VIDEO GAMES AND HOW THEY REVOLUTIONIZED THE WORLD

Games are a powerful entertaining method that are usually disconsidered and deserve more attention

Video Games 101

DOOM: Old but gold

The Awakening  
Did we change your mind?

A change of pace

Made by:

Dinu Andrei - Aurelian

Ilie Dumitru

Neculae Andrei - Fabian

Intro (Dinu Andrei - Aurelian):

* Presentation of the speaker & co.

Hello everybody and welcome to our presentation about video games. My name is Dinu Andrei – Aurelian and today together with my colleagues Ilie Dumitru (points out the person) and Neculae Andrei – Fabian (points out the other person) will present the importance and the evolution of video games.

* Video Games 101:

Video games are around us ever since PONG released in 1972 and they found unique ways to entertain us over the years. As kids we often lost track of time playing games, becoming immersed in their exciting and sometimes overwhelming worlds. And now, as we grew older we look back with nostalgy at the times that passed in a bittersweet manner and we can say for certain that only video games can make you feel this unfailing way.

* Structure of the presentation (outline + duration)

So, our structure is simple. It contains only three topics. One about the humble beginning before the boom, another about the AI in video games and the last one about a change of pace in the industry. The hole presentation shouldn’t take more than 10 – 15 minutes.

* Reason for choosing the topic

The reason why we have chosen this topic is simple. We, at hearts, are gamers, playing from young ages video games, growing with them and admiring them, so it only came naturally to choose something that we felt would represent one of our most profound passions. (As an example, when we met to work for this project we ended up playing video games together more time than we would like to admit).

* The purpose of the presentation

As people with experience in the field, we felt that video games are rather bad represented among non-gamers, usually associated with the waste of time, loneliness and violence, not to say that some people when hear about video games they thing about the “video games” from the gambling machines, when video games can represent a modern art, a proof of the technological achievements of our computers, a taste of the human ingenuity. That’s why today, we will want to present why the video games are important to the human history.

* Rhetorical question about the subject (Do you know what video games are?)

If you’re going to ask Wiki, it will return this rather dry definition *“A video game is an electronic game that involves interaction with a bla bla….”*, but I think an easier definition of video games would be that they are a form of entertainment as books or movies that are active from the perspective of the user rather than passive and by that I mean that video games are a piece of media that are trying to make you to participate through your inputs into their world with the scope of immersing you in their own universes.

* Some examples of games
  + Minecraft
  + Grand Theft Auto V
  + Counter – Strike: Global Offensive
  + Red Dead Redemption 2

Doom: Old but gold (Ilie Dumitru):

* Now do you want to play some Doom? This is the phrase you most likely heard back in 1993 when it came out.
* This game was so popular that the server of the Wisconsin University where it was hosted broke because of the people wanted to play it so much.
* It was so popular because it was so well optimized that it was faster than most other games at the time, faster even than some games to date.
* Do you know this guy?
* He is John Carmack a genius that changed the world and together with his team made the first DOOM. He invented this algorithm.
* This is the Binary Space Partitioning. The algorithm works by breaking or partitioning the space of the world in two parts at each step. This algorithm was invented for optimizing 3D graphics and for that reason it is still used today in all of those movies, animations and CGI you see on the screen.
* Now I want to ask you something that seems unrelated, have you ever watched Toy Story/Avatar/The Matrix? Ok, you probably had that opportunity because of these guys, the guys behind DOOM, legends of the gaming world and people no one thinks about or gives any credit to when they watch a movie or an animation these days.

The awakening (Neculae Andrei - Fabian):

- As everything gets bigger and bigger all around us, it only makes sense that AI industry is also expanding. Right now, we can see how big of an impact it has on everybody's lives and we can only imagine how much more it can do in the future. Games are among the first to introduce AI to the insatiable vast public, even though at that time it was a shadow of what it is today. What is even more impressive is that games are one of the best environment for AI development and training because of the large amount of data it can provide from the users in a small amount of time. Thus, games are even introducing new ways of using AI, a good example being Left 4 Dead (2008), which adjusts the gameplay based on the player's actions and performance. This can easily lead to AI knowing our preferences and maybe even simplifying our lives. Well, in fact, most of it is already happening.

