```
┌─────────────────────┐     ┌─────────────────────┐
│  UWorldSubsystem    │     │ FTickableGameObject │
├─────────────────────┤     ├─────────────────────┤
│                     │     │                     │
├─────────────────────┤     ├─────────────────────┤
│                     │     │                     │
└─────────────────────┘     └─────────────────────┘
```

UIrradianceScheduler

- - ESchedulerState State
- - TQueue< FCaptureRequest > Queue
- - TOptional< FCaptureRequest > Current
- - TWeakObjectPtr< UIrradiance Subsystem > Irr
- - TArray< UPyranometerComponent * > Sensors
- - FSimConfig BaseSimConfig
- - TArray< FDateTime > TimeSlots
- - int32 TimeIndex
- - int32 SensorIndex
- - bool bViewportForced
- - bool bCaptureInFlight

- + UIrradianceScheduler ()=default
- + ~UIrradianceScheduler ()=default
- + void CaptureOnce(const FSimConfig &Sim)
- + void StartSimulation (const FSimConfig &Sim)
- + void ClearQueue()
- + ESchedulerState GetState () const
- + virtual void Tick(float DeltaTime) override
- + virtual TStatId GetStatId () const override
- + virtual ETickableTickType GetTickableTickType() const override
- + virtual UWorld * GetTickable GameObjectWorld() const override
- - void EnsureSubsystem()
- - void ConfigureSunSkyOnce (const FSimConfig &Sim)
- - void SetSunSkyUTC(const FDateTime &Utc)
- - void ApplyViewport (const FSimConfig &Sim)
- - void RestoreViewport()
- - void GetActiveSensors (TArray< UPyranometerComponent * > &OutSensors) const
- - FCaptureRequest MakeRequest (const FSimConfig &Sim, UPyranometerComponent *Sensor) const
- - bool ConsumeIrradianceResult (float &OutValue)
- - void BuildTimeSlots (const FDateTime &StartUTC, const FDateTime &EndUTC, const FTimespan &Step)
- - void LaunchNextSimulation Capture(const FSimConfig &Sim)
- and 6 more...