# Case Study: SlotZ Racer

Multi-player game

3D graphics

Custom user interface elements
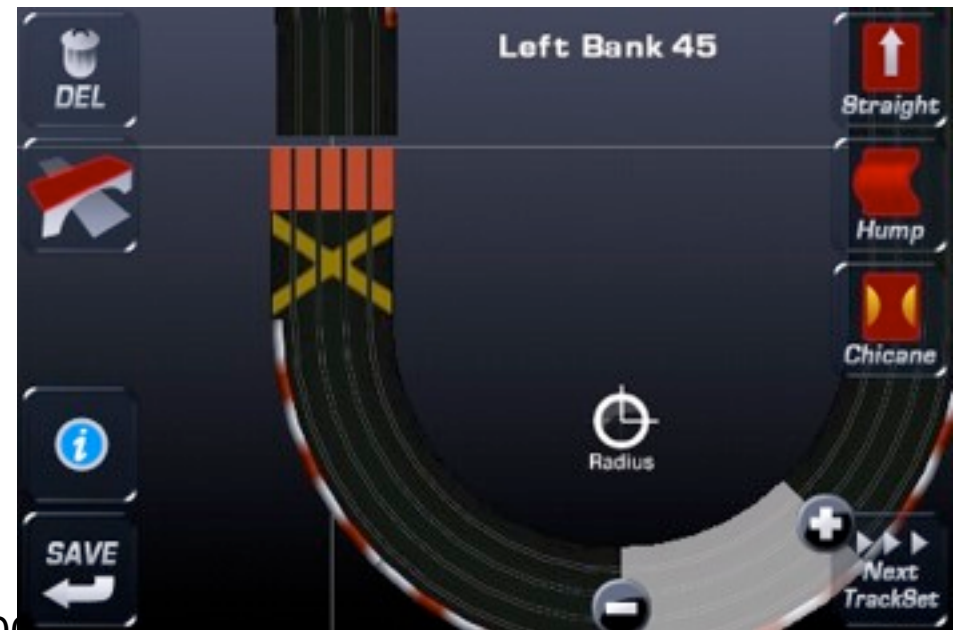
# Disclaimer

- My *only* connection with SlotZ Racer is that it's my favorite game.



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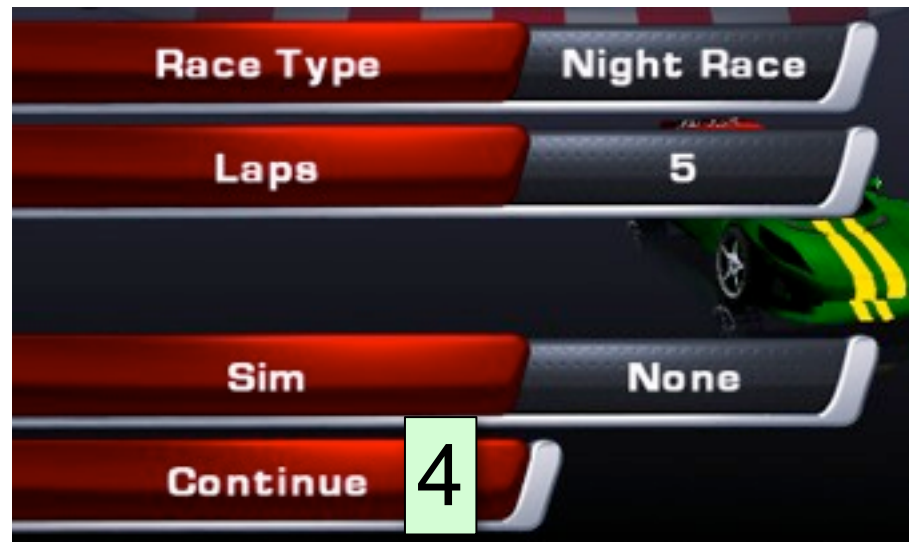
# SlotZ Racer

