

DEBUGGING

Topics

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- **Getting Started with Debugging**

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 - **Runtime Errors**
- **Stepping Through Code with the Debugger**
 - **Attaching the Debugger to Unity**
- **Watching Variables in the Debugger**

Getting Started with Debugging

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 - The book has detailed instructions for using the debugger

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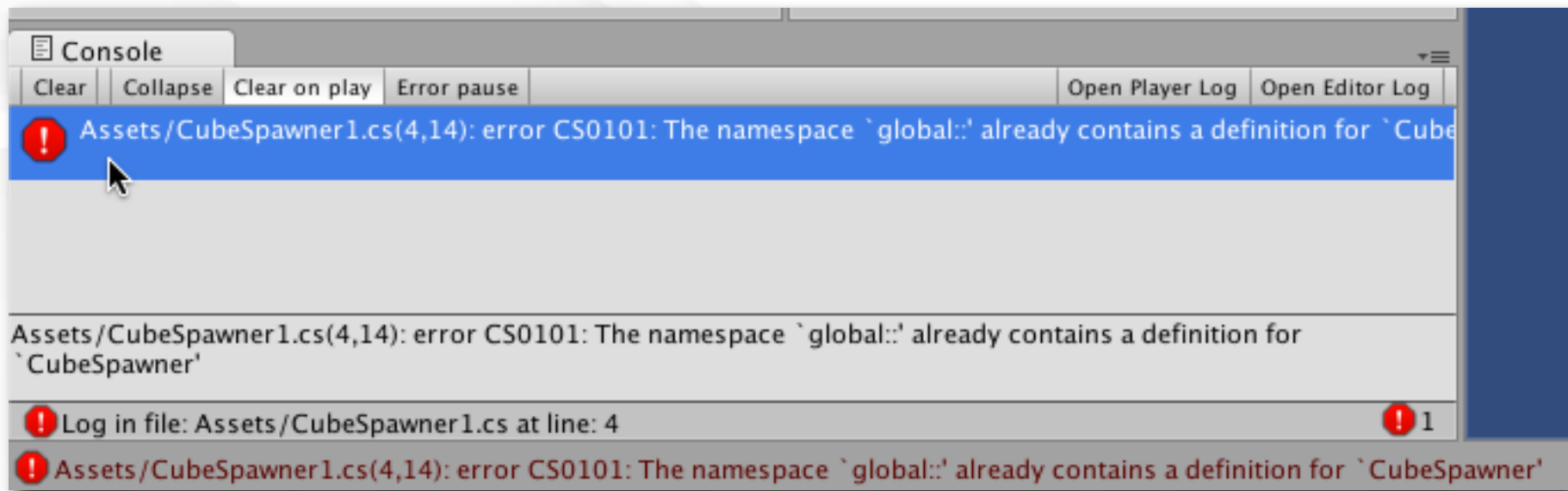
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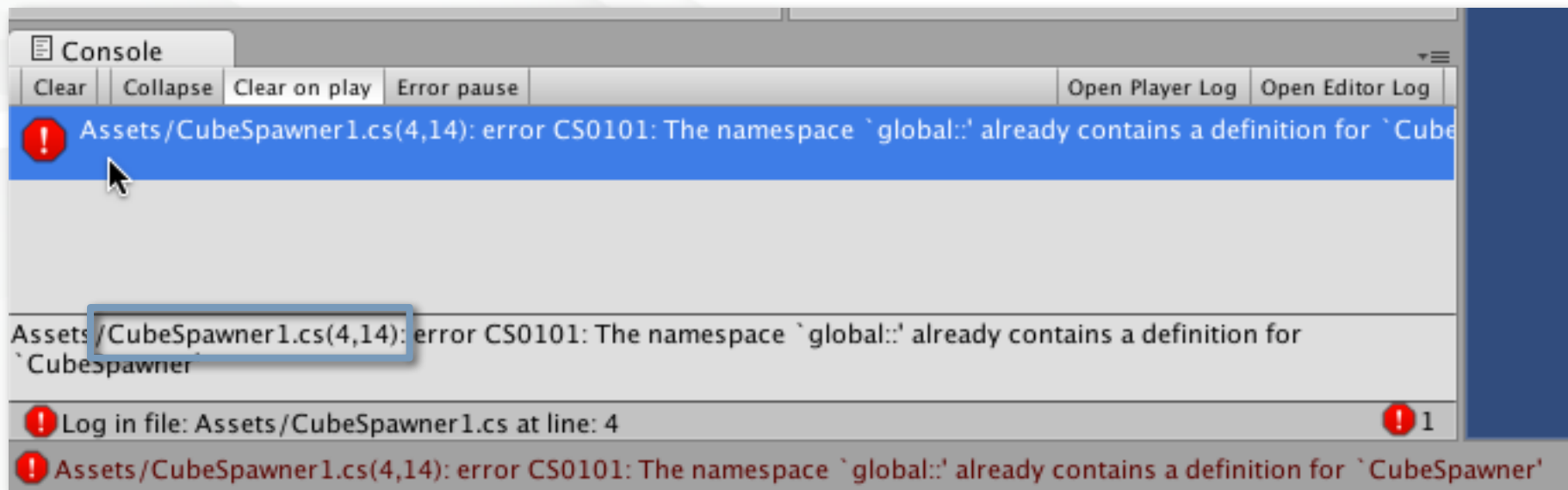
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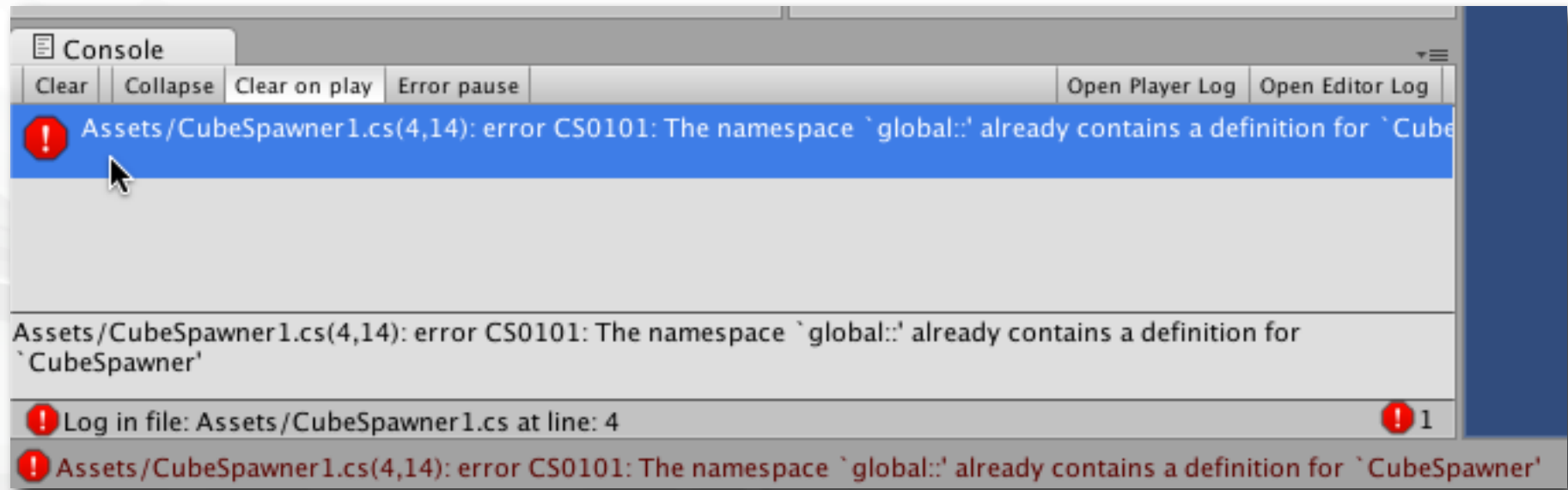
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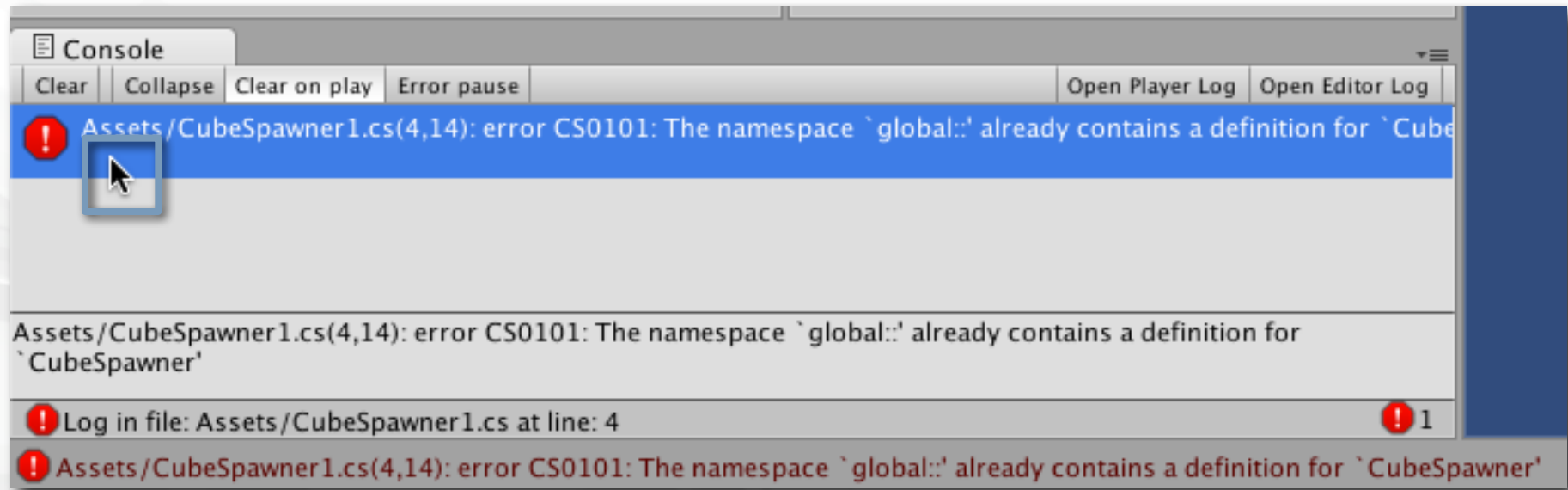
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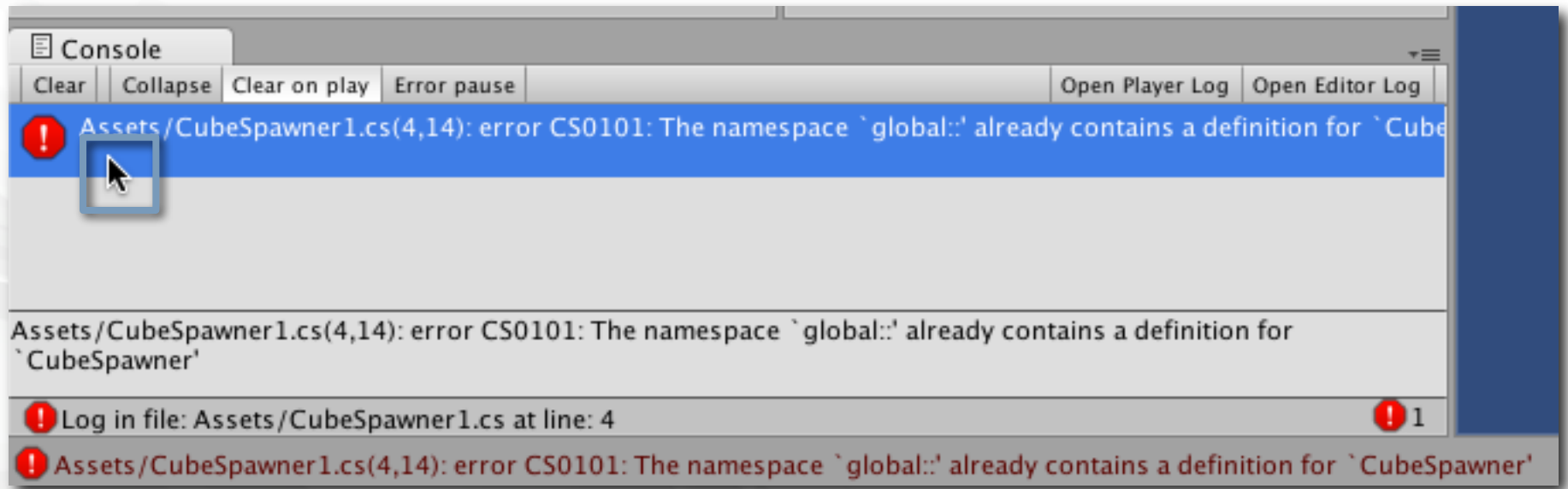
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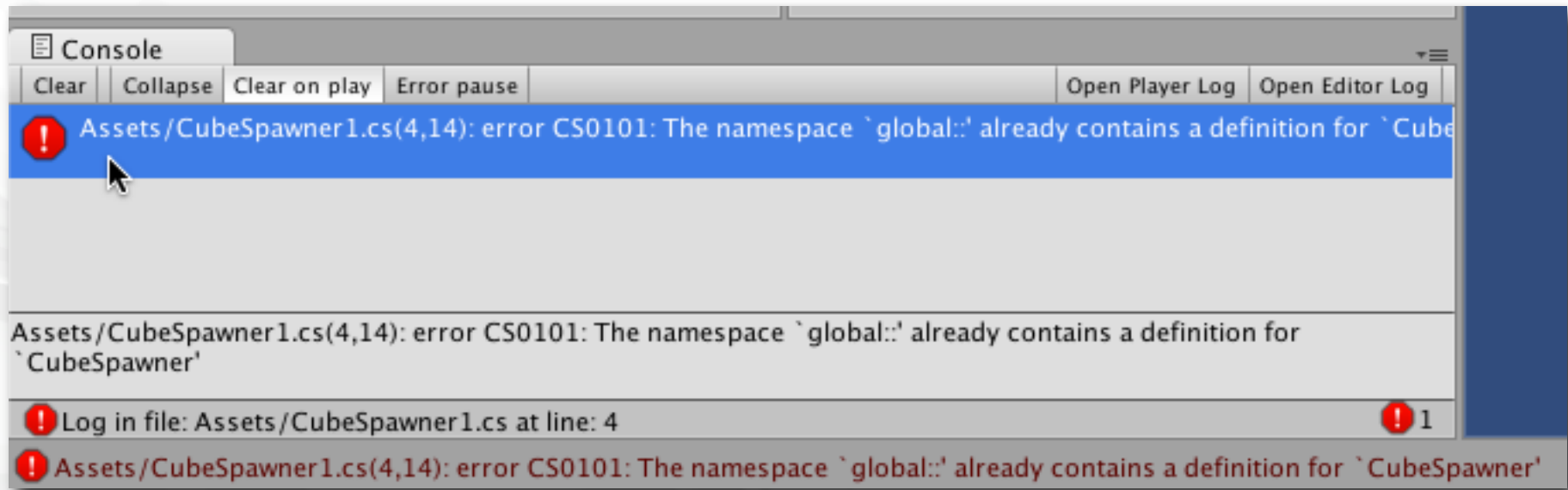


