**题目**

|  |  |  |  |
| --- | --- | --- | --- |
| 学 院 | 计算机学院 | | |
| 专 业：  姓 名：  指导老师： | 数字媒体技术 | | |
|  | 学 号：  职 称： |  |
|  |  |

中国·珠海

二○二一 年 五 月

**诚信承诺书**

**本人郑重承诺：**本人承诺呈交的毕业设计《XXXXXXXXXXXXXX》是在指导教师的指导下，独立开展研究取得的成果，文中引用他人的观点和材料，均在文后按顺序列出其参考文献，设计使用的数据真实可靠。

本人签名：

日期： 年 月 日

**中文题目**

**摘 要**

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX*（概括本次毕业设计作品的主要内容，设计过程，制作的技术要点，所遇到的困难及解决方法等，不少于200汉字。）*

**关键词：**XXXX；XXXX；XXXX；XXXX*（要求3～5个最能表达主要内容的词作为关键词，中间用分号隔开）*

**英文题目**

**Abstract**

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX. *（英文摘要不少于200个单词）*

**Keywords:**  XXXX；XXXX；XXXX；XXXX*（英文关键词）*

**目 录**

[1 前言](#_Toc67865764)*[（注：每一章都重开一页开头）](#_Toc67865764)* [1](#_Toc67865764)

[1.1本设计的目的及意义 1](#_Toc67865765)

[1.2本设计在国内外的发展概况及存在的问题 1](#_Toc67865766)

[1.3本设计应解决的主要问题 2](#_Toc67865767)

[2前期策划及美术设计*（注：每一章都重开一页开头）* 3](#_Toc67865768)

[2.1美术风格设定 3](#_Toc67865769)

[2.2角色设计 3](#_Toc67865770)

[2.4场景设计 4](#_Toc67865771)

[2.5 UI设计 4](#_Toc67865772)

[3模型制作*（注：每一章都重开一页开头）* 5](#_Toc67865773)

[3.1 游戏模型制作规范 5](#_Toc67865774)

[3.2 角色模型制作 5](#_Toc67865775)

[3.3 场景模型制作 5](#_Toc67865776)

[3.4 道具模型制作 6](#_Toc67865777)

[4贴图制作*（注：每一章都重开一页开头）* 7](#_Toc67865778)

[4.1 PBR材质贴图制作流程 7](#_Toc67865779)

[4.2 UV铺展 7](#_Toc67865780)

[4.2 贴图烘焙 7](#_Toc67865781)

[4.3 贴图绘制 8](#_Toc67865782)

[4.4 贴图效果展示 8](#_Toc67865783)

[5角色绑定 *（注：每一章都重开一页开头）* 9](#_Toc67865784)

[5.1 骨骼设置 9](#_Toc67865785)

[5.2 蒙皮权重 9](#_Toc67865786)

[5.3 控制器设置 9](#_Toc67865787)

[6角色动画制作*（注：每一章都重开一页开头）* 10](#_Toc67865788)

[6.1 XXXXXX 10](#_Toc67865789)

[6.2 XXXXX 10](#_Toc67865790)

[6.3 XXXXXX 10](#_Toc67865791)

[7游戏界面制作*（注：每一章都重开一页开头）* 11](#_Toc67865792)

[7.1 XXXXXXXX 11](#_Toc67865793)

[7.2 XXXXXXXX 11](#_Toc67865794)

[7.3 XXXXXXXX 11](#_Toc67865795)

[8游戏特效制作*（注：每一章都重开一页开头）* 12](#_Toc67865796)

[8.1 XXXXXXXX 12](#_Toc67865797)

[8.2 XXXXXXXX 12](#_Toc67865798)

[8.3 XXXXXXXX 12](#_Toc67865799)

[9游戏美术资源整合*（注：每一章都重开一页开头）* 13](#_Toc67865800)

[9.1 XXXXXXXX 13](#_Toc67865801)

[9.2 XXXXXXXX 13](#_Toc67865802)

[9.3 XXXXXXXX 13](#_Toc67865803)

[10总结*（注：每一章都重开一页开头）* 14](#_Toc67865804)