- As a side topic, I want to share the AI of two of my favorite games, which I think are really unique and interesting: Rain World and Will You Snail. What made me fall in love with Rain World was that, unlike most games, where AI characters follow pre-determined paths and behaviors, (change slide) Rain World's creatures have a complex and dynamic behavior system that is based on their own needs, desires and past experiences. In other words, the game's developers, James Primate and Joar Jakobsson, used an advanced technique called "ecology simulation", which basically means the creatures hunt for food, compete with each other for resources and even learn from their past mistakes, thus adapting their behavior accordingly. The game's AI has implications beyond the gaming world, as it has the potential to be used in fields such as robotics, where robots could learn from their environments and adapt their behavior in real time.

- On the other hand, the developer of Will You Snail chose another approach: he implemented an evil AI in his platformer game, which makes fun of you every time you fail with over one thousand different voice lines, making it way more annoying but also very rewarding to finish a level. The difficulty and the beauty of the game don't come from the way the levels were created, but rather from the AI itself, which predicts the next moves you are most likely to make and tries to stop you by either placing enemies or spikes on the ground in real time. This way, an already difficult game became even harder with an interesting twist, making the immersion and the gameplay a lot more fun and sharing an awesome concept to the world.

A change of pace (Dinu Andrei – Aurelian):

At the end of the 2000 it was the end of an era and the beginning of a new one not only for the world we knew, but also for the industry of gaming. People celebrated the chances of the new century with both joy and fear as many thought that the end of the world would come. In this years, two games of an immense importance appeared, two faces of a coin. This games would change forever how a story is told and how freedom and an engaging world is built in games to immerse the player. The first face of the coin is looking to the past, to the times that just left.

The year is 1998 and a small company called Valve launched their debut game: Half - Life. This game, this single game impacted so much not only the industry of gaming at that time, but its influence is still lingering today in most games, actually. To give a quote from John D. Carmack showing the perspective of people about stories in video games at that time: *“Story in a game is like a story in a porn movie. It's expected to be there, but it's not that important.”.* Unfortunately for him, this quote aged like fine milk. Today even the most indie games have a little story ready to unfold or a secret deep lore convoluted and hidden behind the elements of the game. Until that point there was no story in pretty much all of the games. You were just a random guy randomly put in a random world having a task to do. Then Half - Life came and took the world by storm with its intriguing story and unique and revolutionary methods of storytelling.

The story of Half – Life follows a MIT physicist named Gordon Freeman who must fight his way through, and hopefully out of, the Black Mesa Research Facility, New Mexico, after an experiment intended to research improved teleportation technology goes horribly wrong, and tears open a rift in the space/time continuum between our world and an alien border world containing forces far beyond the understanding of any human mind.

The other side of the coin is looking to the future, with a hope to a brighter world. In the year 2001, one of the most controversial game in history was launched: Grand Theft Auto III. Singlehanded, GTA III shaken the world from its roots, turned it upside – down, and destroyed the remaining grain of peace that it had until that moment. It was so popular that half of the gaming industry started making clones of the game, giving their own spin to the formula in hope to get at least a fraction of its fame. To put it better into perspective, by March 2008 it sold over 14.5 million copies.

What was so special about GTA III was that it brought to the table an immersive open world, a compelling and entertaining story, giving the player complete freedom to explore at will and the tools to make their own fun. The game was offering beside the story missions a multitude of side activities like Off-Road Challenges, Rampages, Unique Stunt Jumps and even car jobs like paramedic, firefighter or taxi driver.

In conclusion, the gaming world is a fascinating subject to discus and we think it deserves more love and credit. Thank you for your attention and for allowing us to tell you about our most beloved topic.