

Unity3D Test

Introduction

Introduction

- You must create a small game/application. You may choose one or more tiers of requirements from the list.
- *Use place holder assets. Assets quality will not be considered, the way they are used will.*
Don't know where to get assets? <https://www.assetstore.unity3d.com/>
- *You Must deliver the project using any repository system you prefer*
As suggestion you can use BitBucket (<https://bitbucket.org/>) or GitHub (<https://github.com/>)
- *The application build target is ANDROID.*

Introduction

- ‘How-To-Use’ instructions can be presented in-application or through a ‘Manual’, in that case the ‘Manual’ must be in the repository with the project.
- *The deliver limit time is 7 days after receiving this document. Delivering before that is ok, after that it will not be considered.*
- *You may look for references and use them as base for your project, but you can’t make direct copy of any third party code.*

Introduction

- All codes must be well documented. External documentation is nice to have.
- The evaluation criteria are :
 - Code optimization
 - Code standards
 - Implementation and problem solving techniques and patterns
 - Project structure, architecture and organization
 - Tiers requirements achieved

Unity3D Test

Tier 0

Tier 0

- Requirements:
- Implement initial menu and whole application flow (Start application - Using application - Quit application)
- Use one of the three following game references for game BASE mechanics:

Tier 0



- Subway Surfers

Tier 0



- Puzzle Bobble

Tier 0

- Bejeweled



Unity3D Test

Tier 1

Tier 1

- Requirement 01 :
- Combine 2D and 3D assets in the application.



- 3D world combining 3D and 2D assets



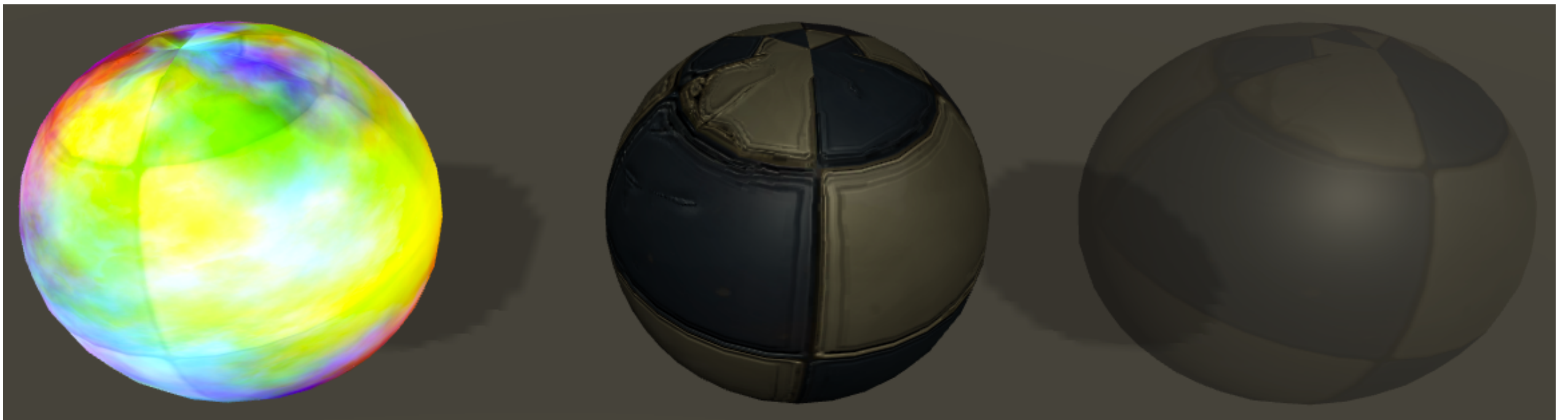
- 3D world and assets with workspace 2D UI

Tier 1

- Requirement 02 :
- Must have :
 - Physics interactions
 - Collision detection
 - Particles
 - Spawning system (spawn enemies, VFX and/or obstacles)

Tier 1

- Requirement 03 :
- Use the following types of shader:
 - Transparent shader
 - Normal map shader
 - Self Illuminated shader



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Tier 2

Tier 2

- Requirement 01 :
- At least one object with a custom shader containing:
 - Two Diffuse textures.
 - One Normal map or Specular map