[参考文献 15](#_Toc67865805)

[谢 辞 16](#_Toc67865806)

[附 录 17](#_Toc67865807)

# 1 前言*（注：每一章都重开一页开头）*

Rougelike游戏[[1]](#footnote-1)（参考《注释标注方法》）是一种让玩家沉浸在满足好奇心和好胜心的快感中的游戏，不断的通过获得新的道具，装备，技能等让玩家感受到即时的奖励反馈。通过道具技能配合，游戏性等因素，让玩家沉浸其中。

次世代美术流程往往与Rougelike游戏看似不相匹配，长制作周期、质量要求等让许多独立开发者望而却步。我们将讨论如何在次时代美术流程中，既增强游戏画面，又充实游戏美术内容的方法。通过探讨最快速的次世代模型制作流程，研究如何在可视化的shader编辑器中进行材质多样化制作，将制作门槛降低，提升制作效率。

…….。

1.1本设计的目的及意义

Rougelike游戏是一种随机的艺术，是对人类好奇心的深入探究。玩家会希望不断获得新的道具以获得不同的游戏体验，面对不同的怪物，不断挑战，是目前独立游戏制作的主流。但rougelike类型游戏画面主要以像素画为主，因为三维开发成本过高，制作周期较长。但已经有游戏《雨中冒险2》（图1.1）在三维的rougelike游戏方面取得进展，证明了rougelike在三维世界中的可行性。………..



图1.1 三维下的rougelike游戏：《雨中冒险2》

1.2本设计在国内外的发展概况及存在的问题

据报告《2019 Free Global Games Market Report》 [1] (《参考文献标注方法》) 显示，主机市场占比为全球游戏市场的32%，该数据证明了主机游戏在全球范围内发展情况良好，而根据伽马数据发布《2019中国游戏产业年度报告》[2]显示，主机游戏在全国游戏市场占比约为2.3%左右，2019年，中国单机游戏市场实际销售收入大幅上涨达到6.4亿元，同比增长341.4%。这组数据显示了我国主机市场的劣势，但也同时预示了中国单机市场的复兴。因此，我国主要的次时代游戏制作目前虽然大部分为对外输出，即外包形式，但在未来，由于单机市场的复兴，对于次时代游戏美术技术的需求会越来越多，玩家对于游戏画面的追求也会更进一步。………..

1.3本设计应解决的主要问题

*（介绍本设计将要解决的主要难题，及解决方案或技术路线）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

# 2前期策划及美术设计*（注：每一章都重开一页开头）*

*（概括说明一下本章的主要内容，开始制作前做了哪些策划工作，完成那些主要部分的美术设计，以及这些都怎样影响到后面的工序）*…….

2.1美术风格设定

由于我们的游戏定位为音乐打击类游戏，并且结合了VR设备，为了增强玩家的游戏体验，我们将风格定义为光彩科幻的风，类似《Beat Saber》如图2.1所示。场景中使用射灯照明，结合向玩家飞来的自发光节奏块，整体感官为未来科幻的感觉。

*（分析目前流行的美术风格，说明本设计采用哪种风格，图文并茂的说明设计构思的参考来源）*



图2.1游戏《Beat Saber》

*（图号按“图A.x”的形式排序，A表示章号，x表示本章出现的次序）*

2.2角色设计

经过筛选和讨论最终留下了适合我们的NPC与boss的不同参考图片进行分类处理，方便以后在制作中以为基础进行修改和设计。NPC作为玩家的指引，我们选择了偏成熟的大姐姐形象；为了更好的吸引玩家，Boss1我选择了酷酷的潮流帅气的叛逆的坏女孩形象，让玩家对接下来出场的其他boss有所期待；boss2则选择了与之前完全不同的穿制服的高傲学霸形象；最后一个boss我确定为穿着华丽裙装实则看起来就很腹黑的小妹妹的形象。如图2.2所示。

 

(a) (b)