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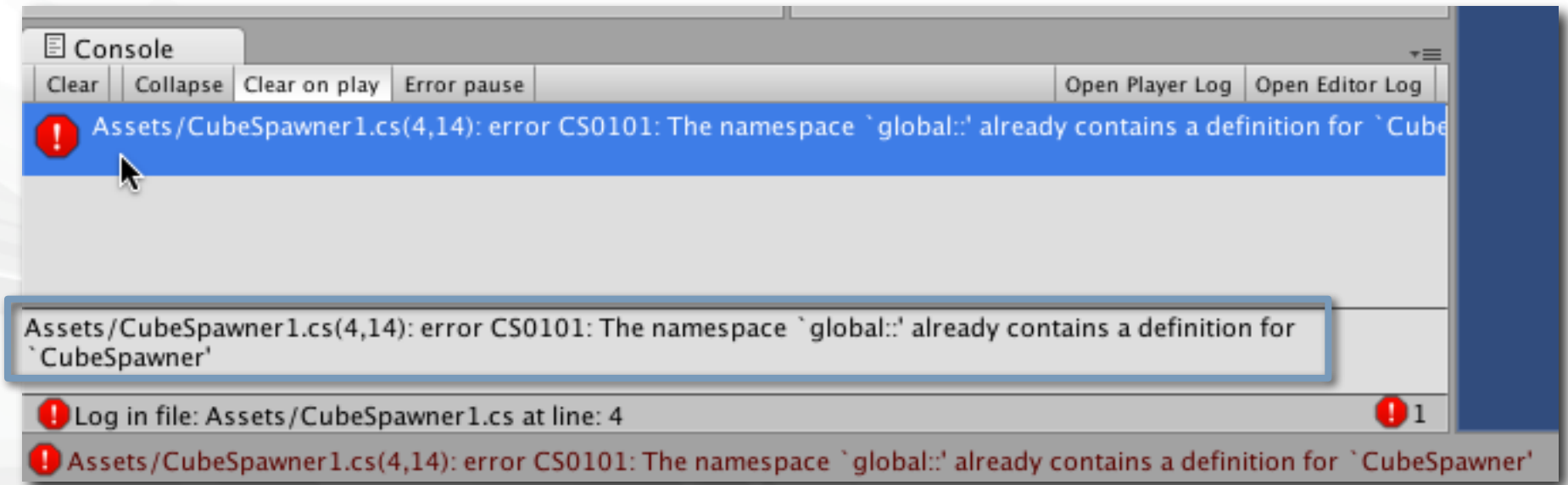
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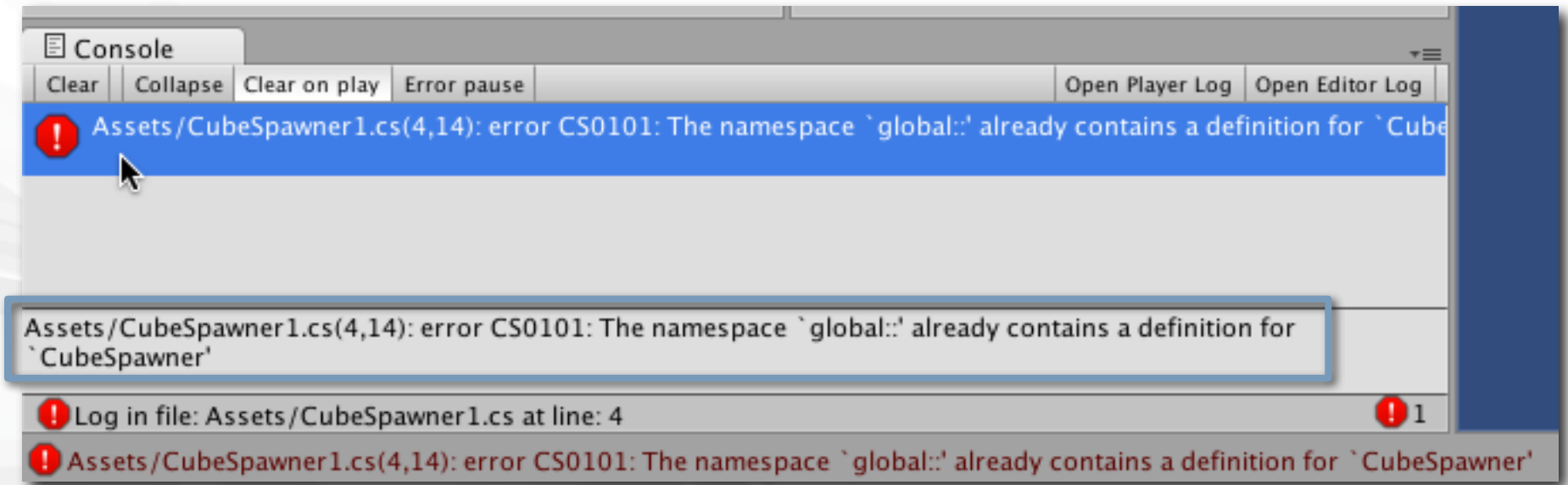
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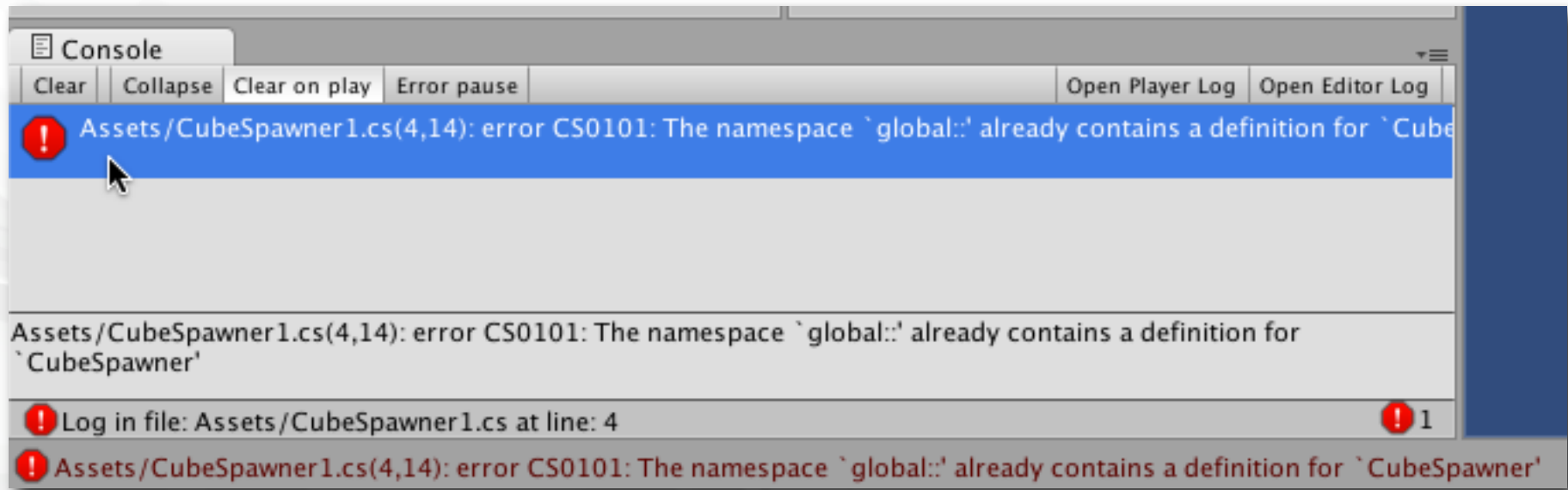
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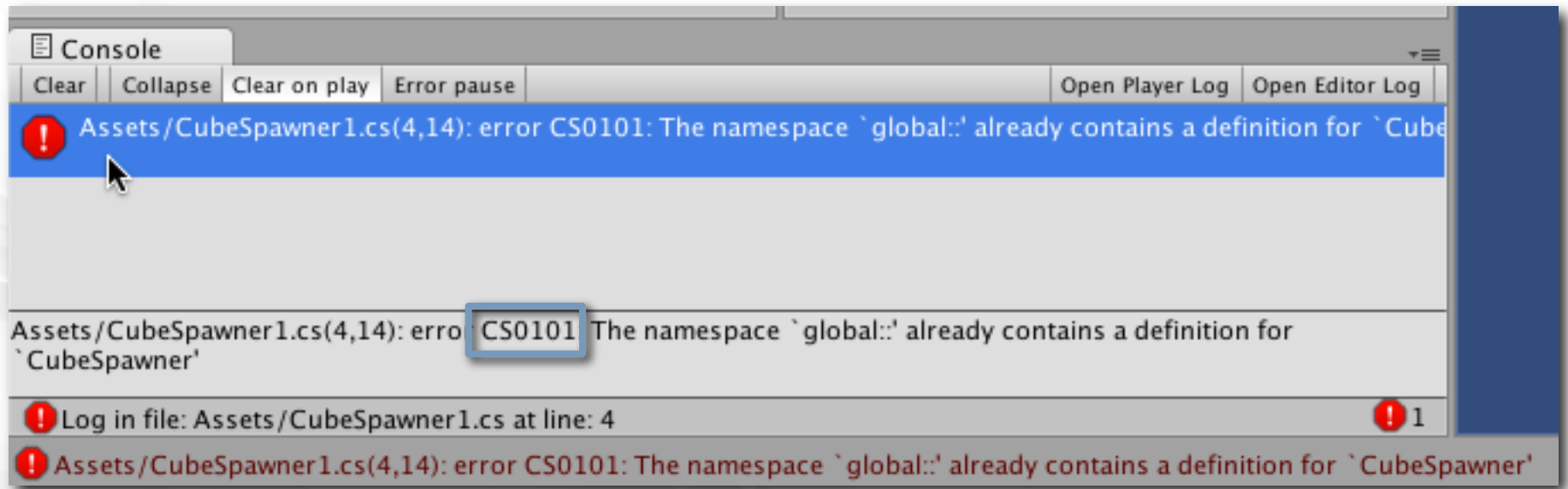
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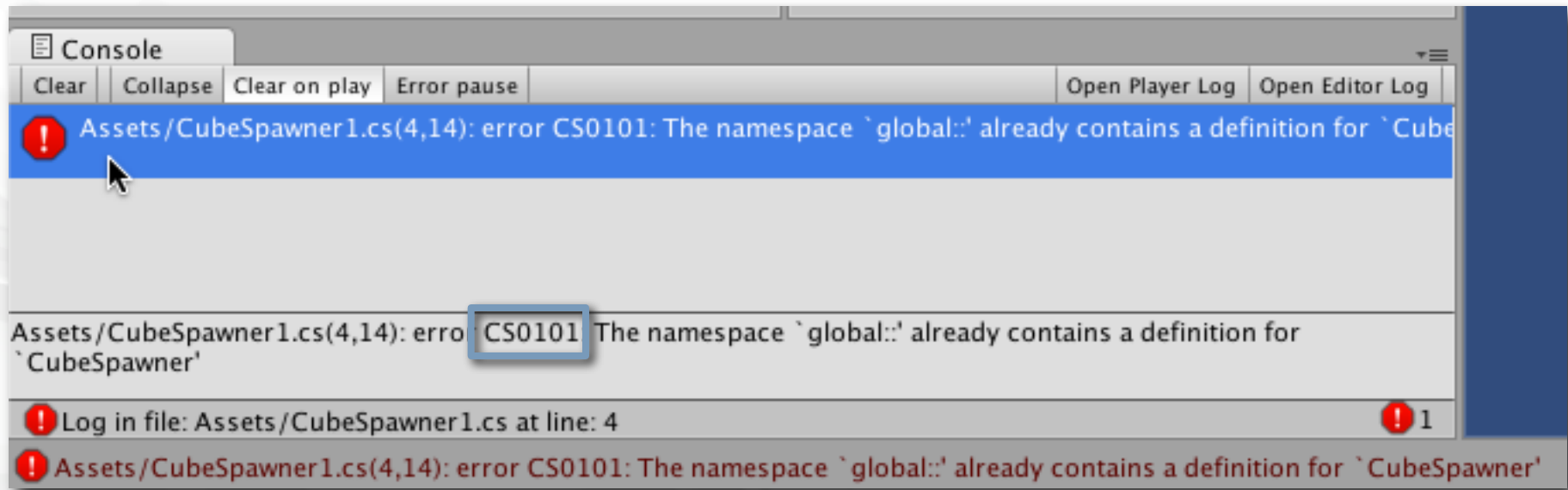
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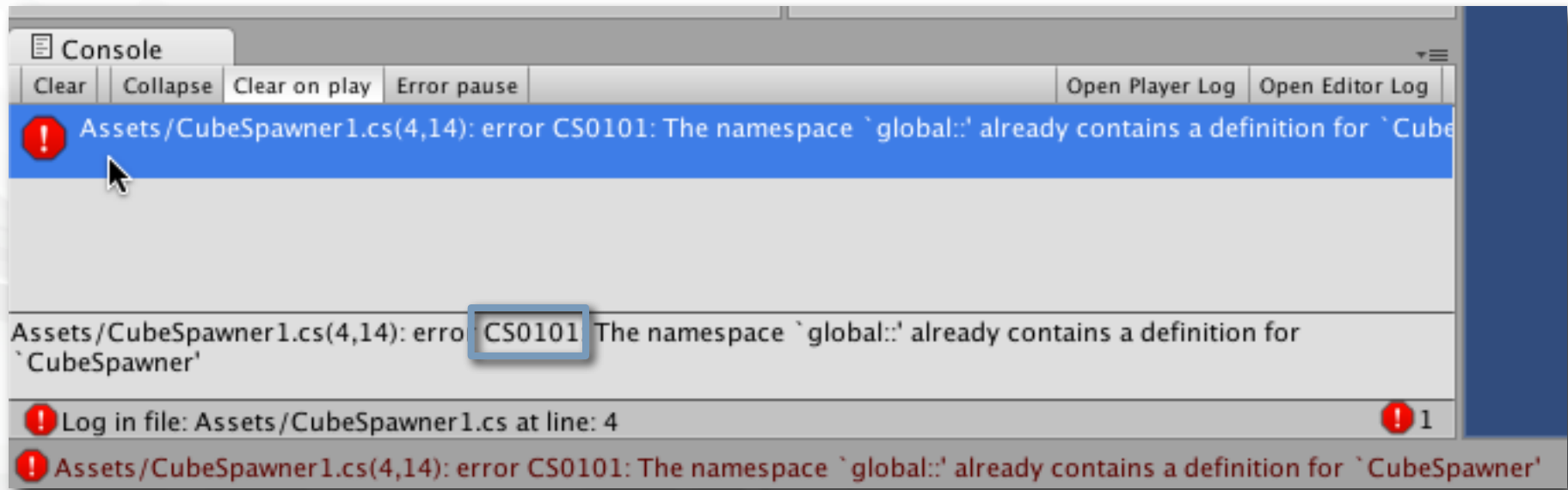
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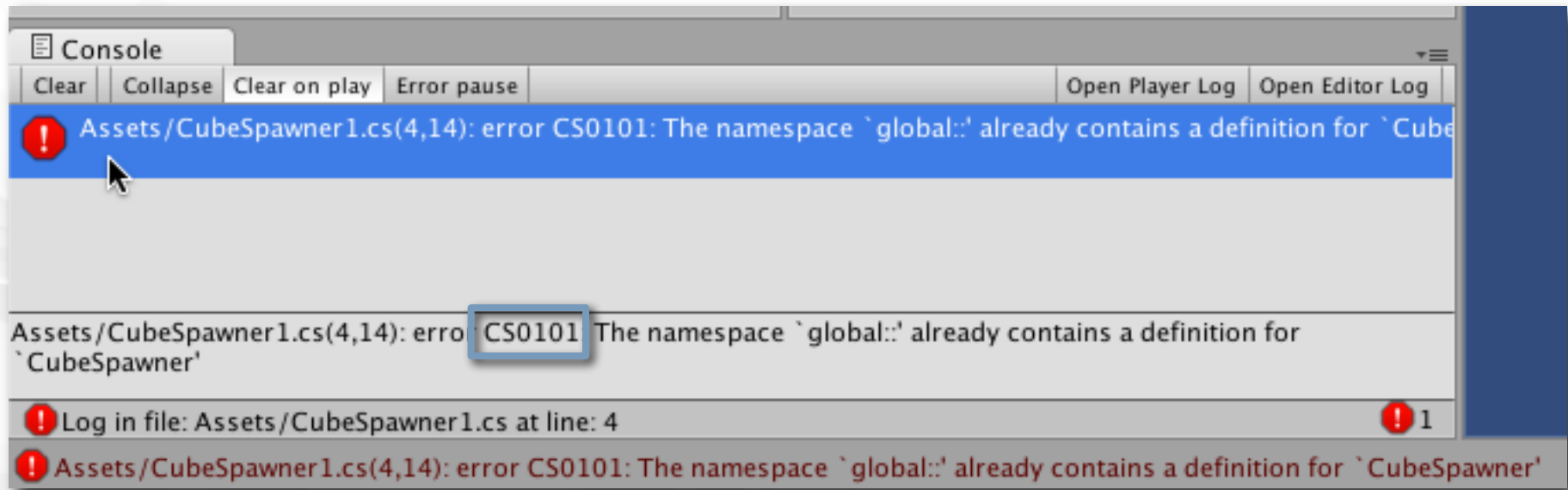
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 - If not, search the Internet for the error number
 - Example: "Unity error CS0101"
 - Unity forums and StackOverflow.com have some of the best answers