Tier 2

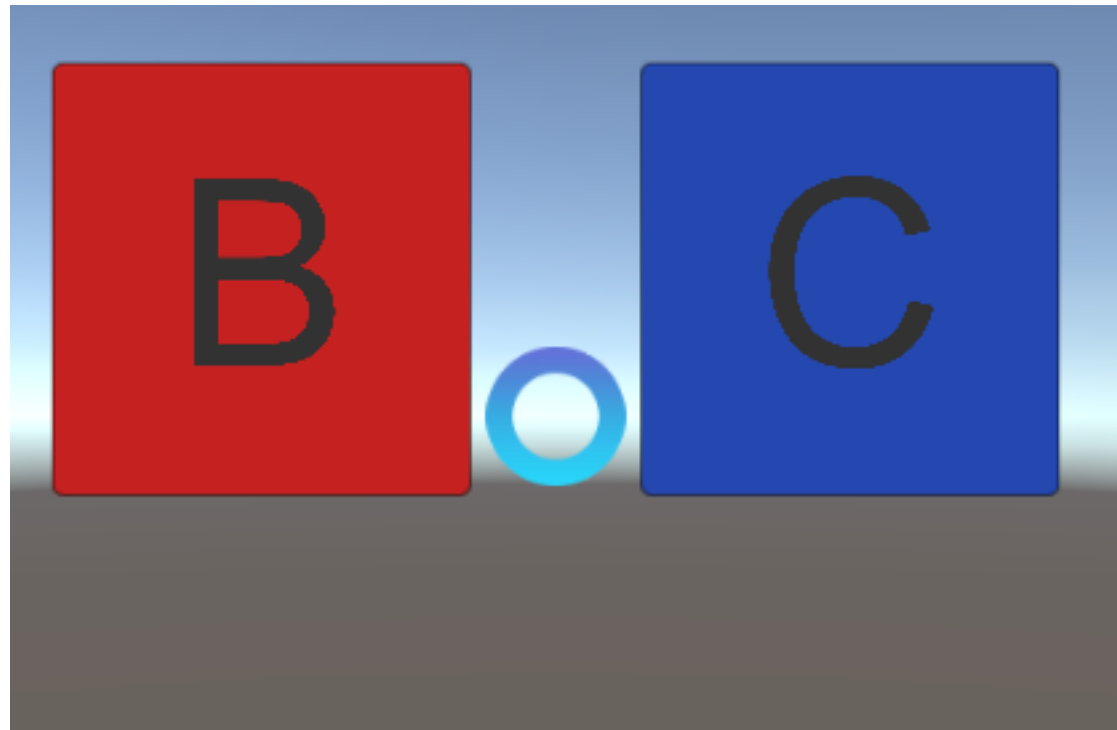
- Requirement 02 :
- Camera movement OR VR Camera (using Gear VR native support)

Unity3D Test

Tier 3

Tier 3

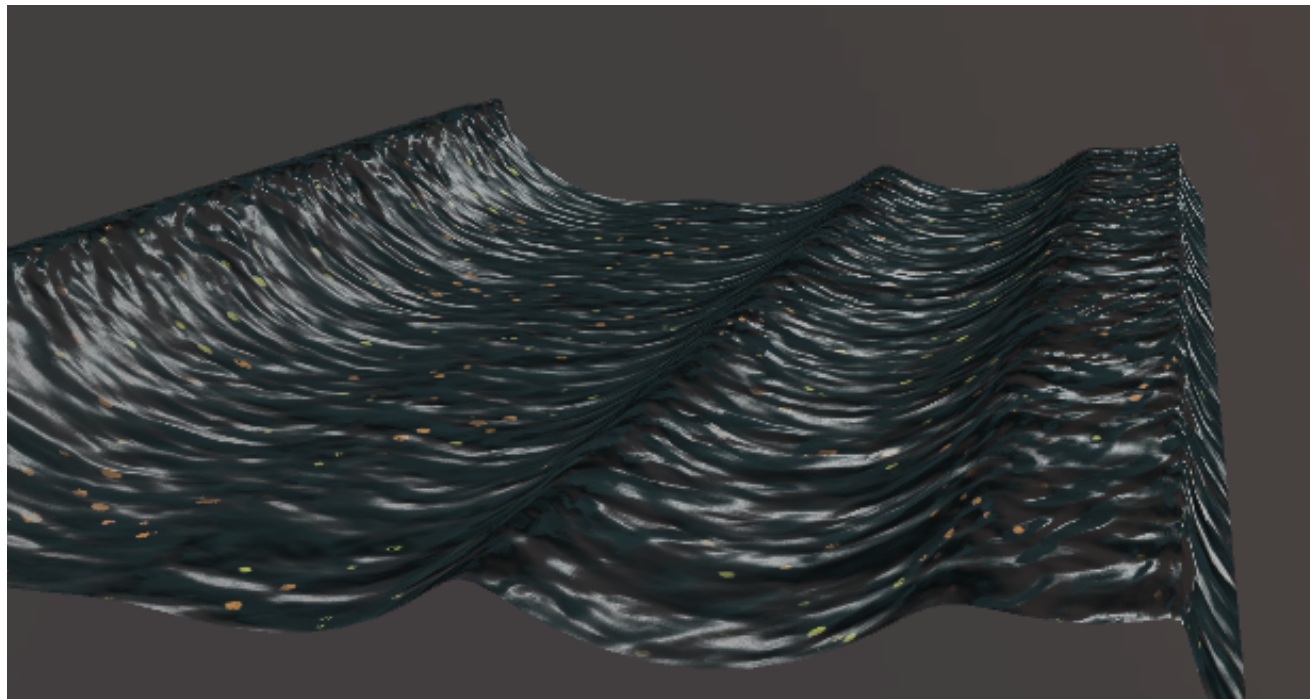
- Requirement 01 :
- One object that is always on top of others in render order (can not use more than one camera and must have the effect with 3D/2D assets and UI)



