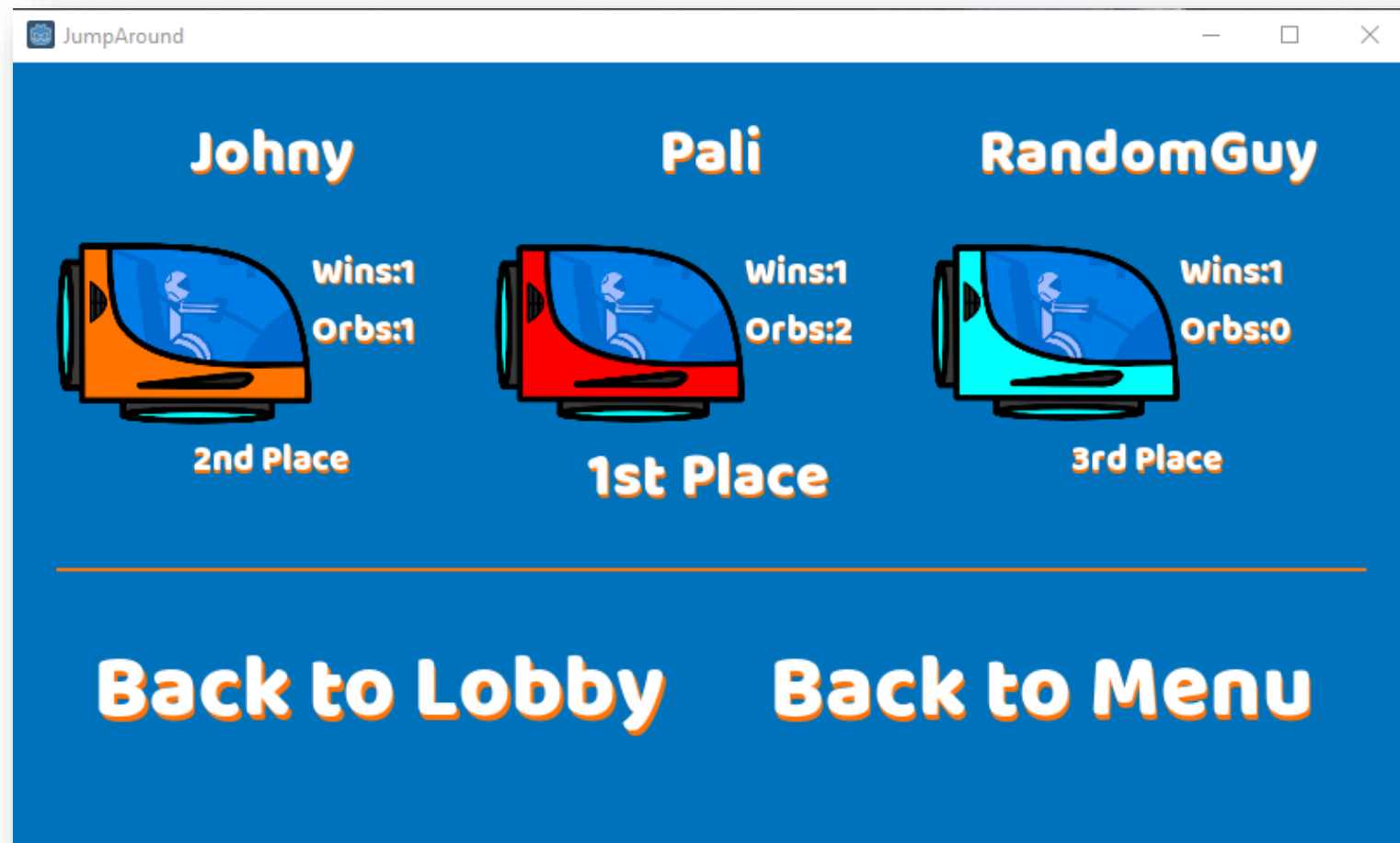
TitleScreen (Menu)



LobbyScreen



ResultScreen (Výsledky hry)



Ďakujem za pozornosť