

## Executive Summary:

The purpose of this evaluation document is to present our group's analysis of the multimedia products we chose to assess for this assignment. We were asked to pick three different multimedia based products, to evaluate, review, determine the significance of the content, and to test their functionality. Our team chose interactive multimedia, otherwise known as games. We focused on two online games, Line Rider, and the hit craze Angry Birds for Google Chrome . Our third choice is an award winning PC based game called Portal. As a group we determined the criteria for how we were to critique each product and developed a rubric to guide us through the process, which will be explained later in this document.

This document will first cover general overviews of the games and an explanation of the criteria we determined was significant. Next, each game is evaluated and rated separately. In conclusion we will recommend the superior game and justify how we reached that outcome.

## Game Overviews:

Angry Birds - Angry Birds is a strategy puzzle game created for mobile touch screen-based smart phones by Rovio, a Finnish game developing company. The story behind the game is simple: the pigs have stolen the birds' eggs. To help get revenge, players must use a slingshot to launch the birds at pigs that are stationed on and/or in structures, with the goal of destroying all of the pigs on the playing field. New birds, some with special abilities, become available to the player as the levels advance. When you start a level in Angry Birds, you see the target to knock down. Upon the completion a level, a screen pops up showing your score and how many stars you received, as well as options to redo the level or continue on in the game.

Line Rider - Line Rider is a simulated physics game that was designed by a Slovenian student and quickly became an Internet craze. The goal of the game is to create unique tracks using one or more lines with your mouse that allow the sledder to defy the laws of gravity. You are given a blank screen, a bobble-headed sledder (dubbed "Dude" by the creators), a menu of tools, and your imagination. The gamer becomes the track designer and can create to the extent of their desire. Each choice of track color has a unique capability, and the tracks can be as complex or as simple as the gamer chooses. There really is only one function in the game, and it continues on for as long as you wish to play it.

Portal - Portal is a single-player first-person puzzle-platform video game produced by Valve, which also runs the game Half Life 2. The concept of the game is to use portals fired from the portal gun your character carries to solve puzzles. When fired at a wall, the portal gun causes a portal to appear. You then fire another portal, which is linked to the first, and are able to use the portal to teleport all over the game map, using the portal gun to solve puzzles. Each level begins and ends with an elevator, as the entire goal of the game it to get from one point to another by solving the tasks to reach the end of the level. This gives a complete feel to the user when you reach the end elevator and ride it to the next, more complex puzzle.

## Evaluation Criteria:

For this analysis, we were asked to evaluate each interactive multimedia game based on effectiveness and appropriateness. The multimedia elements of images, animation, audio and video components, and audience were evaluated for each. We were given a copy of the Military Handbook MIL-HDBK-29612-3A, which defines four categories of interactive presentation. Category 1 is a low grade presentation and is primarily used for introducing an idea or topic. A Category 2 presentation is medium grade, involving more

recall than Category 1, and is used mainly for non-complex operations. Category 3, or high simulation, presentations use video and/or graphics to present emulations or simulations. Category 4 presentations are known as real-time simulation presentations and require a high degree of interactivity. Each interactive multimedia game evaluated was assigned a category.

## **Angry Birds Evaluation:**

Images: The images used in the Angry Birds game are simple two-dimensional cartoons that are brightly colored and exaggerated. Their use of bold lines and high contrast give them a comical appearance that mirrors the overall feel of the game. Because the game was first developed for -and is still predominantly used on- mobile phone devices, the simple, bold images are designed ideally for viewing on such a small screen.

Animation: Angry Birds is perhaps one of the most well-known personal computer games of the current generation. The game itself has become so popular that the characters have transcended the game world. The in-game animation has contributed greatly to this popularity in many ways. First, each level is vibrant and colorful. These brightly colored worlds draw and maintain player attention. Second, the characters are simultaneously simple and complex. The angry birds are simple enough to recreate, but complex enough to be recognized by people who don't even play the game. The animation used has been very successful in ensuring that players and potential players expect fun to come from launching the birds across the screen.

