



# THE DESIGN OF AN ALTERNATE REALITY GAME AS CAPSTONE COURSE IN A MULTIMEDIA POST-GRADUATE DEGREE

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# Introduction

- Technology effects our everyday lives
- ICT evolves and so does multimedia technologies
- Students need to be transliterate
- Students need to be able to cope with all the technologies

# Introduction

- Multimedia degree's fourth year of study
- Students consolidate 3 years of learned skills
- Develop an Alternate Reality Game
  
- The paper propose the students design the ARG to supplement library literacy skills taught in Academic and Information Management module

# What is an Alternate Reality Game

- ARGs are games
- A game
  - Collection of activities
  - Guided by artificial rules
  - Overcome obstacles
  - Achieve specific goals

# What is an Alternate Reality Game

- The context of an ARG is our reality
- Interactive fiction
  - Player driven narrative
- Complex obstacles
  - Requires collaboration between players
- Use multiple types of media and platforms
  
- Puppet masters – The facilitators of the game
- Rabbit hole – The starting point of the game. What grabs the players attention to start of.

# Skills acquired in the Multimedia degree: First year

- basic HTML and HTML 5;
- basic image editing and creation skills (Photoshop, GIMP);
- basic design skills;
- basic programming skills (Java, C#, C++);
- introduction to animation (Adobe Flash);
- introduction to sound editing (Adobe Audition).

# Skills acquired in the Multimedia degree: Second year

- advanced web development skills (JavaScript, jQuery, PHP etc.);
- usage of web based technologies (Web 2.0 technologies);
- advanced programming (C++, Java, C#);
- relational database development (SQL);
- theoretical basis of multimedia basics (hypermedia, information architecture and trends);
- video editing and creation (Adobe Premier).

# Skills acquired in the Multimedia degree: Third year

- Computer Science skills vary depending on the students individual subject choice and varies from computer security, artificial intelligence, computer graphics, programming language, etc.
- a theoretical base of multimedia trends (Social media and education, etc.)
- advanced video editing (Adobe Premier, Adobe After Effects);
- Human Computer Interaction (Gesture based interaction, Multiuser interfaces, etc.);
- Game design theory.

# Student ARGs: Number 13

- Developed and ran in 2010
- Narrative: Save a student's sister from a Free Mason sect.
- Rabbit hole: The university website for the Multimedia degree was "hacked"
- Gameplay: Treasure hunts, puzzles
- Technology: Web, interactive maps, timers, video editing, audio
- Considered successful by players and puppet masters

# Student ARGs: Colossus Innovation

- Developed and ran in 2011
- Narrative: Giant corporation dabbling in pseudo science wants to stop/cause the end of the world.
- Rabbit hole: Advertising and recruitment on campus by CI
- Gameplay: Interactive puzzles, logic puzzles, narrative based mechanics.
- Technology: Web, video editing, audio
- The game did not successfully complete but students (puppet masters) still achieved the learning objectives

# Student ARGs: Campus Ghost

- Developed and ran in 2012
- Narrative: Campus ghost story myths. Help a ghost to set the other ghosts free.
- Rabbit hole: A metallic structure with a electronic timer counting down.
- Gameplay: Treasure hunts, puzzles, encryption (inside images)
- Technology: Web, video editing, audio, physical electronics, image editing
- Considered successful by players and puppet masters

# Examples of ARGs

- The Beast – considered to be the first successful ARG
  - Created for Stephen Spielberg's movie AI
  - Created by Microsoft employees in 2001
- Ingress – currently being run by Google
  - Created by Google for the purpose of crowdsourcing (guessed)
  - Use current technology like Augmented Reality

# The difference between games and gamification

- Gamification – “Gamification is the use of game thinking and game elements in a non-game context in order to engage users and solve problems”
- Gamification enhances the experience of using an existing system by borrowing from games
- Games are developed from the ground up

# ARG: advantages to the designers and the players in the learning environment

- Designer employ previously learnt skills in real world applications
- The designer and player both have to find information from a variety of places, evaluate the relevance of the information, and apply the information to solving the current problem
- The players are provided with an immersive experience that arguably better simulates the reality of information distribution
- Interactive nature - promotes active learning environment for the player

# Challenges when designing an ARG

- Limited time in designing and implementing a comprehensive ARG
- The ability of the designer group to effectively work together
- Successful play cannot be guaranteed
- Limited funds
- Available technology to the player base

# Possible future application of ARG in Library Literacy training

- It is essential for education institutions to equip people with the skills and means to become information-literate and to enable them to locate, access and evaluate information (Mchombu & Cadbury, 2006).
- A compulsory module in Information Literacy in Academic and Information management is presented at University of Pretoria
- An ARG can supplement the skills taught in the module
  - Simulate information distribution
  - Seek, locate and evaluate information
  - Learned skills will be incorporated into the game puzzles

# Possible future application of ARG in Library Literacy training

- Skills like:
  - Locating various information sources
  - Accessing these sources for relevant information
  - Evaluate information
- The ARG can incorporate these skills into the narrative and puzzle design
- Building the ARG, the fourth year students will use their skills required through the MM degree
- Playing the ARG will enable the first year students to use their skills gained through the Academic and Information Management module

# Conclusion

- An ARG can be used as a capstone for the multimedia degree
- Designing the ARG effectively utilizes the skills learned through their previous three years of Multimedia studies
- Playing a game with challenges designed to utilize library literacy skills is an effective way to strengthen and enhance these skills.