Common Compile-Time Errors to Know

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 - Check to make sure all braces have a mate { }

Bugs Attaching Scripts to GameObjects

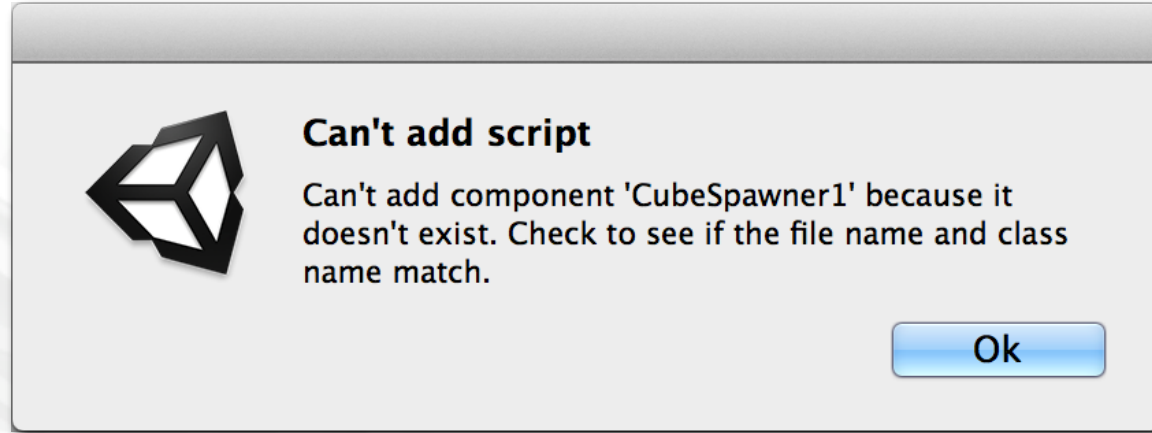


Can't add script

Can't add component 'CubeSpawner1' because it doesn't exist. Check to see if the file name and class name match.