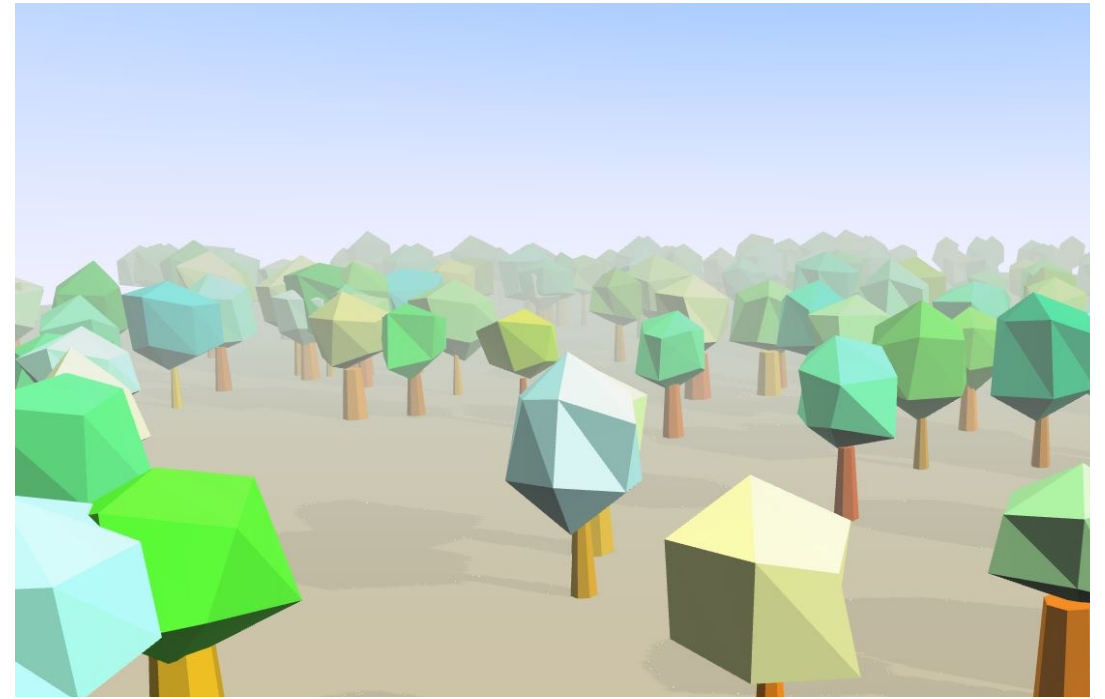
- Reticles are one example of usage for 'render order' requirement

Tier 3

- Requirement 02 :
- One object that uses vertex animation (with one texture as reference for animation) and vertex color to be used on obstacles or enemies.



- Example of vertex animation used for water effect



- Example of vertex color used for trees variation