Introducing…

Run Run Revolution!
What is $R^3$?

Run Run Revolution ($R^3$) takes dance gaming on the go
Our Questions

1. What are possible game scenarios?
2. Can we integrate a switch with a display?
Use Case Scenario 1: Standing

• User watches and performs dance commands standing

• Foot commands match song beat

• Light to moderate Exercise
Use Case Scenario 2: Sitting

• User watches and performs dance commands sitting

• Foot commands match song beat

• Light exercise
Use Case Scenario 3: On the Go

• User dances to the beat on the go (or in the classroom)
• No visual aid required
• Light exercise
Use Case Scenario 4: Coach Mode

- Coach app gives you various exercise commands (push ups, sits ups, jumpies, running, etc)
- No visual aid required
- Listen to any of your favorite music
- Moderate to heavy exercise

Don’t stop now, keep on pushing! 1! 2! 3! FASTER!
Sketch Model Demonstration

- Sketch model consists of switches, Arduino microcontroller and python code
- Demonstrates technical feasibility
Sketch Model Demonstration

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Technical Revelations

- Our project is feasible and within course scope
- Sensors can be used for mobile gaming
- We built a fun and engaging game
Benchmarking

• Various products in the “in-motion” gamer market
• $35 - $300 price range
• No on-the-go options
• $40 price target
Target Customers

• Casual gamers with smartphones
  – 20 million potential users
  – $500 million market size

• Casual athletes with smartphones
  – 30 million potential users
  – $3 billion market size
For the future...

• Source smaller components (pressure sensors)
• Device to fit in the shoe vs. on the shoe
• Incorporate positional data from accelerometers
• Explore game possibilities with accelerometer data:
  – Stride length
  – Jumping
  – Complex motion detection
Thank you!

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