

Introduction to NextGen Games, Animation & VFX.

Hi! I'm Chris Jeffrey, a lecturer in **Game Design** and **Programming** on the **NextGen** course!

I've been working in the games industry for over 10 years now, running an indie studio and working with the likes of MiniClip, Armor Games, Kongregate and Nickelodeon. I currently still work in the industry and I'm working on a Nintendo Switch title at the moment! So **I'll be teaching you how to design and develop games.**

I've put together this workbook in order to give you an idea of course content on our course and give you a taster of what life at Sunderland College would be like whilst studying on our Games, Animation and VFX course.



Introduction to NextGen Games, Animation & VFX.

The purpose of these slides are to introduce you to some of the course content that we cover on level 2/3 Game Design, Animation & VFX.

We will cover:

- Introduction to a Game Design Document.
- Examples of popular Game Design Documentation.
- Game Design Document template I've designed for you to fill out for your own game.
- What is Unity and what can it do for game development.
- How to install and get Unity.
- **Two** Unity game design tasks. Make your own games!





Game Design Documents

Game Design Documents

A **Game Design Document** or **GDD** is a descriptive document for a video game. This document is live - meaning that it is constantly being edited and updated.

The purpose of design documentation is to express the vision for the game, describe the contents, and present a plan for implementation. A design document is a bible from which the producer preaches the goal, through which the designers champion their ideas, and from which the artists and programmers get their instructions and express their expertise.

Anybody should be able to look at the document and understand your vision!



Can you name the game?!

5. Specification

5.1 Concept

The aim of Race'n'Chase is to produce a fun, addictive and fast multi-player car racing and crashing game which uses a novel graphics method.

5.2 Story

5.2.1 Setting

The game will be set in a present-day world.

5.3 Game Structure

There will be 3 cities with a different graphic style for each city (e.g. New York, Venice, Miami). There will be many different missions to be played in each city. This is so that players can get to know the routes through a particular city.

In each game type, it will be possible to progress to different cities only when certain goals have been attained.

5.4 Players

The PC game will be playable by multiple players across a network or by one player at a standalone machine. Console versions will allow two players at one machine. This facility may be added to PCs.

5.5 Action

Players will be able to drive cars and possibly other vehicles such as boats, helicopters or lorries.

Cars can be stolen, raced, collided, crashed (ramraiding ?) and have to be navigated about a large map.

It will also be possible for players to get out of their car and steal another one. This will mean controlling a vulnerable pedestrian for a short time. Trying to steal a car may result in an alarm being set off which will, of course, attract the police.

Grand Theft Auto (PS1)

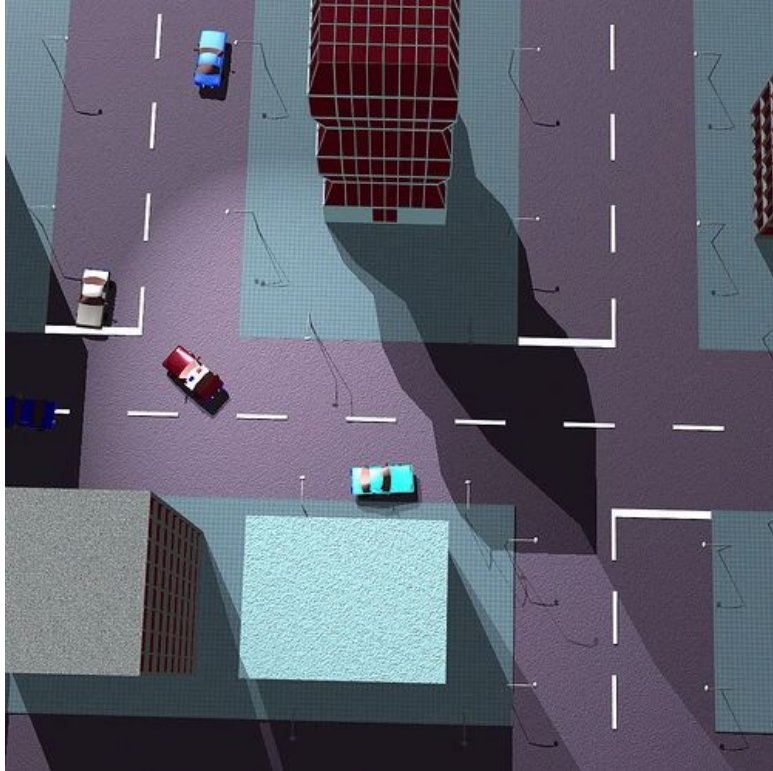
Race'n'Chase was the original concept of what would become the first installment in the **Grand Theft Auto** series.

