Introduction to Video Game Interfaces

**Teacher:** Sarah Buchanan
**Email:** sarahb0816@gmail.com
**Class Time:** 1-1:50pm
**Class Location:** BHCSI Computer Lab

**Course Objective:** This course explores creating computer games using different interfaces. We will be using the XNA Game Development studio with Visual C#, which will allow us to easily create a 2D game using the keyboard as input as well as a Nintendo Wii remote.

**Grading:** The final letter grade will be based upon the five items listed below. The programming assignments can be done during class and you can also finish them during your lab period.

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<td>Exam #1</td>
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<td>Exam #2</td>
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**Tentative Schedule:**

**Week 1:**
- Day 1) Demo and analyze the game we will be making.
- Day 2) History of video game interfaces.
- Day 3) Math background.
- Day 4) Introduction to XNA game components and Visual Studio.
- Day 5) Moving sprite across the screen at a constant velocity.  
  **Exam #1**

**Week 2:**
- Day 6) GameObject class.
- Day 7) Get input from the keyboard. Precalculus math background.
- Day 8) Shoot bullets with a constant velocity.
- Day 9) Replace the keyboard input with input from the wiimote. *(11am – 11:50am)*
- Day 10) Smooth the Wiimote values.  
  **Exam #2**

**Week 3:**
- Day 11) Create an array of GameObjects for your bullets.
- Day 12) Create an array of GameObjects for your enemies.
- Day 13) Collision detection between bullet and enemy.
- Day 14) Keep Score. *(11am – 11:50am)*
- Day 15) Customize your game. *(11am – 11:50am)*  
  **Final Exam**