Oliver Collins-Cope

2102775@rutc.ac.uk

Learning Aim A

Investigate technologies used in computer gaming.

Unit 08 Computer games development

Assignment 1

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# Introduction

In the modern day there are many current and emerging technologies that are constantly evolving. This evolution has led to stark change in social and technological trends in computer gaming, regarding user requirements and the larger gaming industry. Furthermore, the current and emerging technologies also have, and are likely to continue to have an impact on game development now and in the future. Throughout this paper I will discuss how the different technologies and user requirements can impact game development and design.

# Social trends in computer gaming

There are a large number of variables and factors to consider when discussing and evaluating social trends in computer gaming. This section will aim to cover all of these points that can determine different factors within the social trends of computer gaming, while discussing how these factors affect each other and the significance of each one individually.

## Popular genres

There are many genres of games, however there are primarily 15 popular genres. These are

* Action games
* Roleplaying games (RPGs)
* Adventure games
* Strategy games
* Puzzle games
* Platformer games
* Simulation games
* Sport games

## Player base

## Production styles

## Multiplayer

## Artificial intelligence

## Emerging technologies

## Security of integrated services and multiplayer environments

# Technologies used in computer gaming

## Benefits and limitations of different platforms for development

### Personal computers

### Consoles

### Mobile devices

### Web based

## Hardware options and their involvement in development

### CPU

### GPU

### Memory, RAM/ROM

### Output

### Input

### Storage

### New technologies

## Software options and their effect on development

### Operating system

### Programming languages

### Device drivers

### Graphic options

### Audio options

## Use of game engines and how they aid computer game development

### Rendering engines

### Physics engines

### Collision detection

### Scripting

### Animation

# Comparison on how current and emerging technologies computer game development

# Comparison on how different technologies impact the game industry and requirements and expectations

# How current technologies are impacting game development and design

## How emerging technologies impact game development

## How games are developed to meet the requirements of users

## How games are developed to meet the requirements of the larger game industry

# Evaluation

## The impact of current and emerging technologies on development