Re: group work

Markus Krugel

Wed 24/10/2018 02:22

Gesendete Elemente

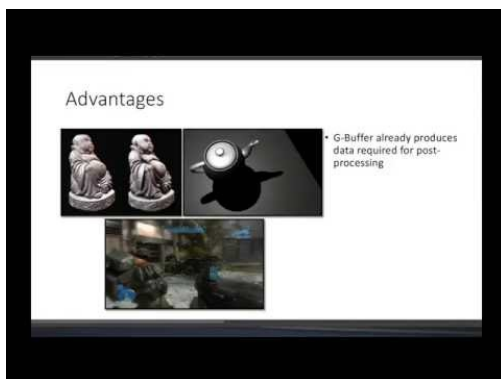To: Jia Foo <1fooj30@solent.ac.uk>;

Mip mapping

https://www.techopedia.com/definition/27195/mip-mapping-mipmapping
https://en.wikipedia.org/wiki/Mipmap
https://graphics.ethz.ch/teaching/former/vc_master_06/Downloads/Mipmaps_1.pdf

deferred

https://www.3dgep.com/forward-plus/#Definitions
https://en.wikipedia.org/wiki/Deferred_shading
https://nbertoa.wordpress.com/2016/01/25/directx11-deferred-shading/

DirectX11 Deferred Shading – Nicolas Bertoa

nbertoa.wordpress.com

The second step is the lighting phase. In this step, geometry representing the light's area of influence on the screen is rendered, and for each resulting fragment that is shaded, the g-buffer information is sampled from the render target textures.
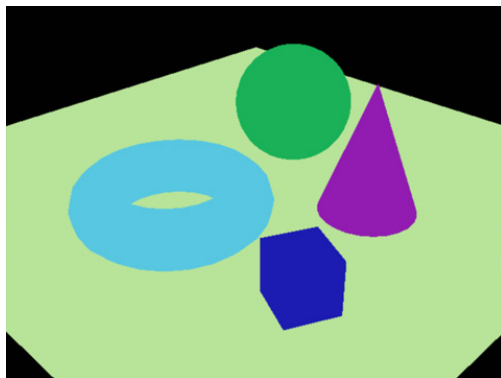
Deferred shading - Wikipedia

en.wikipedia.org

In the field of 3D computer graphics, deferred shading is a screen-space shading technique. It is called deferred because no shading is actually performed in the first pass of the vertex and pixel shaders: instead shading is "deferred" until a second pass.. On the first pass of a deferred shader,

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Deferred vs Forward+ Rendering with DirectX 113D Game ...

www.3dgep.com

The first pass of the Forward+ rendering technique uses a uniform grid of tiles in screen space to partition the lights into per-tile lists. The second pass uses a standard forward rendering pass to shade the objects in the scene but instead of looping over every dynamic light in the scene, the current

MipMap Texturing - ETHZ

graphics.ethz.ch

3 Goals • You can explain why it is a good idea to use mipmaps • You know how to generate mipmaps in OpenGL • You know the different filters for mipmap

Mipmap - Wikipedia

en.wikipedia.org

In computer graphics, mipmaps (also MIP maps) or pyramids are pre-calculated, optimized sequences of images, each of which is a progressively lower resolution representation of the same image. The height and width of each image, or level, in the mipmap is a power of two smaller than the previous level. Mipmaps do not have to be square.

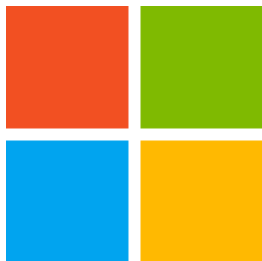## What is MIP Mapping (Mipmapping)? - Definition from Techopedia

www.techopedia.com

MIP mapping (mipmapping) is an anti-aliasing method used in many 3-D rendering applications. It is usually used in game visualization and 3-D image rendering.

