

# ColourBlind

---

Technical Document

---

Hybridizing Forethought

# Contents

<b>Development.....</b>	<b>Page 3</b>
• Hardware	
○ Capabilities	
• Software	
○ Limitations	
○ Capabilities	
<b>Target .....</b>	<b>Page 5</b>
• Pros	
• Cons	
<b>Staffing.....</b>	<b>Page 6</b>
• Programming	
• Art	
• Management	
• Audio	
<b>Costs.....</b>	<b>Page 7</b>
• Hardware	
• Software	
• Staff	
<b>Return on Investment.....</b>	<b>Page 8</b>
• Estimated Price	
• Projected Sales	
• Projected Profits	
<b>Produced By.....</b>	<b>Page 9</b>

# Development

---

## Hardware

This game will be developed using the following hardware:

Acer Aspire 7738G laptop with the following specifications:

Intel Core 2 Duo Processor: P7550 (2.26GHz, 1066MHz FSB)

NVIDIA GeForce GT 130M: 2303MB TurboCache

17.3" HD+ LED LCD

4GB DDR3 Memory

500Gb HDD

Blu ray Disc drive

The artwork for the game requires a computer with the following specifications in order to run Blender.

2 Ghz dual CPU

2 GB Ram

1920 x 1200 px Display with 24 bit color

3 Button Mouse

Open GL Graphics Card with 128 or 256 MB Ram

A scanner will also be required. Epson Perfection V300 Scanner was the model chosen.

## Capabilities

The hardware used for the game was capable of handling Unity3D version 3.0 without any problems.

## Software

The game itself will be entirely developed using Unity3D Version 3.0. As well as this for 3d modelling purposes Blender will be used. Audio recording and editing will be done with Audacity. Miscellaneous other programs may be used for graphics such as Photoshop.

### Limitations

Unity3D – This programs primary limitation is in its application of scripting languages. Most of us have experience in C++ and Java, however, Unity3D only accepts JavaScript, Boo and C#.

As well as this the program only supports .FBX, .dae, .3DS, .dxf and .obj files. This is not a huge problem as we will use Blender for the 3D modelling. However, does limit our choices.

Photoshop – File size is very large. Requires experience in order to be useful.

Blender- Requires experience to get full functionality.

The other programs are sufficient for the requirements.

### Capabilities

Unity3D – Supports many audio file formats including MPEG 1/2/3, WAV, Ogg vorbis, AIFF, MOD, IT, S3M, and XM.

Audacity – Supports all file formats supported by Unity3D.

Blender – Supports the .psd format used by Photoshop.

# Target

---

This game is being developed for PC. Available for download from the Steam platform.

## Pros

- PCs are the mostly widely distributed games machines available and are open to a wider range of audience, unlike consoles which tend to have dedicated fanbases.
- The Steam platform may not be as widely distributed, however, it is getting more and more popular as more triple A titles are released on it.
- As well as this making purchases using Steam is incredibly easy.
- The keyboard is one of the most accessible controllers for the target audience (younger gamers).
- Developing for the PC means that the game is more accessible to casual gamers.

## Cons

- Requires an internet connection
- Requires access to a Credit/Debit card, not ideal for target audience
- Steam may take a percentage of income
- Requires advertising to increase public awareness
- Users would need to have both Steam and a Steam account, some are reluctant to download additional software.

# Staffing

---

## Programming

This project will require three full-time programmers in order to get the project completed in a reasonable amount of time. The programmers will need to have previous experience using JavaScript or C# as well as knowledge in networking programming in order to implement the networking side of the game.

## Art

One full-time artist and one part-time will be required for this project. The part-time employee will be required for concept art and art direction and another will be required for 3D modelling and graphics manipulation. The 3D modelling artist should have prior experience with both Blender and Photoshop.

## Audio

One part-time audio engineer will be required. This engineer will be mainly involved in sourcing and creating audio files for the various aspects of the game as well as dealing with any copyright issues that may arise. Should have prior experience using Audacity or a similar program.

## Management

One part-time project manager will be required for this project. The main responsibilities will include producing a PERT chart for the projects development, overseeing the entire project as well as ensuring that deadlines are met.

# Costs

---

## Hardware

Acer Laptop x 5 -£849.99 x 5 = £4249.95

Epson Perfection Scanner - £75.99

## Software

Unity3D Pro - \$1500 x 2 = \$3000 (£1874.19 as of 16/11/2010)

Blender - Free!

Photoshop - £625.96

Audacity - Free!

## Staffing

Assuming 12 week completion time:

Programmers - £4212 x 3 = £12636 (£9 ph, 39 hour week)

Part Time Artist - £1920 (£8 ph, 20 hour week)

Full Time Artist - £3744 (£8ph, 39 hour week)

Sound Engineer - £720 (£8 ph, 15 hour week for last 6 weeks of project)

Project Manager - £1800 (£15 ph, 10 hour week with project team)

## Miscellaneous Costs

Premises - £1000 pcm = £3000

Advertising - £6129.21 (20% total other costs)

**TOTAL COST OF PROJECT - £36775.31**

# Return on Investment

---

**We expect to price the game at £3.99**

**Steam has a userbase of 20million( figures taken from Feb 2009) with an average concurrent use of 2 million users, if just 0.1% of users buy the game that would equate to 20,000 sales and c£80,000 in revenue.**

**However, assuming that Steam take a percentage of any revenue made (50%) this would be cut in half.**

**Required sales to break even would therefore be 20,000 copies. This is before any after sales support etc has been added into the figures.**

**This document produced by:**

**Christoffer Pettersson**

**B00191431**

**Gavin Reid**

**B00188753**

**Andrew Cunningham**

**B00217221**

**Joshua Jahanshir**

**B00209681**

**Anthony Walsh**

**B00191818**