

Graphics and audio

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Preface

This is a live document, and is full of gaps, mistakes, typos etc.

Part I

2D graphics

Chapter 1

Fonts

Chapter 2

Markdown

Chapter 3

LaTeX

Chapter 4

HyperText Markup Language (HTML)

4.1 Introduction

4.1.1 "html", "body", "p"

```
<html>
```

```
</html>
```

```
<html>
```

```
  <body>
```

```
    <p>Hi</p>
```

```
  </body>
```

```
</html>
```

4.1.2 Headers

4.1.3 Lists

4.1.4 Breaks

4.1.5 Hyperlinks using "a" and tags

```
<html>
```

```
  <body>
```

```
    <p>Hi</p>
```

```
  </body>
```

```
</html>
```

4.1.6 Inputs

Chapter 5

Cascading Style Sheets (CSS)

5.1 Introduction

5.1.1 Introduction

Chapter 6

Image manipulation

6.1 Introduction

6.1.1 Anti-aliasing

6.1.2 Rotating images

6.1.3 Layers

6.1.4 Scaling images

6.1.5 Mode 7

6.1.6 Other

2d graphics. sprites. palattes

6.2 Picture Processing Unit (PPU)

6.2.1 Introduction

Dedicated hardware. Each clock output pixel.

6.3 Audio Processing Unit (APU)

6.3.1 Introduction

Dedicated hardware.

Part II

3D graphics

Chapter 7

2D ray casting and texture mapping

Chapter 8

Binary Space Partitioning

Chapter 9

3D Projection

Chapter 10

Texture mapping

Chapter 11

3D modelling

11.1 Introduction

11.1.1 Rasterisation

11.1.2 Shading

11.2 Ray tracing

11.3 Subsurface scattering

11.4 Ambient occlusion

Chapter 12

Texture filtering and anti-aliasing