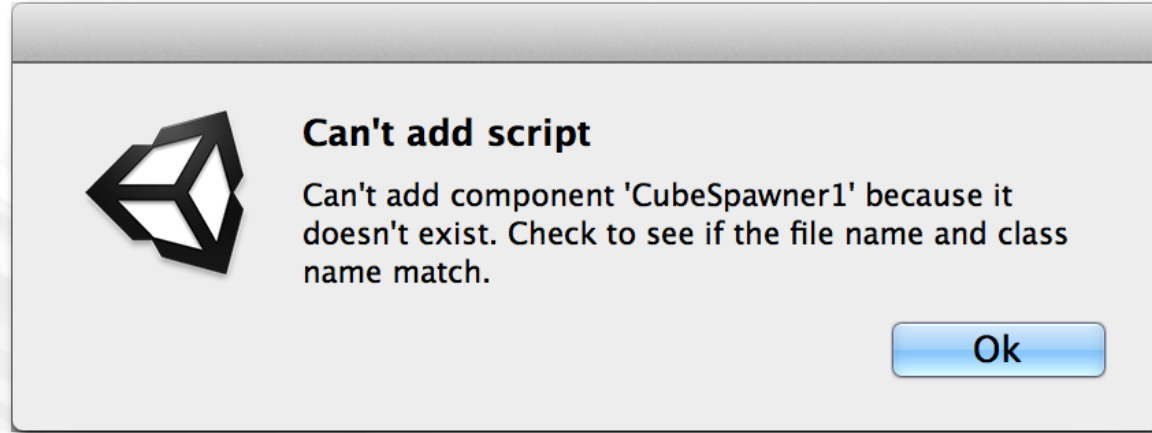
Ok

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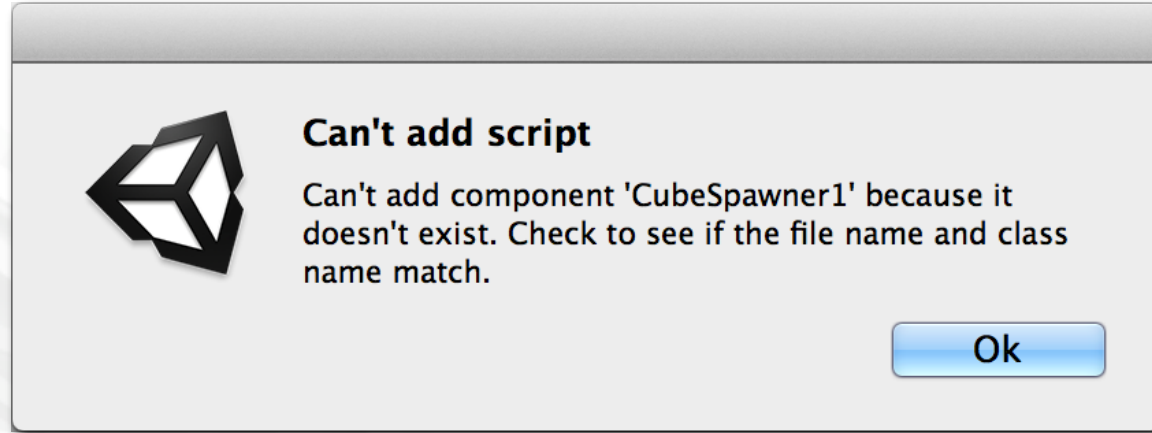
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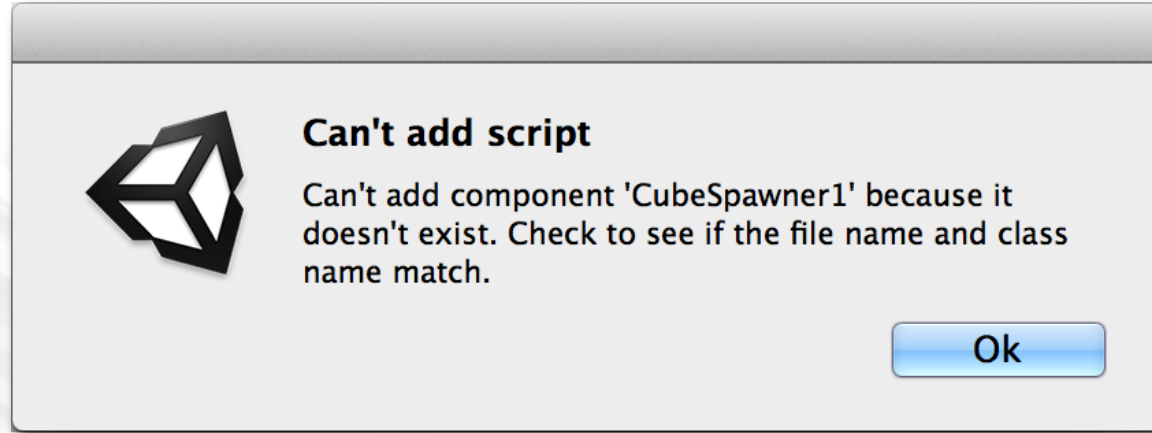
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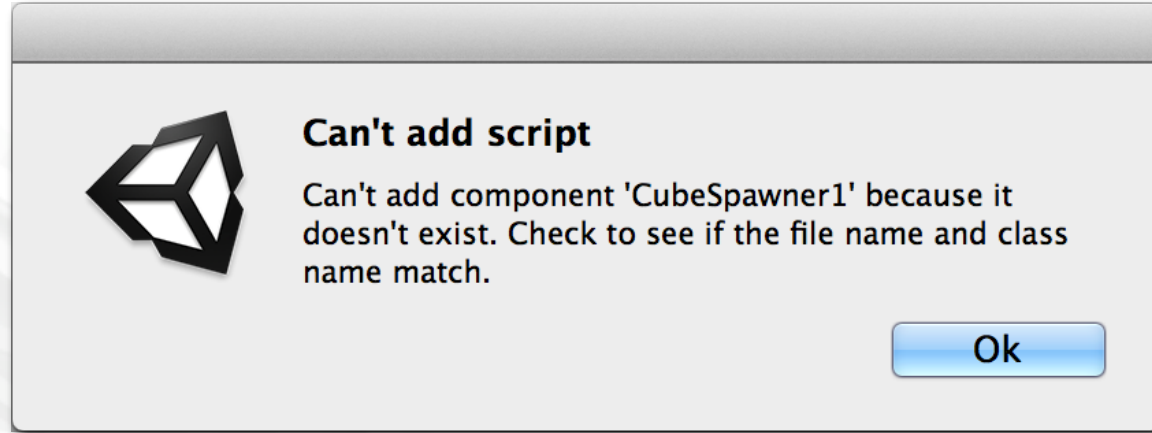
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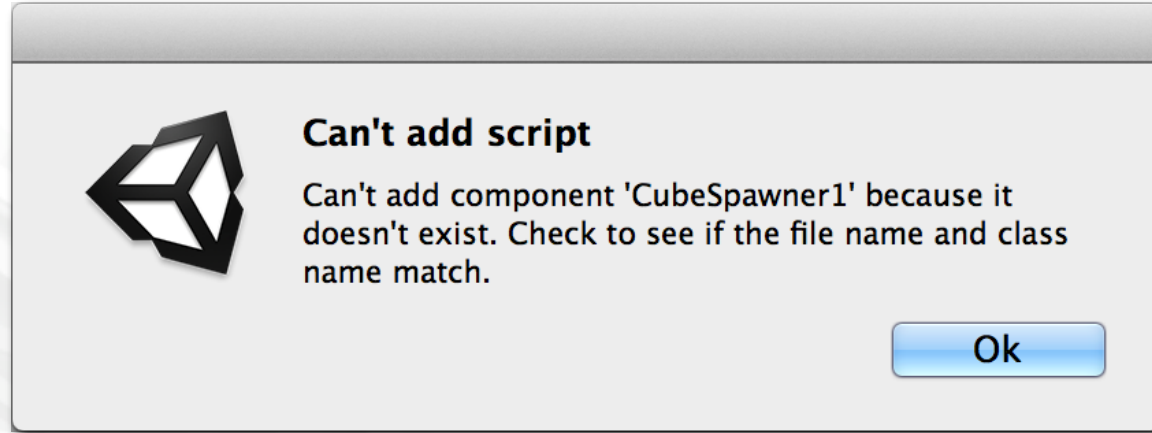
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- **Example**
 - Script filename: **CubeSpawner1** (or CubeSpawner1.cs)
 - Class name: `public class CubeSpawner : MonoBehaviour { ... }`
- **To Fix: Match the names to each other**

