

### Scenario

There are many benefits to playing video games. One of these benefits is connecting people when it is impossible to meet in person. Online video games allow us to play without leaving the comfort of our homes and connect with friends, family, and people we share little in common with. Games, such as Wii Sports and Flowy, can also help people build healthy habits and improve physical and mental health. Yet, video games are often only marketed to young people. Video games have the potential to help more people, regardless of age, connect with others and improve their well being.

Over the last 50 years, as technology has evolved, so too has gaming. Graphics have improved, game play has become more involved and realistic, and storylines have become more detailed. Even with all this change, much about video games has remained the same. Video games are still a booming business and projectile motion remains an engaging and accessible feature of game play. Whether kicking a soccer ball, jumping over a crocodile, or colliding birds into pigs, there is something about projectiles that appeals to experienced gamers and novices alike.

Many video games include projectile motion, but it is often used in violent ways. Some video games promote connectedness and physical and mental well-being. Few video games capitalize on the power of projectile motion in a nonviolent way to encourage connectedness and well-being. This is an opportunity for a savvy social entrepreneur to design an engaging, nonviolent, and accessible game that uses projectile motion to make a positive impact on the world.

### Challenge Statement

Your challenge is to design a nonviolent video game that encourages people to connect with each other or develop healthy habits.

Your game should:

- **Incorporate projectile motion.** Describe the role of projectile motion in your game.
- **Promote well-being.** Show how your game creates an experience that helps people connect or build healthy habits.
- **Include a prototype.** Provide an animation or storyboard that will help programmers know how to build the game by showing:
  - Multiple possible projectile paths;
  - Equations that model the projectiles' motion over time and distance traveled.