

CONSOLE DEVELOPMENT IN 15 MINUTES

All you need you to know to be a Pro



Sperasoft is a great team of professionals specializing in SKU development, game engineering, art, online and platform development and production support.

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Overview



- Different hardware platforms
 - PC, XBox, PS3
 - Each have its own unique properties
- Consoles are weaker that PC
 - But they have controllers!
- Dev Kits used for development:
 - Debug hardware specific problems

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Memory



- Whatever you do, think of memory
- Avoid leaks (everyone fails that)
- Know your memory management system.
- Avoid memory fragmentation
- Never use global scope new
- Sometimes useful to un-inline functions
- Careful with templates
- Always use same allocator to delete stuff
- Stack size is limited too
- Use memory analysis tools available



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Performance



- Always think of the performance
- Understand usage of the code that you write
- Avoid extra nested loops
- Avoid extra pointer dereferencing
- Avoid cache misses
- Sometimes useful to handcraft/unroll loops
- Sometimes useful to inline functions
- Use performance analysis tools available

Teamwork



- You must know and follow your processes
- Simple code > smart code
- Keep relevant people in loop
- Code reviews are mandatory
- No build breaks
- No major functionality breaks

TRC Specifics



- TRC stands for Technical Requirements Checklist:
 - Failing to meet TRC cost a lot of money;
 - It is better to pass first party TRC check at once;
- Be aware of TRC violations:
 - due to unresponsiveness;
 - due to controller unplugs;
 - to screen space allocation;
 - due to network connectivity loss;
- Can use game restart as last resort

Package Development Specifics



- Pay attention to your interface
- Design clean interfaces, use PIMPL
- Maintain ABI
- Try to use PODs in your interfaces

General Coding Specifics



- Know and use STL:
 - It is quite good comments and documentation
- No magic numbers
- Defensive programming, assert a lot
- Use includes, namespaces correctly



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