

Indie Game Development Tools

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Game Development

- Independent Game:
 - Small budget
 - Small Team





Priorities for Developers

- Low Cost Development
- No License Fees
- Easy Distribution
- Wide platform availability
- High Technical Support

Engine Questions

- How much does the development environment cost (per license, per sale, etc)
- Are games royalty free?
- What games have been developed in this environment?
- What is the tool's level of difficulty?
- What programming language does it use?
- What are the features set this game development environment apart from others?




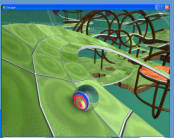

Game Development Tools

- Garage Games Torque
 - \$150, demo Available
- Blitz3D
 - \$90, demo Available
- Microsoft XNA
 - Free, \$99 for XBOX 360 Development






Game Development: Torque

- Torque
 - Language: C++ / Torque Script
 - Wide Portability:
 - XBOX360, OSX, PC, (WII)
 - Visual Strengths
 - Rich environments
 - Visual Weaknesses
 - Requires "advanced" understanding of CG concepts
 - Tiered Development tools:
 - New, Educator, Commercial


Game Development: Blitz3D

- Blitz3D
 - Language: Visual basic
 - Lightweight games with high PC portability
 - Can be ported to Mac (BlitzMax for Unix, Mac, PC)
 - Short, fluid learning curve
 - Fair sized community
 - Visual Strength:
 - Multiple textures
 - Visual Weakness:
 - Lighting

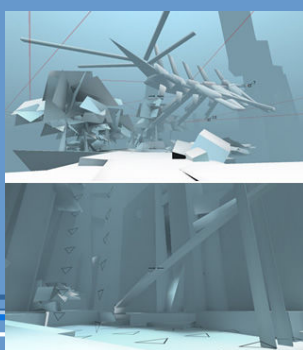



Game Development: XNA

- Microsoft XNA
 - .Net Framework (C#)
 - Free
 - For PC, XBOX 360
 - Offered with starter kits
 - Fair dev community support
 - Visual Weakness
 - Can be memory hog (in comparison)
 - Must code "guts" of engine
 - Visual Strengths
 - HQ optimized Engine
 - Great lighting and texturing



Art in Blitz3d



Normalized From PixelSumo.com

Blitz3D Overview

- Supports all standard Interactive CG functions
 - Double Buffering
 - Collisions
 - Textures, Lights, etc

Blitz3d: Game Programming

- Setup Graphics
 - Graphics3D 640,480
- Game Loop
 - While Not KeyHit(1) . . . Wend
- Three Important Functions
 - UpdateWorld()
 - RenderWorld()
 - Flip()

Blitz3D: Let's Play



References

- **Blitz3d:**
<http://www.blitzbasic.com/Products/blitz3d.php>
- **DarkBasic (lite):** \$14.99:
<http://darkbasic.thegamecreators.com/?f=lite>
- **DarkBasic:** (\$39.99)
<http://darkbasic.thegamecreators.com/>
- Microsoft XNA:
<http://msdn2.microsoft.com/en-us/xna/aa937795.aspx>