Traditional Animation Principles within Mobile App Development

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Welcome to this Thunderstruck Presentation by Danny Bacchus & Melvyn Ternan

"Traditional Animation principles within mobile App development"
A unique request

Jake Habgood

Games Britannia

“A Short Workshop”

Incorporating skills from both

Animation & Digital Media Production
A unique request

4 Hours
Animation & DMP
based around
Games Design
A unique request

Initially

Nothing came to mind
A unique request

Unique

Games Design

Fusion
A unique request
The Neverhood (PC - 1996)
A fully stop motion animated ‘point and click’ adventure game

3.5 tonnes of clay were used in the production of this game.
Clay was melted down and spread over wooden frames for the large and small sets
Skullmonkeys (Playstation - 1998)
Sequel to The Neverhood, a fully stop motion animated ‘platformer’ game

Boombots (Playstation - 1999)
Also developed by The Neverhood, a 3D animated ‘beat ‘em up’ game featuring stop motion elements
Armikrog (PC - September 30th 2015)
Long awaited successful Kickstarter project by Doug Tenaple (creator of The Neverhood), a new fully stop motion animated adventure game.
Inspiration

Lumino City (PC - 2014)

A ‘point and click’ adventure game featuring hand-made sets and frame by frame animation
Inspiration

Amanita Design
Game studio responsible for a range of games featuring frame by frame animation and photo manipulation.
Machinarium (PC - 2009)

Botanicula (PC - 2012)
Simplifying the Stop Motion

Challenges met
Simplifying the Stop Motion

Challenges met

Simplify a green screen animation studio that could be set up anywhere
Simplifying the Stop Motion

Challenges met

Simplify a green screen animation studio that could be set up anywhere

Simplify the software used, letting students focus on the creation and animation aspects
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Simplify a green screen animation studio that could be set up anywhere

Simplify the software used, letting students focus on the creation and animation aspects

Limit complicated builds by pre-constructing various puppet elements
Simplifying the Stop Motion

Fluro lights - Hardwood Green screen backdrop - Stop Motion Rig - Canon EOS 1100D - Tripod
Simplifying the Stop Motion

Stop Motion Software

DragonFrame - Short 12 frame loops - Post production by tutor
Simplifying the Stop Motion
Pre-constructing & Limiting elements

Limited item set - Pre-built Armature - Animation cheat sheet
Danny receives a set of folders each containing a static or animated stop motion piece for the game.
The game was made using Adobe Flash CC; an easy to use and intuitive platform for making apps for a variety of platforms.

Level Design
Project was pre-prepared for students to customise / create levels with assets made in previous session.

Create collision layer
Add visuals
Place interactive elements

Project also allowed for additional levels to be added (time permitting).
Level Design

Students were introduced to the script to understand how the game works with fundamental scripting basics (variables, logic, functions, event listeners...)

Script could be edited to change how the character behaves and game mechanics.
The Final Product
Benefit for Students
Stop Motion Animation

“Hands-on Visual Development”

“Hands-on Animating”

“Team work”
Benefit for Students

App Development

Students are introduced to basic scripting fundamentals and mechanics of mobile app design. Skills can be transferred to a variety of different development platforms and scripting languages. (javascript, C#, Unity…)

With additional time these skills can be greatly enhanced and developed:

- Students could write script themselves
- Add additional interactive objects or game elements (score, timer, health-bar, enemies, sound etc.)
- Animate game objects
- Added material on implementing unique mobile user input and functionality
Questions -after which- Answers