The game consisted of an open world where the player would either take the role of a cop or a criminal in multiple game modes that, hence the title of the game, ranged from races to police chases.

You can access the full Race'n'Chase GDD within this work folder.



Race'n'Chase



Grand Theft Auto (PS1)



Making Your First Game - Video



Game Design Document Task

During the Level 2 and Level 3 Games, Animation & VFX course you will design, produce and publish a 3D game. The game will be made using **Unity, Maya, Substance Painter** and **Photoshop** (*we'll teach you all of the skills you'll need*).

Your task is to fill out this game design document for YOUR OWN GAME!

The document has instructions and will guide you through completion with annotations.

Tip: Don't make your game too complicated – you will have to make it! Keep saving and backing up your work.

You can access the Game Design Document template within this work folder.



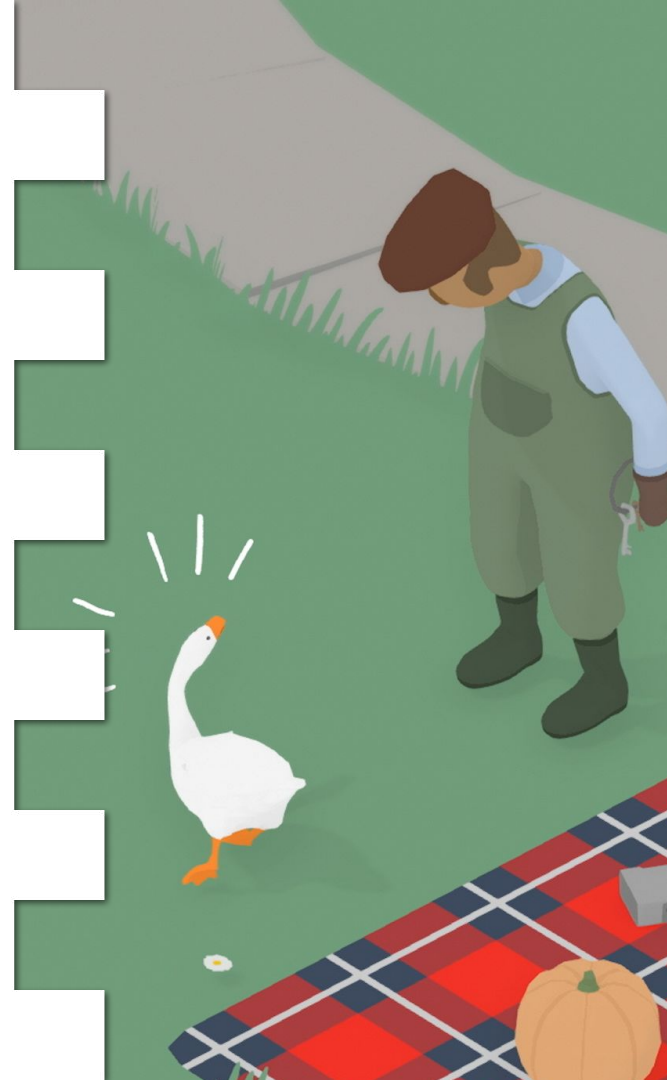
Game Design Document Task - Extra

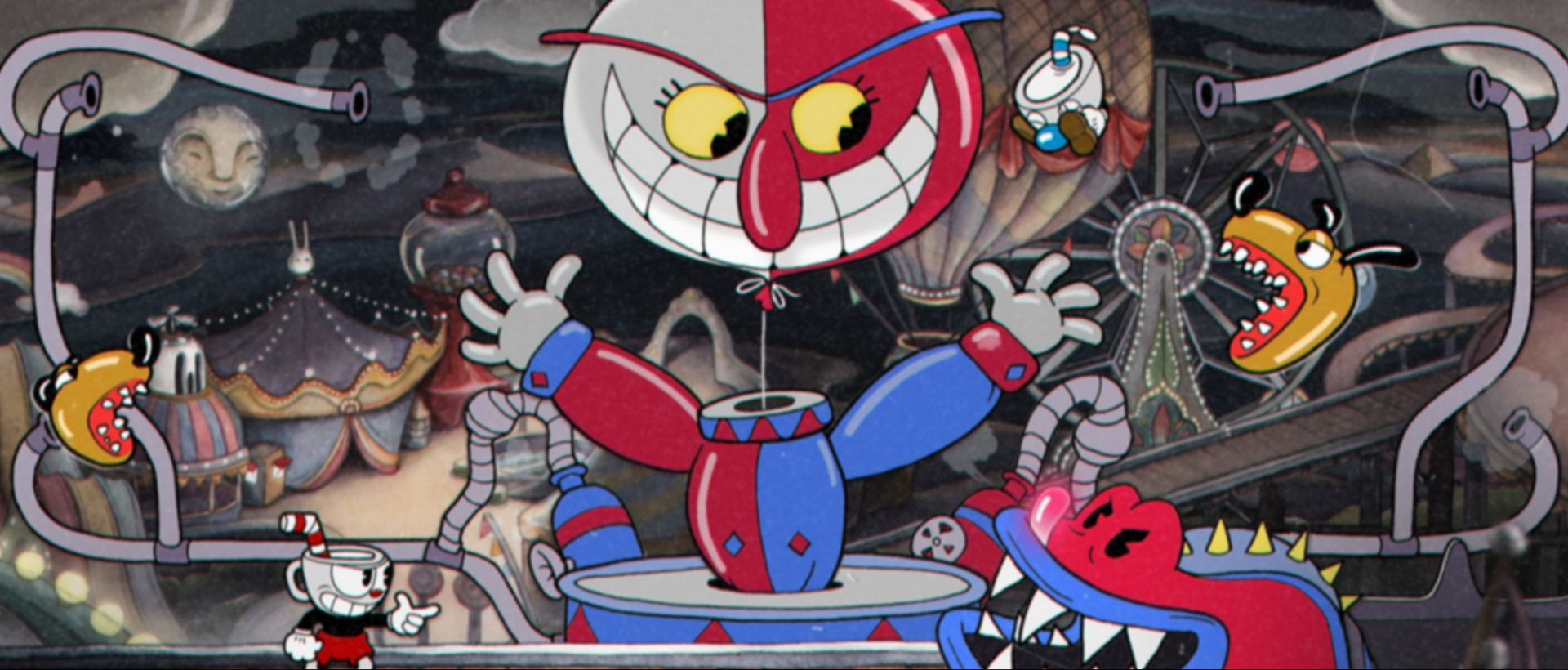
Game design documents are a fantastic way to get ideas across in game development, **HOWEVER**, they're just words.

Try and update your game design document with:

- Character concept art.
- Environment concept art.
- Screen mockups
- Level design mockups.
- Sketches that can accompany your game design document.

Remember, this is early stage production. **Art does NOT need to be final** and look good. It's to get an idea across.





Introduction to Unity

Understanding Supported Features of Unity

How does a game engine work?