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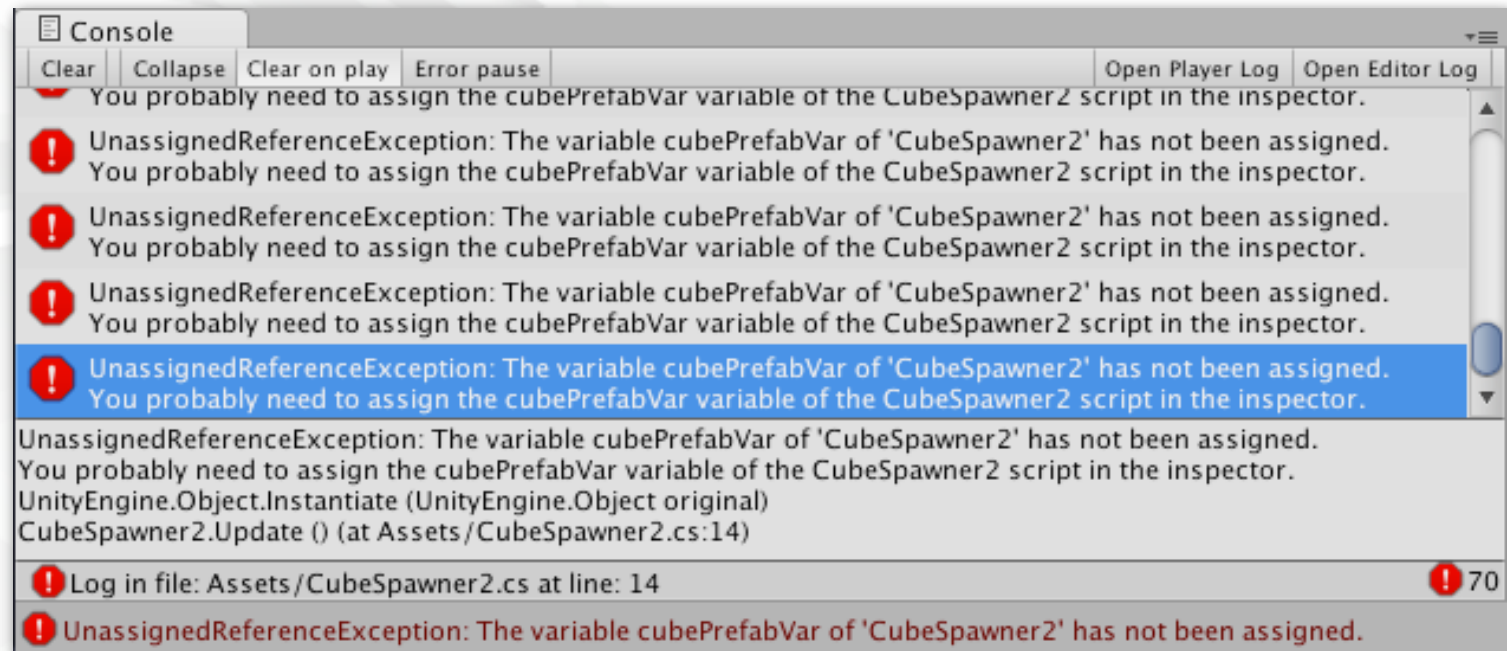
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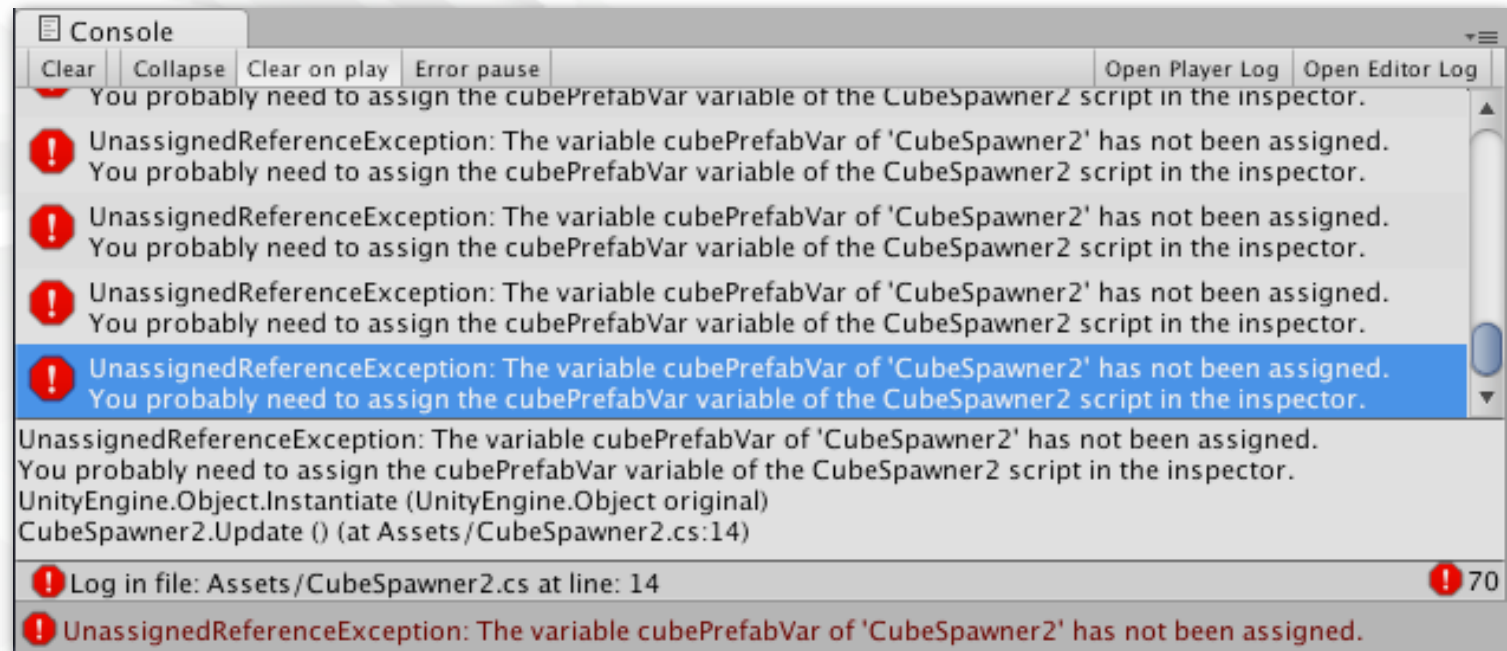
- `UnassignedReferenceException`
- `NullReferenceException`