From: Jia Foo
Sent: 23 October 2018 12:35:00
To: Markus Krugel
Subject: Re: group work

type out the user story,
CREATE THE CRITICAL PATH
Work breakdown structure
Grid Task
Task
timescales
dependencies

https://docs.microsoft.com/en-us/windows/uwp/gaming/how-to-suspend-an-app-directx-and-cpp (possible way to pause with directx)

https://docs.microsoft.com/en-us/windows/uwp/gaming/how-to-resume-an-app-directx-and-cpp (possible way to resume with directx)

How to resume an app (DirectX and C++) - UWP app developer …

docs.microsoft.com

How to resume an app (DirectX and C++) 02/08/2017; 2 minutes to read Contributors. In this article. This topic shows how to restore important application data when the system resumes your Universal Windows Platform (UWP) DirectX app.
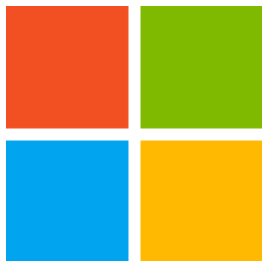
How to suspend an app (DirectX and C++) - UWP app …

docs.microsoft.com

How to suspend an app (DirectX and C++) 02/08/2017; 3 minutes to read Contributors. In this article. This topic shows how to save important system state and app data when the system suspends your Universal Windows Platform (UWP) DirectX app.

From: Markus Krugel
Sent: Tuesday, October 16, 2018 12:30:16 PM
To: Jia Foo
Subject: Re: group work

flow of the game

GameManager
Camera + Renderer
StartMenu
Input
(if startLevel)
  Level + HUD
    Emey + Character + NPC + Object
 GameManager.Update
if(gameOver)
    black screen with gameover text for time limit
    StartMenu
if(pause)
    PauseMenu
    freeze GameManger.Update
   if(continue)
      unfreeze GameManager.Update
if (finish)
   StartMenu

From: Jia Foo
Sent: 16 October 2018 12:26:49
To: Markus Krugel
Subject: Re: group work

3d development technique, the reference for the research we did
user story
critical path , timescale, dependencies, tasks
work break down structure

class diagram meeting memo,
                  needed level class, to load level and save level,restart
                  input class to registered the player input to the game
                  game manager- new method change level
                  we disclass item class
                  we dicussed beforehand already character class should hold player , enenmy
      and npc
                  added enemy drop item
                  game check needed as we missing (update in game manager)
                  menu for pause game (new menu class)
                  forgot to include collision,input , new menu class reference to game amanager
      created game flow

From: Markus Krugel
Sent: Wednesday, October 3, 2018 10:49:22 AM
To: Jia Foo
Subject: Re: group work

From: Markus Krugel
Sent: 03 October 2018 10:38:28
To: Jia Foo
Subject: Re: group work

camera moves around a certain point
https://www.youtube.com/watch?v=KfIqJaslnNk

The Gardens Between - PGW 2017 Announce Trailer | PS4

www.youtube.com

Check out the announce trailer for The Gardens Between.

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class diagram

game object
  character class
    enemy
      (melee)
      (range)
    player
    npcs
  objects
camera
renderer
collision
state machine for enemies
  patrolling
  attacking
  chasing
game manager
HUD

detailled classes

game object
  position
  texture
  model

    collisionbox

character
    inventory (enemy drops item, npcs give item)

enemy
    health
    damage
    seesPlayer
    state machine

player
    movement
    health
    damage

npcs
    dialogue text

objects
    transform
    can be moved

camera
    position
    direction
    near plane
    far plane
    transform
    player reference

HUD
    health display
    inventory display

game manager
    gameover
    list of game objects
    menu
    start game
    level

collision
    collision references to all game objects
    are colliding

renderer
    game objects in viewport
    draw()
    buffer()
    clean()
    update()
    reference to camera
    reference to hud

From: Jia Foo
Sent: 27 September 2018 10:03:59
To: Markus Krugel
Subject: Re: group work

Renderer- lighting
        -object/shape
        -texture
        -collision check
        - draw

camera/viewport-

game manager - character class
        -collision check
        - character movement
        - enemy AI(patrol , attacking player)
        -game object(collectable,wall,trampoline)
        -??? interaction with the world , health decrease ,start conversation, ...)
        -UI - menu or HUD
        -

(55%)
0.font, content page ,formatting in document
1.ad-hoc,white box black box testing
2.object oriented design
3.development technique
4.flowchart /class diagram
5.functionality and core requirement
6.references----(your development technique or math)
7.images/ equations

(35%)
user story
critical path/tasks/timescales/dependencies
grid task/times to WBS (work breakdown structure)
work breakdown structure

(10%)
Evidence of equal distribution of work ----------------------- work divided fairly
Reflection of the Design Process
Identification and resolution of problems ------------------------------reflection
Software backup methodology (Source control, multiple saves etc..)-------------------------google drive .version control or hard drive

From: Jia Foo
Sent: Thursday, September 27, 2018 9:20:20 AM
To: Markus Krugel
Subject: group work

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From: Jia Foo
Sent: Thursday, September 27, 2018 9:20:20 AM
To: Markus Krugel
Subject: group work