A game engine is the software that provides game creators with the necessary set of features to build games quickly and efficiently.

A game engine is a framework for game development that supports and brings together several core areas. You can import art and assets, 2D and 3D, from other software, such as Maya or 3ds Max or Photoshop; assemble those assets into scenes and environments; add lighting, audio, special effects, physics and animation, interactivity, and gameplay logic; and edit, debug and optimize the content for your target platforms.



Understanding Supported Features of Unity and Game Engines

Unity is a 2D/3D cross platform engine for game development.

There's more than just games created with Unity though nowadays!



**Unite Berlin - Made with Unity
Sizzle Reel 2018**



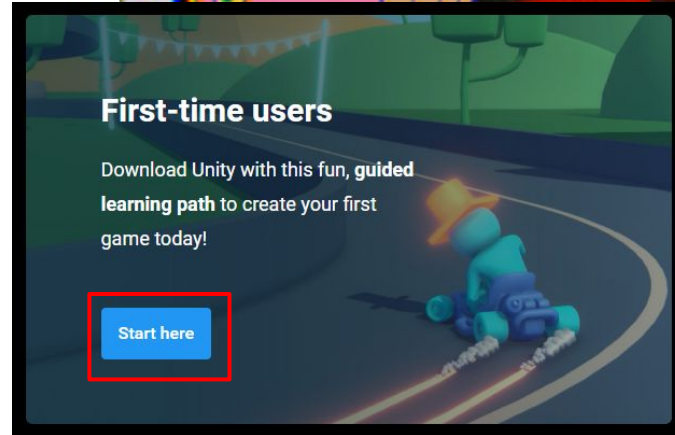
Installing Unity

Unity is completely free for student and personal use. **Which is great!**

This means you're able to download it at home and work through it unlike other software packages that cost.

Head over to <https://store.unity.com/download-nuo> and download/install Unity.

I'd highly recommend you check out <https://learn.unity.com/> as they have a wealth of beginner tutorials to introduce you to Unity.



Unity - Your journey begins here



New to Unity?

It's never been easier to start creating

Microgame Task

Unity has a large amount of resources that you can use in order to learn the tool and get used to developing and designing games with it!

On the same website that you downloaded Unity, if you scroll down. There are a whole host of microgames with tutorials on getting starting with using Unity!

<https://store.unity.com/download-nuo>

Pick from one of these templates within Unity to start your journey.