Common Runtime Errors



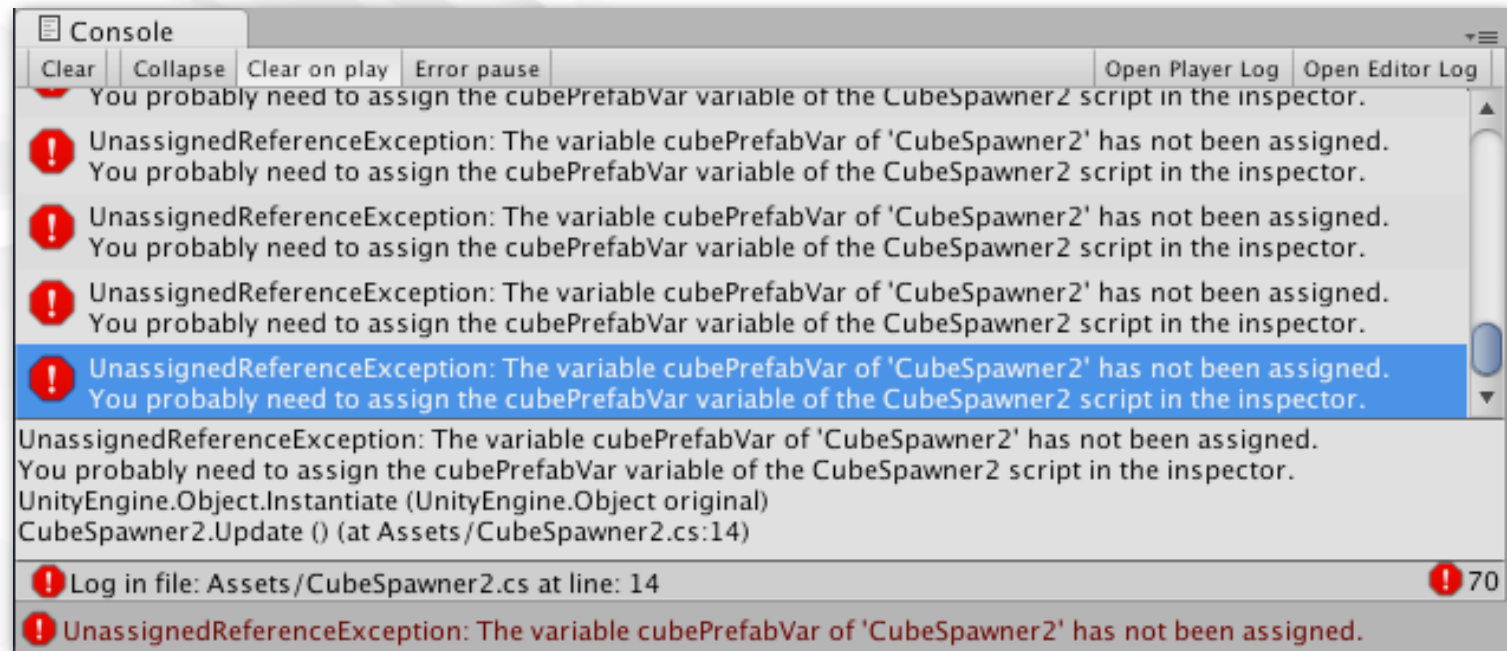
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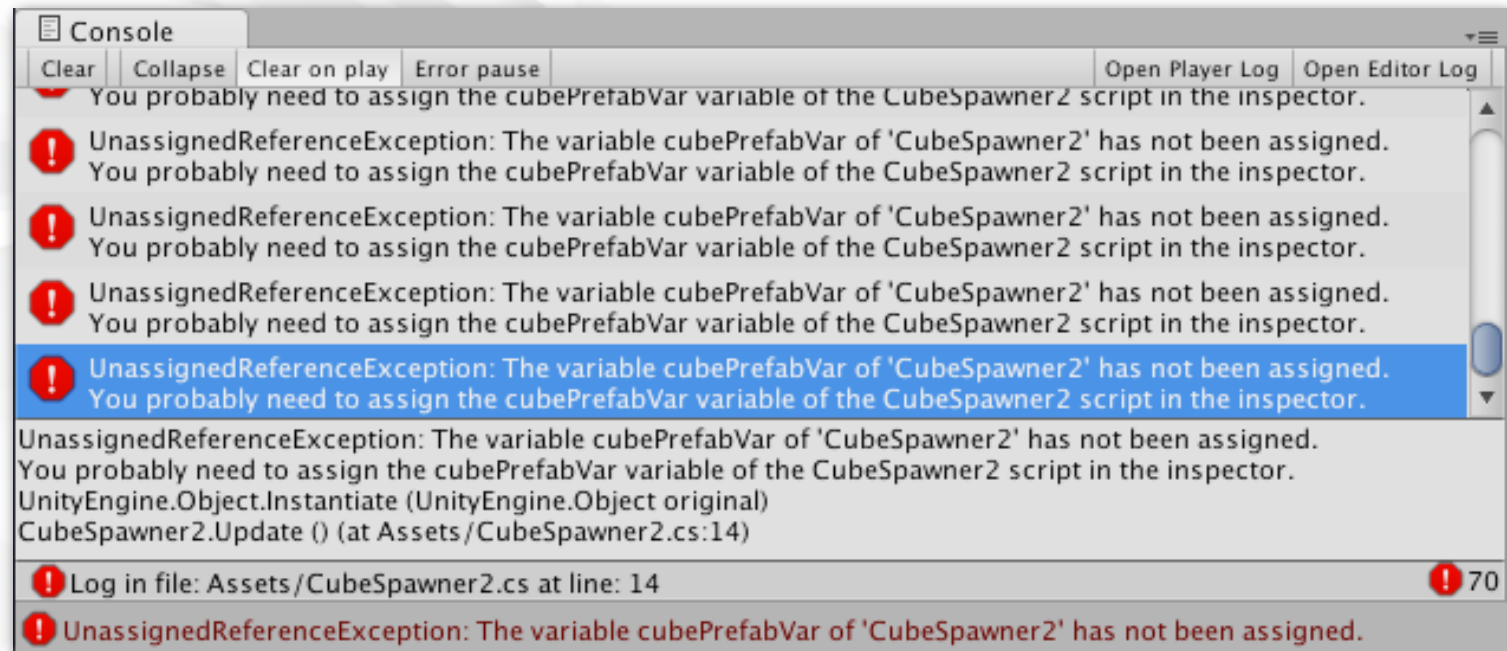
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- **UnassignedReferenceException**
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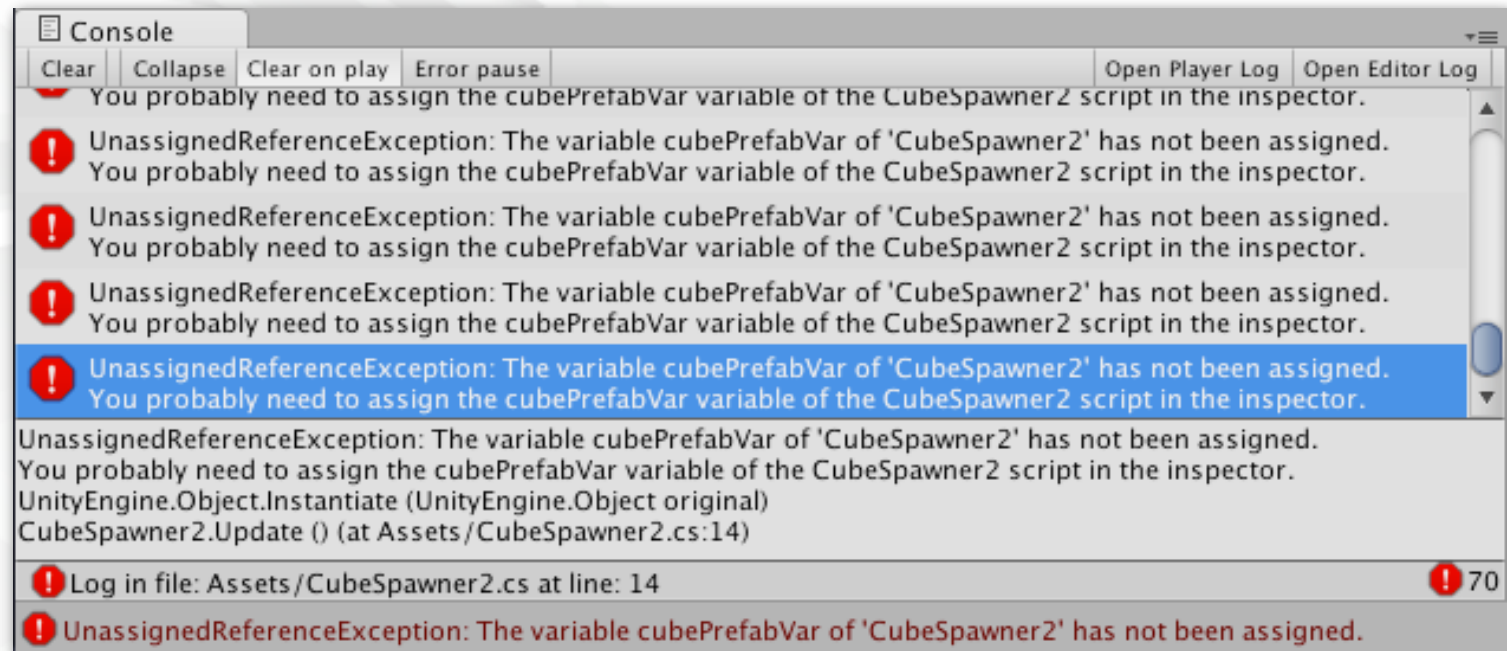
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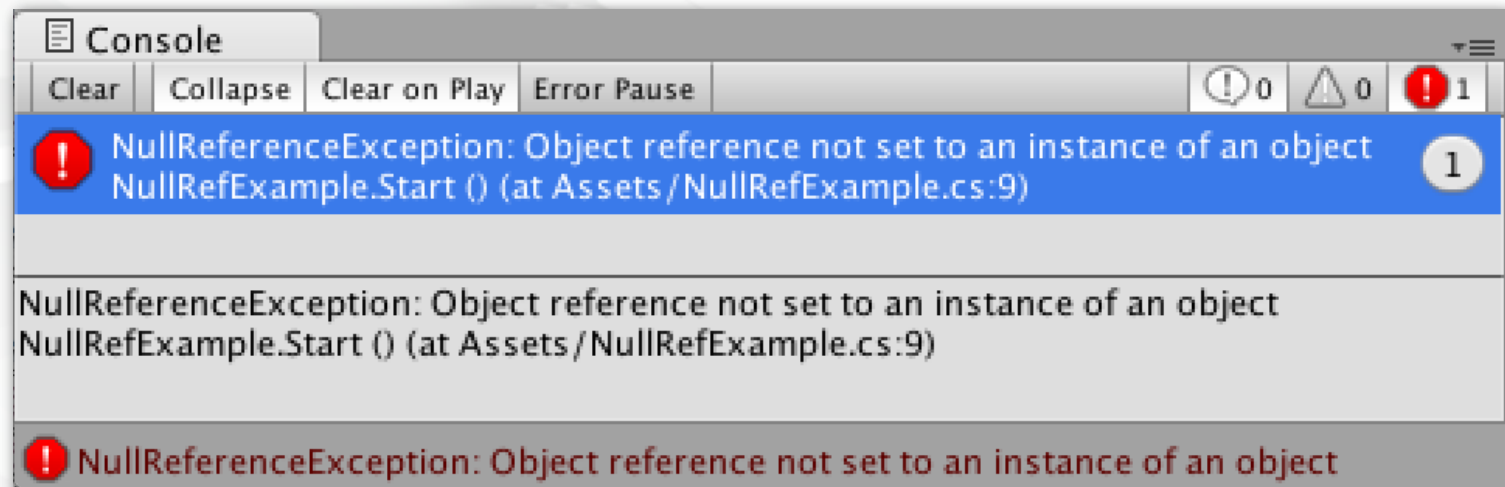
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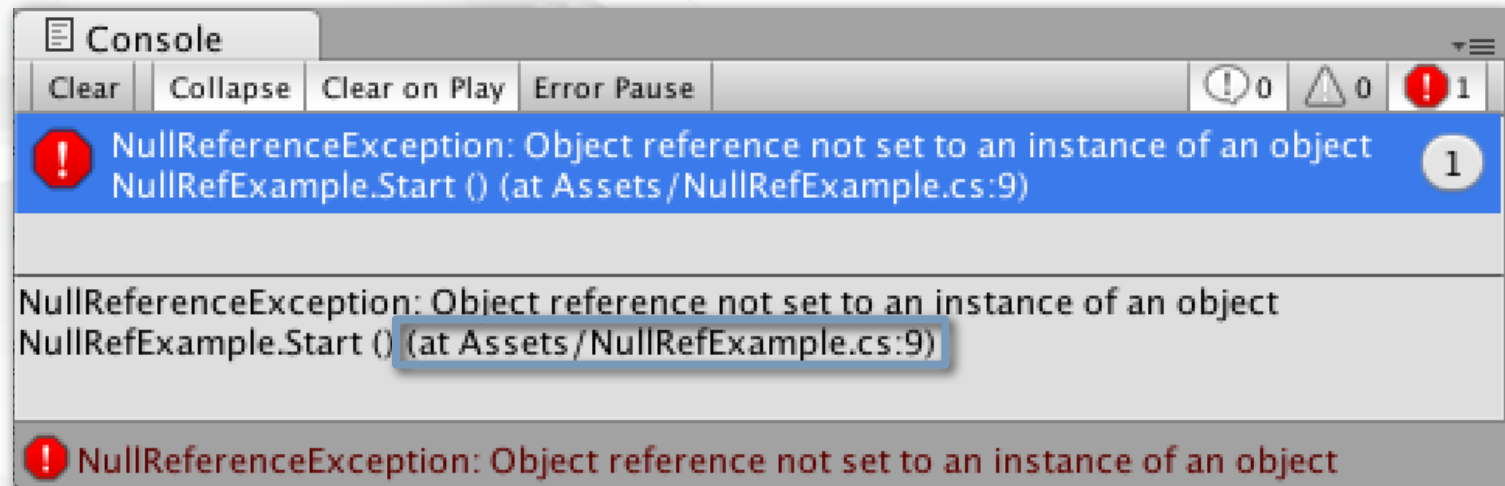
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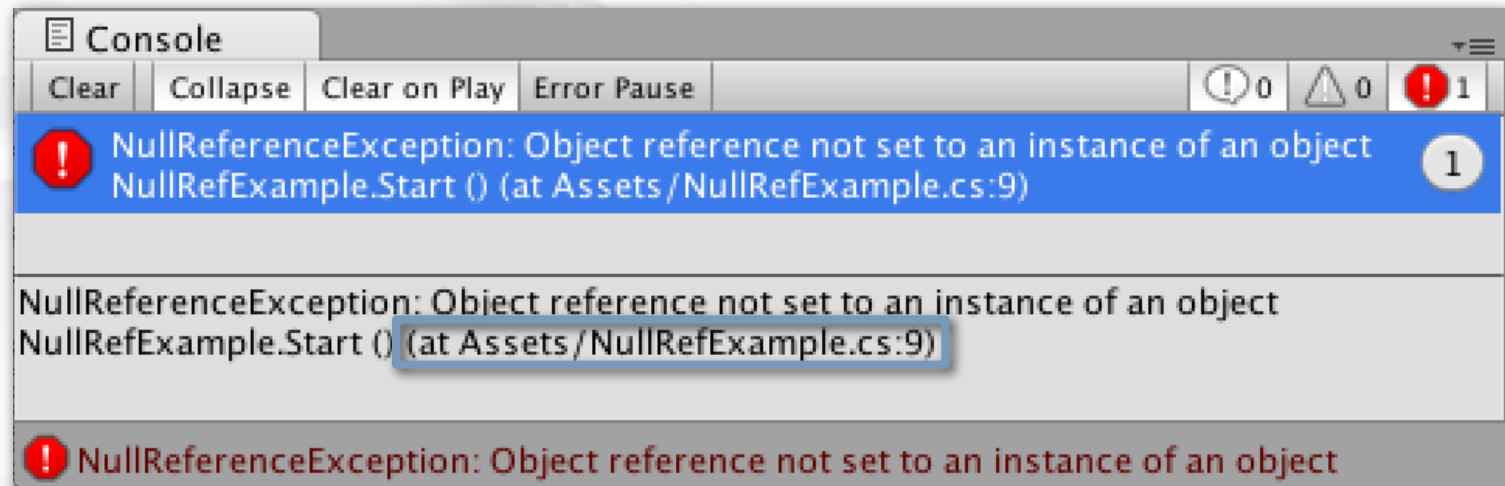
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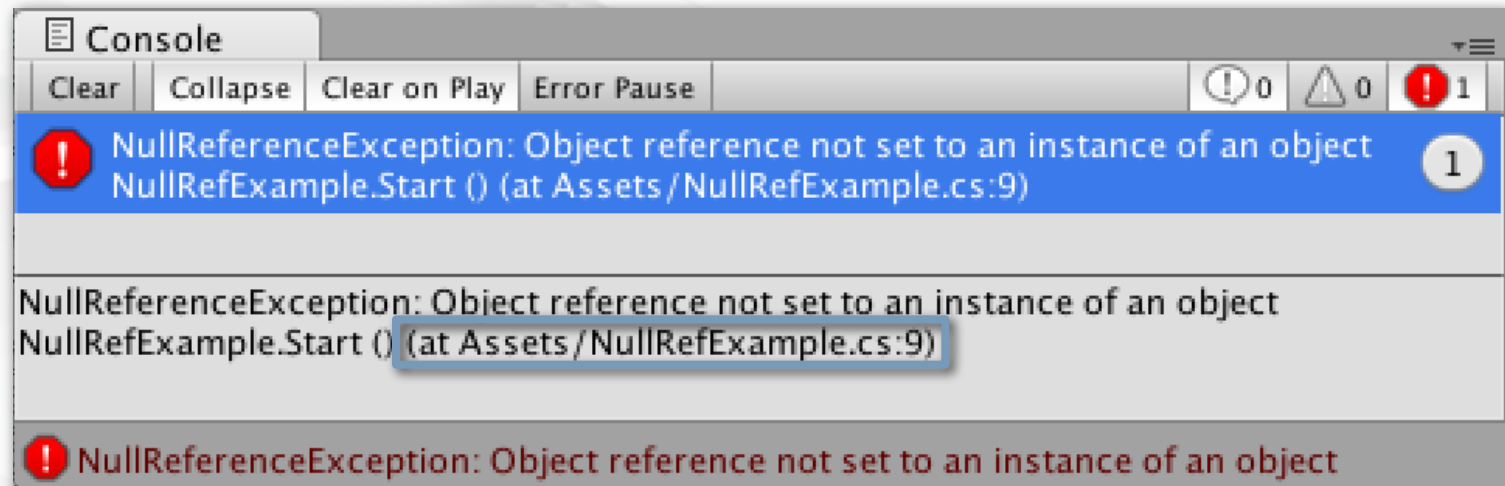
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- These are difficult to debug!

