Chapter
Bouncing, Tossing, Rolling and Stacking
We all know that if we throw a rock up in the air, it must come down.
We know that friction will eventually slow a rolling ball and bring it to a full stop.

Figure 1 – Basic Definitions of the Coefficient of Friction

\[ F_{\text{friction}} = \mu N \]
Toss a ball straight at a brick wall and it will bounce back.

Throw the ball at an angle, and it will careen off the wall at an angle.
The POWER of:

Mathematics and Physics in Games
Bow Man 2: Experimentation and Repetition
Paper Toss: Simple Choices with Unclear Outcomes
Jenga: The Inherent Drama of Gravity
World of Goo: From Toy to Game
Peggle: Balancing Mystery and Legibility
Physics-based games tap into our natural desire to explore the world around us through play.

We get to poke and prod at a system, bouncing, tossing and stacking pieces to see what will happen.

Turns out this poking and prodding generally translates well to video games. Bouncing a real ball is fun and so is bouncing a virtual ball.

The laws of physics give game designers a familiar set of rules from which they can build a game.

Basing your game on physics gives you a head start in designing a dynamic system.
Download or Play

- All the games mentioned
- Angry Birds
- Etc
Chapter 12
Socializing
Current Style of Gameplay

• The Wii introduced physical play into the living room with video games.
• Through massively multiplayer games like World of Warcraft and systems like Xbox Live.
• Social networking game
Apples to Apples: Reading People, Not the Game
1. **Shuffle and deal out the red cards.** Each player can have anywhere from 5 to 20 cards or even more, depending on how long you want the game to last. Arrange your players (of which there should be at least 3) in a circle or around a table for the best effect.
2 Pick a person to be the judge of the first round. If possible, this person should already be very familiar with the rules of the game so they can provide an example for everyone else.
3 Have the judge shuffle the green cards, then flip over the top one. The rest of the players now pick a card from their hands that they think best matches the adjective on the green card. For example, if the green apple card says "cute", and your cards say "potato chips", "school", "babies", "grass", and "camping", you would most likely pick the "babies" card to submit to the judge.
Once all players have submitted a card, the judge flips them over to look at. It's now the judge's job to decide which of the cards is best described by the adjective on the green card. For example, if the green card says "scary" and the cards being judged are "cotton candy", "telephones", "envelopes", "chairs", and "haunted house", the judge would most likely choose the "haunted house" card to be the winner.

- The judge's decision can be completely subjective; e.g., if the judge thinks haunted houses are fun but has a fear of chairs, they would probably end up picking the "chairs" card in spite of the fact that most people would pick the "haunted house". That is why it's important play to the particular judge of that round--keep this in mind as you're selecting the card to submit!

- If everyone agrees on it beforehand, you are allowed to have table talk, which consists of the other players trying to convince the judge which card should be chosen as the winner. Of course, this reveal which card was played by which person, but it can be a very entertaining way to give the game an extra dimension of strategy.
5 Whoever wins collects the green card and becomes judge for the next round. Everyone except the judge from the previous round draws a new red card and gameplay continues in this manner until someone attains as many green cards as they have red cards. That is, if you decided at the beginning of the game that each person should have 10 red cards per round, 10 green cards are also needed to win.

- Alternately, if you want to make it more of a challenge to win, you can have each green card that someone wins replace one of their red cards. In this situation, everyone would have the same number of cards at all times, but some people would have more red than green and vice-versa (depending on who wins more rounds). In this version, the first person to replace their entire hand with green cards is the winner.
Rock Band: Becoming a Band
Rock Band: Becoming a Band
# Facts on Rock Band 3

<table>
<thead>
<tr>
<th>Aggregate scores</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aggregator</strong></td>
<td></td>
</tr>
<tr>
<td>GameRankings</td>
<td>92.44%</td>
</tr>
<tr>
<td>Metacritic</td>
<td>93/100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Review scores</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Publication</strong></td>
<td></td>
</tr>
<tr>
<td>Edge</td>
<td>10/10</td>
</tr>
<tr>
<td>Eurogamer</td>
<td>10/10</td>
</tr>
<tr>
<td>G4</td>
<td>5/5</td>
</tr>
<tr>
<td>Game Informer</td>
<td>9.25/10</td>
</tr>
<tr>
<td>GameSpot</td>
<td>9.0/10</td>
</tr>
<tr>
<td>GameSpy</td>
<td></td>
</tr>
<tr>
<td>IGN</td>
<td>8.5/10</td>
</tr>
</tbody>
</table>

**Developer(s)**: Harmonix, Backbone Entertainment (Wii/DS)

**Publisher(s)**: MTV Games, Mad Catz

**Distributor(s)**: Electronic Arts, Mad Catz

**Designer(s)**: Dan Teasdale, Sylvain Dubrofsky, Brian Chan, Casey Malone

**Series**: Rock Band

**Platform(s)**: Xbox 360, PlayStation 3, Wii, Nintendo DS

**Release date(s)**:
- NA: October 26, 2010
- AUS: October 28, 2010
- EU: October 29, 2010

**Genre(s)**: Music video game

**Mode(s)**: Single-player, multiplayer

**Distribution**:
- DVD (Xbox 360), Blu-ray Disc (PS3), Wii Optical Disc (Wii), game cartridge (DS)
What to Wear: Tapping the Wisdom of Crowds
Social Networking Game Company

zynga
Wooga
playfish
Playdom
megazebra
pinga
CrowdStar
rockyou
KABAM
KNETIK
Download or Play

- All the games mentioned
- Play social networking game
The chance to interact, explore and have fun together amplifies the engagement of a game.

Suddenly playing, performing well and winning carry deeper meaning. You aren’t simply vying to best the game system; you are playing to beat someone else.

Or perhaps you are working together, forming bonds as a team or band. In both instances, playing with someone else gives the play context outside of the game.

It’s not simply between you and the game system anymore. Now it involves bragging rights and social status.

Tapping into social status outside the game gives game designers powerful tools to increase engagement within the game.

After all, winning a single-player game feels like an accomplishment; beating your friends feels like a triumph.
Project 2 Briefing

Tetris 3D or Whac-A-Mole 3D using UNITY

Deadline 8th June 2015 at 5.00 pm
Lab Assessment 2

**Game: Need for Speed (version will be announce next Monday)**

League Type - >Deathmatch Type

-> Create a team – Two Persons

-> League – 4 Team in one Group (Which means 17 Group)

-> Survive in Group (First Place) - > Go to Deathmatch Game to complete others in 17 team

Week 12/13
Marks
Lab Assessment 2

First Place in Each group = (Full Carriymark)
Winning Round of Seventeen = Add 2 Marks Bonus
Champion (Individual) = $$$ and 2 More Bonus Marks
Lab Assessment 3

Game: Counter Strike/Call Of Duty
League Type - >Deathmatch Type
-> Create a team – At Most Five Persons
-> League – Only Four Groups
-> First in the group-> Deathmatch Game
Marks
Lab Assessment 2

First Place in Each group = (Full Carrymark)
Deathmatch = Add 2 Marks Bonus
Champion (Team) = $$$ and 2 More Bonus Marks