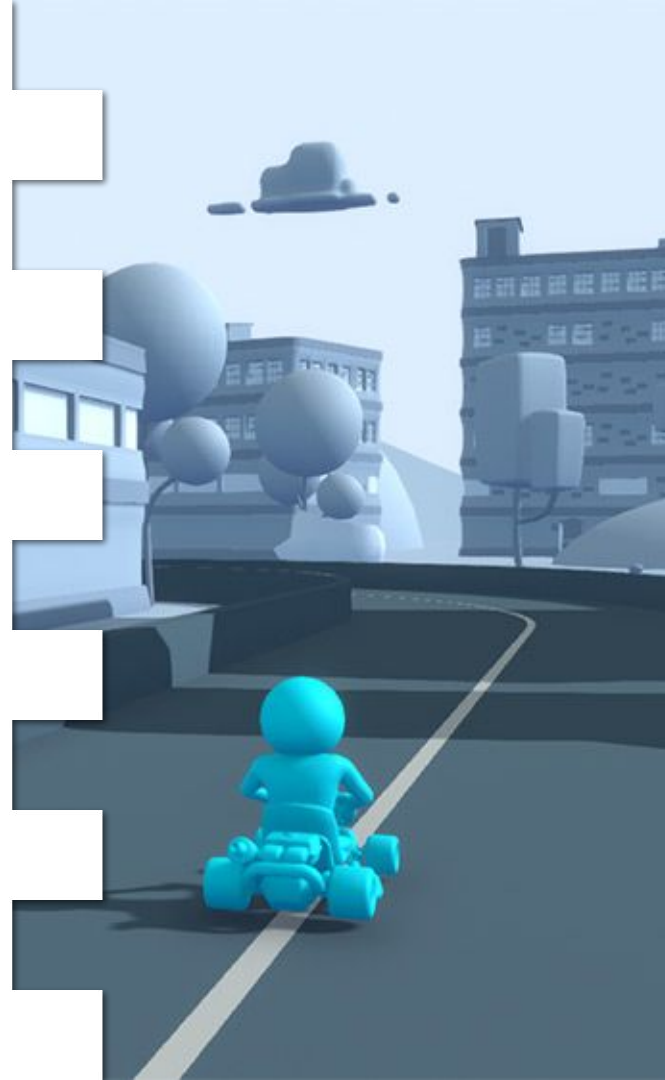
Karting



Platformer



FPS



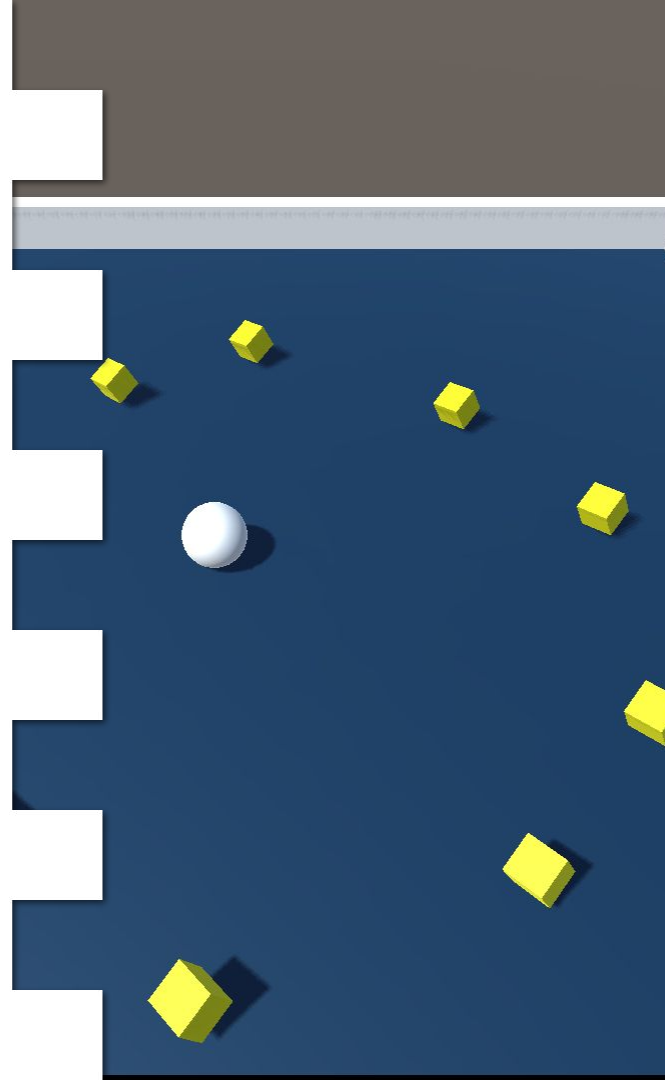
Roll-A-Ball Task

Now you've got to grips with Unity a little bit we're going to create a simple **rolling ball game** that teaches you more of the principles of working with Unity.

In this tutorial, there are **8 videos** to watch that will guide you through this process. This should take around **1 hour and 30 mins**.

<https://learn.unity.com/project/roll-a-ball-tutorial>

Tip: If you create a Unity account, Unity will track your progress through the tutorial, so you can come back to it at any time and pick up.



Unity - Roll-A-Ball



If you have any questions or would like further information about the course or any particular topics you are interested in, please feel free to email me at:

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