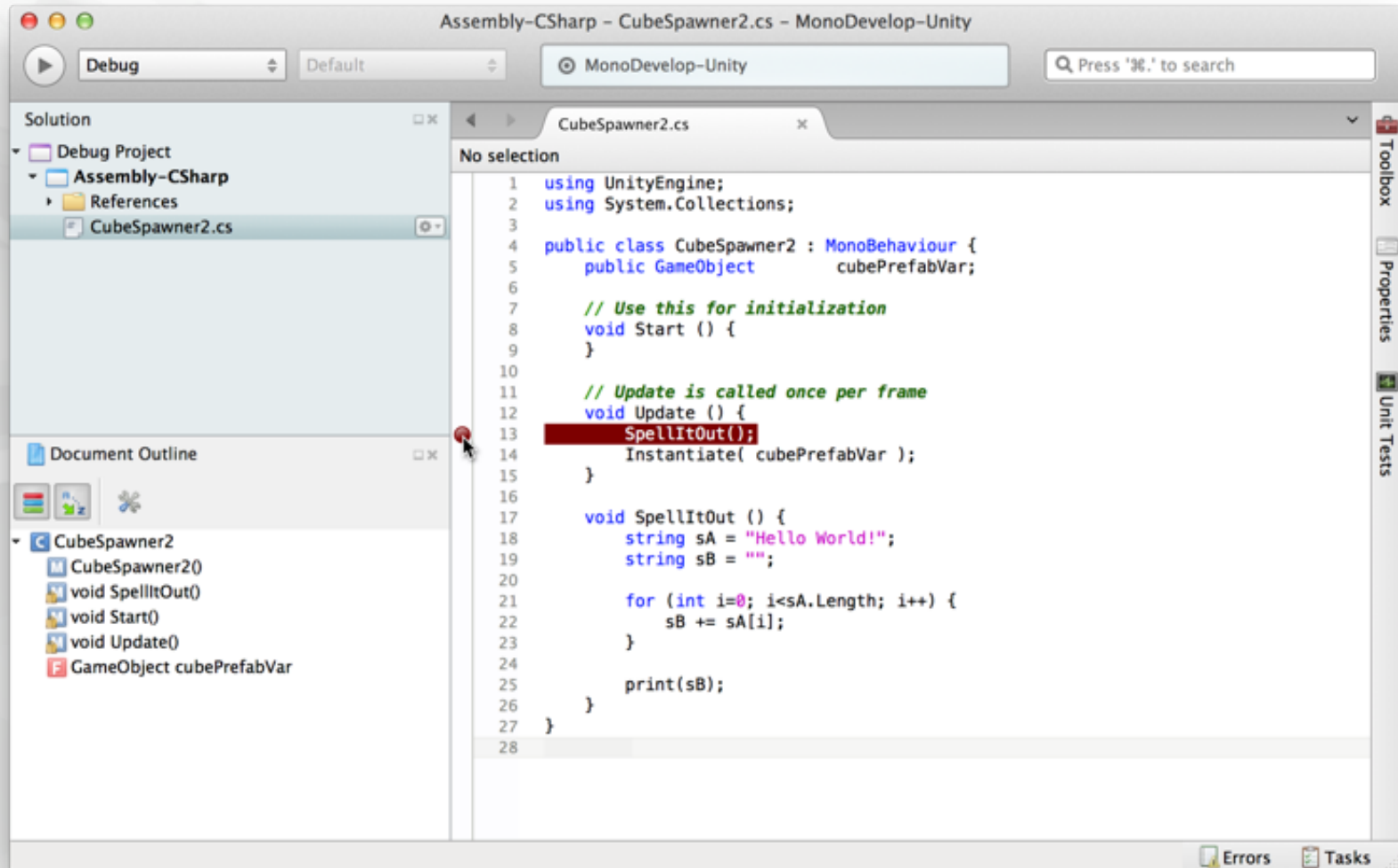
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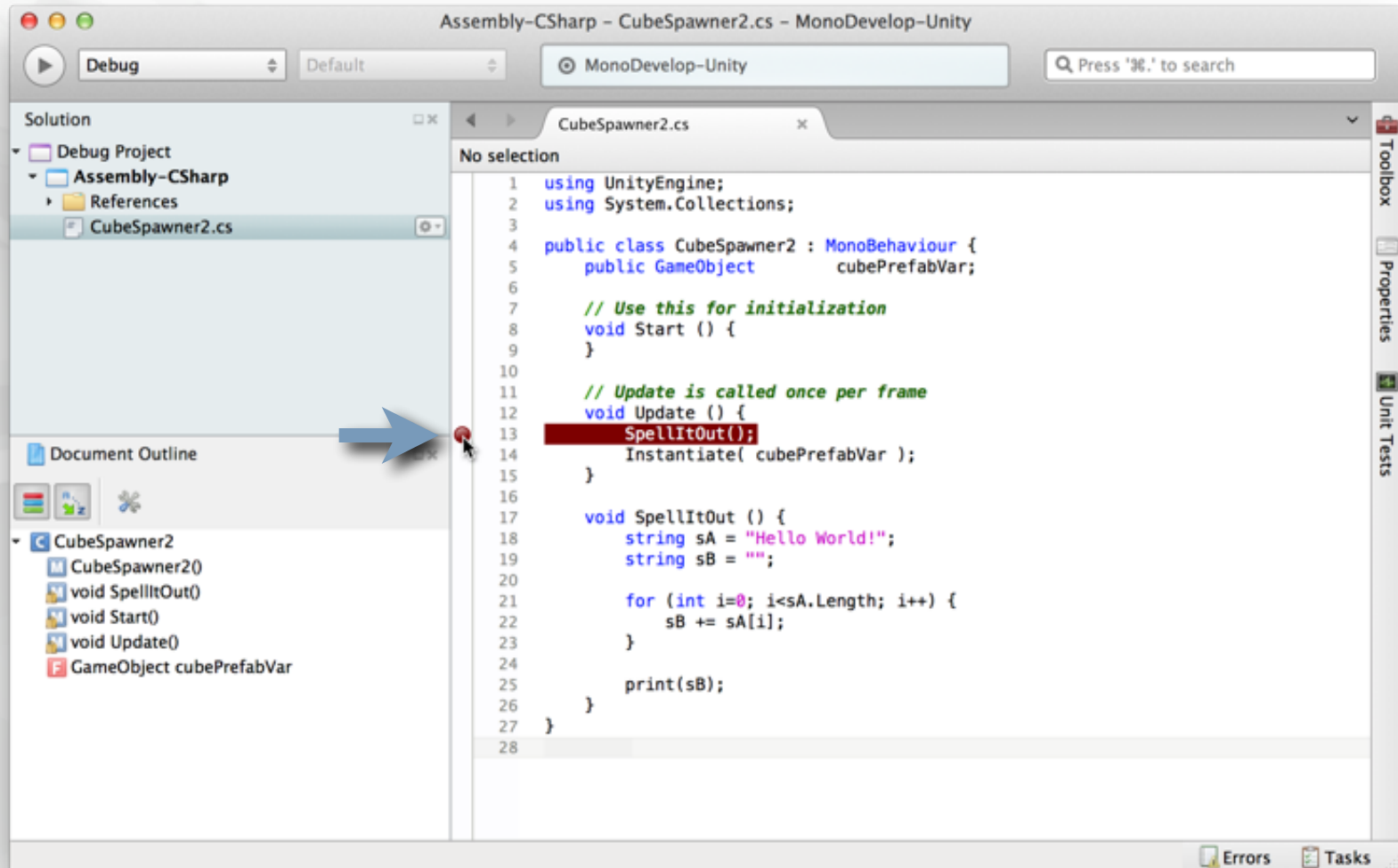
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Stepping Through Code with the Debugger