图2.2 游戏角色的参考图

2.4场景设计

*（具体要求参照角色设计）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

2.5 UI设计

*（具体要求参照角色设计）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

# 3模型制作*（注：每一章都重开一页开头）*

3.1 游戏模型制作规范

*（说明游戏模型制作中的规范，如高模制作，底模制作，布线，造型，LOD等，以及解析这些为什么要按照这些规范制作，对后续工序有何影响）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

3.2 角色模型制作

*（把主要的制作步骤列举说明，并把关键局部截图说明，最后展示成品模型效果，切忌写成流水帐）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

3.3 场景模型制作

*（参照3.2）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

3.4 道具模型制作

*（参照3.2）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

# 4贴图制作*（注：每一章都重开一页开头）*

4.1 PBR材质贴图制作流程

*（先介绍基本原理，然后展开分步骤说明本设计中相关制作内容）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

4.2 UV铺展

*（参照4.1）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

4.2 贴图烘焙

*（参照4.1）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

4.3 贴图绘制

*（参照4.1）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

4.4 贴图效果展示

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

# 5角色绑定 *（注：每一章都重开一页开头）*

*（先介绍骨骼绑定的基本原理，以及游戏角色绑定要符合哪些规范才能更好的跟游戏引擎对接，然后分步骤说明本设计中角色绑定的相关制作内容）*

5.1 骨骼设置

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

5.2 蒙皮权重

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

5.3 控制器设置

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

# 6角色动画制作*（注：每一章都重开一页开头）*

*（先介绍动画运动规律，本设计中的角色规划了哪些动作，如何在游戏引擎中如何导入及调用动作，然后分步骤说明本设计中角色绑定的相关制作内容）*

6.1 XXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

6.2 XXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

6.3 XXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

# 7游戏界面制作*（注：每一章都重开一页开头）*

*（先介绍游戏界面设计的基本设计理论原则，介绍游戏程序中如何调用各界面元素，然后展开分步骤说明本设计中相关制作内容）*

7.1 XXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

7.2 XXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

7.3 XXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

# 8游戏特效制作*（注：每一章都重开一页开头）*

*（先介绍粒子特效的基本原理，介绍本设计中都设计了哪些特效内容，然后展开分步骤说明本设计中相关制作内容）*

8.1 XXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

8.2 XXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

8.3 XXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

# 9游戏美术资源整合*（注：每一章都重开一页开头）*

*（把所制作的游戏美术内容结合游戏程序整合到一起，发布成成品游戏，展示其运行效果，并作必要的说明）*

9.1 XXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

9.2 XXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

9.3 XXXXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

.

# 10总结*（注：每一章都重开一页开头）*

*（结论概括设计的情况和价值，分析其优点和特色、有何创新、性能达到何水平，并应指出其中存在的问题和今后改进的方向。）*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX…….

# 参考文献

*（在毕业设计（论文）末列出在正文中参考或引用过的专著、论文及其他资料，所列参考文献应按文中参考或引用的先后顺序排列。不少于10篇）*

[1] 中美音乐类游戏市场：App Store上架App共3160款 中国占比61%［EB/OL］．

https://www.gameres.com/820660.html, 2018-09-04

[2]游戏美术在手机游戏界面中的研究 [J] . 邵兵,梁皓. 电脑迷. 2017(06)

[3]CG绘画在游戏美术设计中的运用 [J]. 李茂洋. 大众文艺. 2017(09)

……

# 谢 辞

*（简述自己做毕业设计（论文）的体会，并应对指导教师和协助完成设计（论文）的有关人员表示谢意。）*

为时一个学期的毕业设计即将结束了，这也意味者我在北京理工大学珠海学院的大学生涯也即将结束。在毕业设计这段时间里，我得到了很大的自身提高，其中包含了对汽车系统知识的理解、还有对有关这方面书籍的认识等等，这些都得益于老师和同学的大力帮助，…….

# 附 录

*（可选项，对于一些不宜放在正文中，但有参考价值的内容，可编入附录中。例如，公式的推演、编写的算法、语言程序、设计图纸等。）*

1. Roguelike是欧美国家对一类游戏的统称，是角色扮演游戏（RPG）的一个子类（Roguelike-RPG） [↑](#footnote-ref-1)