# Features

# Sophisticated Game

- Slot car racing game
- Race against the computer or friends
- Up to 4 people to race on a single iPhone!
- Built-in track editor
  - Also separate iPhone track editor
- Download tracks from server
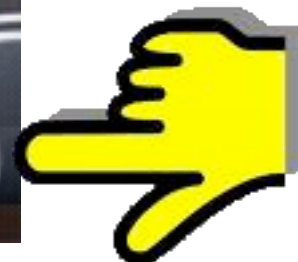- Many options

# Example Control Flow



- Functionally equivalent to nested table views

# Potential Problem: Network Latency

- Want to race against other people
- Network lag would prevent realistic races
- Solution: put four drivers on a single iPhone
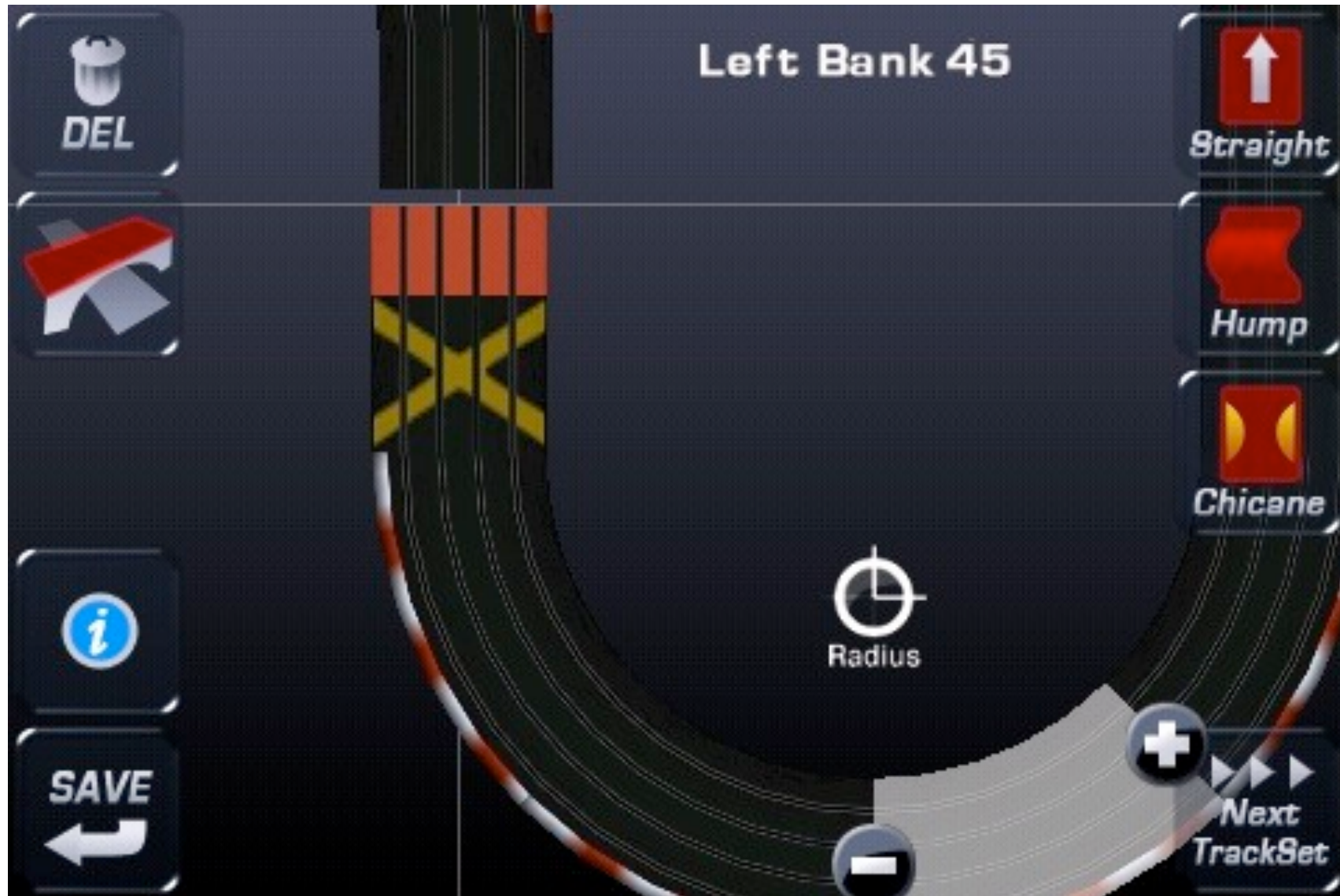
# Four Players on One Device