Audio/Video: The upbeat, easy listening theme music of Angry Birds is catchy and creates a pleasant atmosphere while playing the game. The creators have also developed various, interchangeable theme music that changes periodically. After leaving the home and levels screen the music dies down and allows the player to hear the various noises the birds and pigs make when either being hit or thrown across the screen. Those additional sounds provide additional entertainment for the game. Angry Bird visuals are extremely great as the Apple application; however, for the version played on Google Chrome the multimedia streams choppy.

The game is fast to upload and the content moves fairly quickly, but the main image seems to separate into blocks. This creates a disjoint in the experience. It was also discovered that some of the images disappear when going between various levels proving to be difficult when trying to navigate the site.

Audience Appropriateness: The hit game Angry Birds, has a very solid platform on which it runs. It is a simple concept as the instructive effectiveness of this multimedia piece is to pull a bird back in sling shot. Other than the actual game mechanics, which do work smoothly, the exit and other links (in game menus) to navigate in game are easy to use and understand. The only issue that can be found is that on some computers (using the free game in the Internet browser Chrome) the game will either not work or, be extremely laggy which takes away from the immersive experience of the game. Angry Birds' metaphors remain consistent throughout the progress of the game allowing the player to follow the story and understand their own purpose.. This game includes a few commonly accepted/expected standards including: preview of the level to be completed, game pause available at anytime, and completion screens at the end of each level.

## **Line Rider Evaluation:**

Images: The Line Rider game screen is a blank white box with a menu of small icons at the top. Each icon in the menu is a simple image that quickly and effectively communicates its basic purpose, and is accompanied by a rollover description of its function. These images are somewhat primitive in comparison to today's multimedia advances, but their simple and straightforward design is parallel to the overall theme of the game. The icon of the sled rider, "Dude," also follows the game's simple, hand-drawn theme. Dude is a two-dimensional image made up of the black outline of a sled and rider, with a cropped photo of a man's head attached.

Aside from the white box containing the actual game, the majority of the rest of the website's layout is devoted to advertising, with announcements and video clips viewable after scrolling. This design is distracting and at first glance makes it difficult to identify the location on the actual game.

*Animation:* The animation used in Line Rider is simple, but effective. The purpose of the game is to draw paths via mouse clicks. Your character is then able to slide across these paths in order to reach some goal. Animation is consistent with the visual metaphor of the game (a 2 dimensional paper and pencil drawn world). Line Rider is known for its playability and addictiveness; not its graphics. The basic animation emphasizes the simplicity of the game. This simplicity creates a very unintimidating environment for potential players. They pick up the game and play for hours because they are able to manipulate the game world and create their own levels.

*Audio/Video:* Line Rider's audio is lacking. There is only one time when there is sound during the game; when Dude falls or hits a line, ending his ride. Without more sound, the game lacks life and pizzazz.

The video quality of Line Rider runs fairly seamlessly. The game was played on various brands of machines, as well as, different browsers. After watching the advertisement that plays before beginning, each time the game was opened it was almost instant.

*Audience Appropriateness:* Line Rider was created as a flash game. The concept of sledding is only portrayed by the use of the lines that Dude rides as something of a track. After pressing the play button, the character just falls down and can be moved forward by the lines. The maps created by the lines can become quite complex and the other kinds of lines can add different effects to the game. There are no exit buttons or added links for navigation. Overall, this is very simple game and reaches its target audience effectively.

## **Portal Evaluation:**

*Images:* The graphics in the game Portal are made to look realistic, so that the player feels that they are actually in the game, walking through the levels. There is a bare, futuristic feel to the figures in the game, which coincides with the game's setting in a research facility and its post-apocalyptic time frame.

