

Shared pointers and memory lifetime

- Tracking raw pointers sucks and is error prone
- Shared pointers a.k.a reference counted memory
- If it's not a UObject and garbage collected, you probably want to use shared pointers
- Only use raw pointers for raw memory blocks (like char* buffers)
- TSharedPtr, TSharedPtr in Unreal Engine
- MakeShared and MakeShareable for construction
- TSharedPtrFromThis<> and why we use it, accessing shared pointers from const references
- TWeakPtr<> for weak references, used to avoid circular references and to avoid keeping things alive when we don't want to force lifetime to be extended