# Requirement: Extensibility

- Start with lots of built-in tracks
- Allow users to design new tracks
  - Provide built-in track editor
  - Provide separate free track editor
- Allow users to share track designs
  - Provide web site upload/download

# Multiple Tracks Provided



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# Built-In Track Editor



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# Two Apps + Website



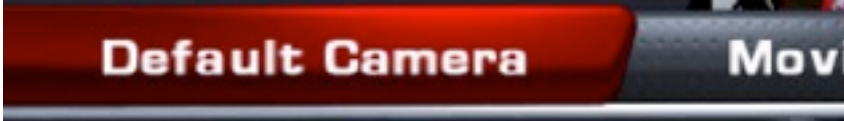360|iDev    Copyright 2009 David A. Wilson

# User Options

# Basic Options



- CPU Skill
- Trails
- Default Camera
- Player Setup
- Player Name
- Throttle Adjust

# Problem With Options

- Can't see all your choices at once

- E.g., Default Camera

- Only see names of camera positions one at a time

- Can't see what they mean

- Better to display list of all choices on one screen, with thumbnail for each one

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# Multiple Camera Views
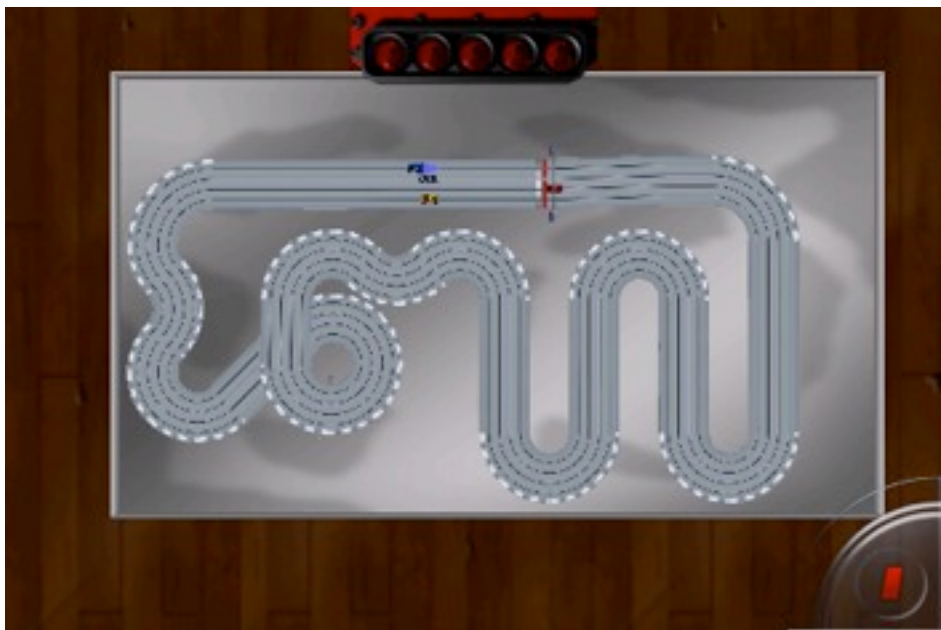
# Advanced Options

- Scale Speed
- Grip Level
- Acceleration Level
- Tyre Smoke
- Engine Noise
- Champ Points
- Crash Penalty
- Collisions
- Barriers
- Chunky Mode
- Scale (HO or 1/32)
- Analogue Control
- CPU Oops Factor

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# Lessons Learned

- Market already exists if based on classic games
  - Slot car racing is already well-known
  - Is not too easy to do (unlike slot machines)
- Keep basic operation simple
  - Only need one finger to operate
- Games usually use custom UI elements
  - Tables don't like tables
  - Buttons don't look like buttons

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# Lessons Learned

- Offer lots of user options
  - Multiple levels of difficulty
  - Make it easy to understand what the choices are
- Offer extensibility
  - Can create new tracks
  - Can download or upload track designs