*Animation:* Developed by Valve Corporation, the animation in Portal aims to go beyond a regular game play experience. The game is based on Valve's signature Source graphics and physics engine. The detailed graphics in combination with the first person experience of the game create a very enticing environment for the player. Portal is a game about solving puzzles. The creators could have put forth less effort into graphics and animation and instead focused on the highly praised puzzle aspect of the game. Instead of skimping, Valve has created a very complete environment to match the completeness of the game itself. The animation complements Portal in such a way that it is as respected and renowned as the game itself.

*Audio/Video:* All through Portal the music keeps the gamer engaged during play time. The miscellaneous scenario sounds are effective and allow to player to feel enveloped within while playing. The creators have developed the sounds that allow the player to feel as if they are in the world and things are not working correctly. An example of this is while running through the game world a computer generated voice communicates with you, the player, the entire time. Her voice is generally consistent, but also glitches once in a while. There are also scenario background noises that help make the different levels seem alive...

*Audience Appropriateness:* The mechanics behind portal are actually a bit more complex compared to the other two games. Like any full first person shooter (fps) video game, it takes a bit of skill to master. You use the mouse buttons to fire the portal device, the mouse to look around, WASD to move forward, left, back, and right respectively, the space bar to jump and the E button to pick up objects. The Esc key will bring up the in game menu, which you can adjust a few visual settings or save/quit the game. Navigating

the menu is also quite easy and intuitive. The metaphor used in this game, the concept of teleporting, is achieved throughout the entire game. Overall the mechanics work and the usability of the platform is quite good.

**Categories:**

After analyzing all the interactive multimedia games, we have determined that the games fall into categories 2, 3, and 4.

We also rated them by a score, 25 points for each evaluation criteria.

<u>Line Rider</u>	Category 1: Low Grade	Category 2: Medium	Category 3: High Simulation	Category 4: Real Time Simulation
Images	5			
Animation	8			
Audio/Video	7			
Audience Appropriateness			20	

Score: 40

Line rider, the most simple of the multimedia programs we analyzed, was placed in Category 2. There was no sound, the animation and game mechanics were fairly simple, and there really was only one interactive function; draw a line. It was able to grab your attention and a more artistic user could spend hours perfecting a track with beautiful backgrounds, but in the end, it is a simple flash program that draws a line for Dude to sled down.

<b><u>Angry Birds</u></b>	Category 1: Low Grade	Category 2: Medium	Category 3: High Simulation	Category 4: Real Time Simulation
Images		15		
Animation			19	
Audio/Video		16		
Audience Appropriateness			18	

Score: 68

Angry Birds fell into the 3rd category. Though the game mechanics were simple, the actual graphics, animations, and music actually immersed the user in the interactive environment of the game. Compared to Line Rider's single action, draw a line, Angry Birds makes the user think and react to scenarios in the game. There is also music and sound effects that also help draw the user into the interactive environment.

<b><u>Portal</u></b>	Category 1: Low Grade	Category 2: Medium	Category 3: High Simulation	Category 4: Real Time Simulation
Images				20
Animation				22
Audio/Video				21
Audience Appropriateness				24

Score: 87

Portal was evaluated as a Category 4 presentation. Not only are the graphics more complex than the other two interactive media games, but its physics engine and overall concept make it a more complex and engaging experience. It involves multiple tasks that must be completed by the user creatively and without assistance. This, we determined, was what solidified it as belonging to the 4th category. It branches into many levels and complies to all the requirements for categories 1, 2, and 3. Even though the actual game play only takes a few hours to complete (compared to most full scale video games which can take over 20 hours to complete), it won the 2008 video game of the year award.

### **Conclusion:**

After careful analysis and evaluation of each game, our group determined that Portal has the best use of the multimedia elements, categorizing as a 4 according to the Military Handbook. The advanced graphics and animation, the complex game situations and obstacles, and the level of skill required of the user by Portal make it a more involved and aggregate game experience than the others. Angry Birds was a close second and Line Rider trailed in third.