- **Step 2: Attach the Debugger to the Unity process**

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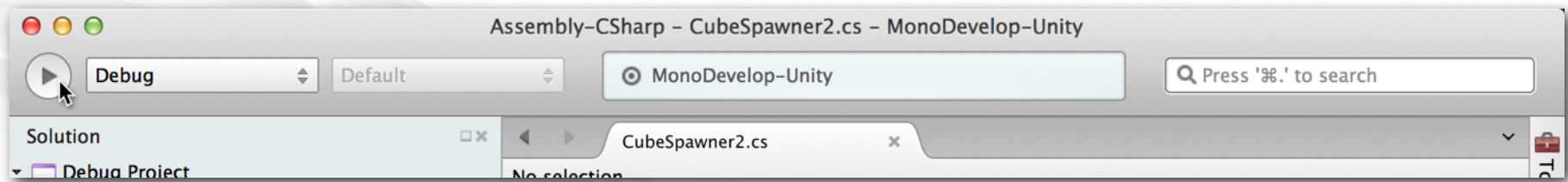
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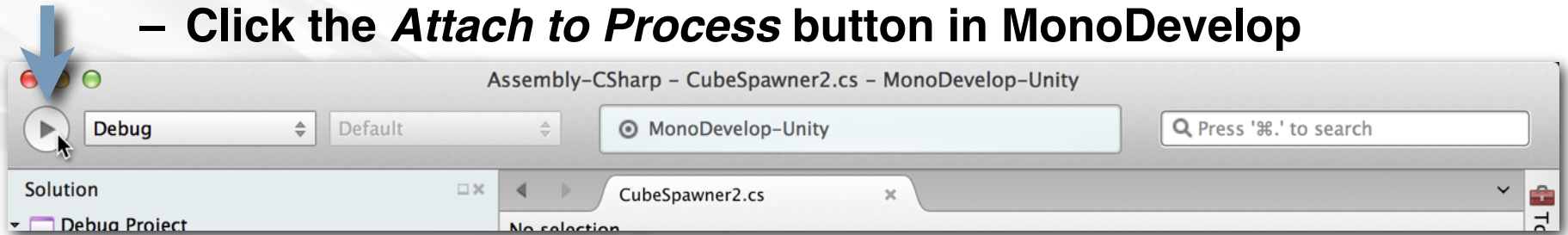
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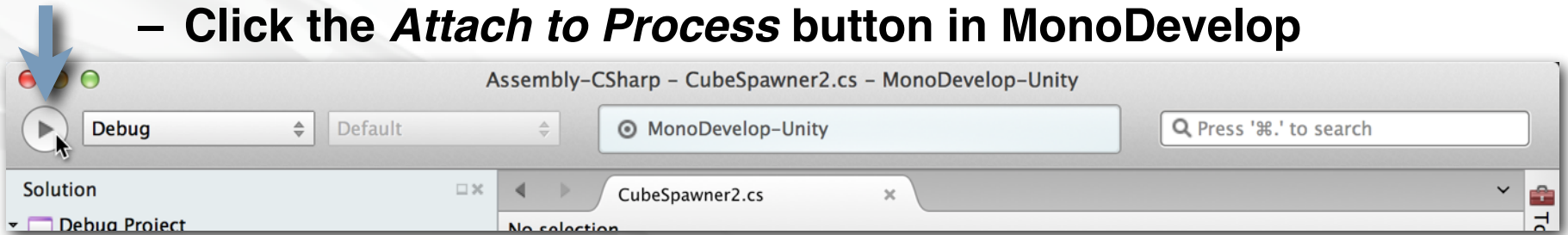
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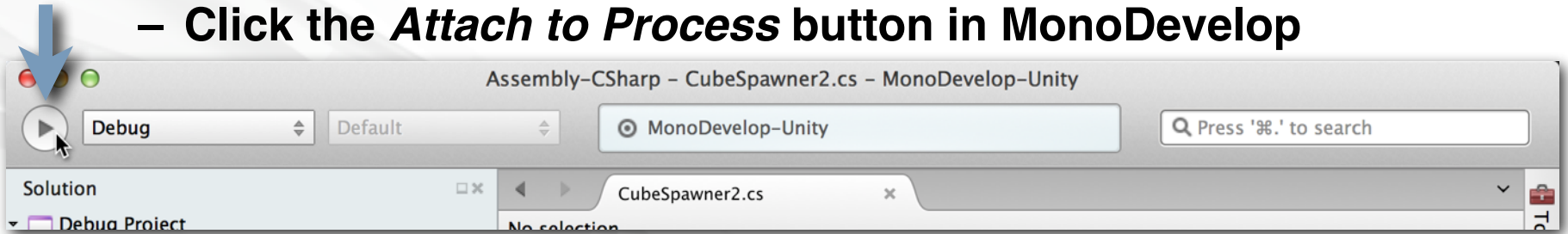


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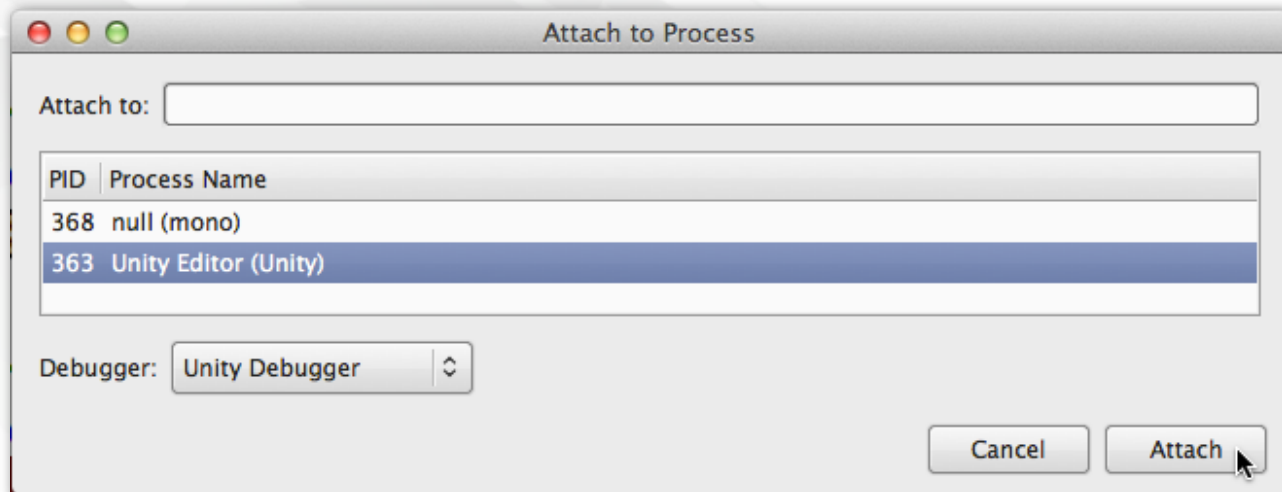
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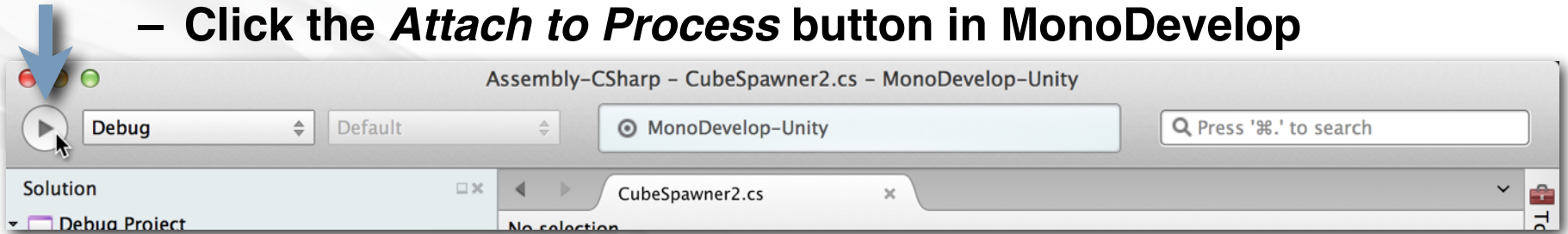
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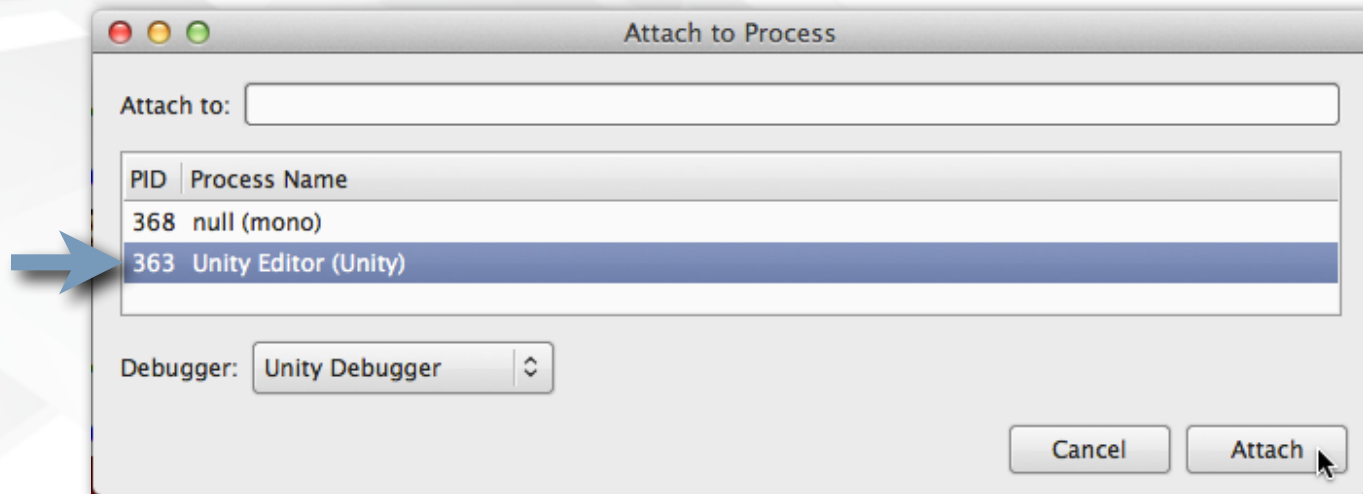
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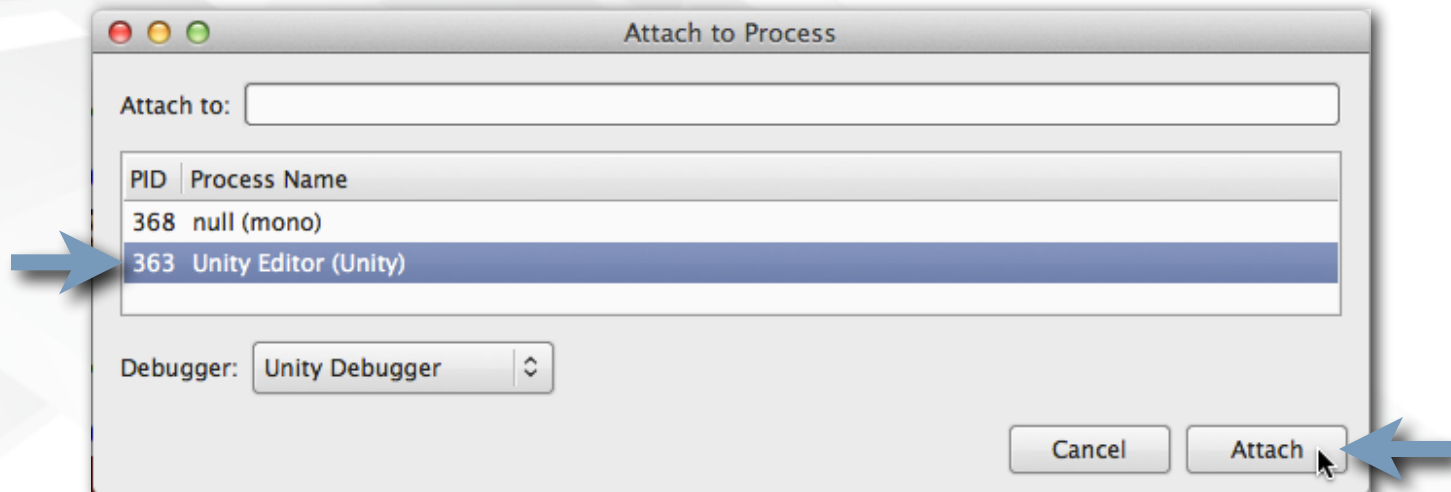
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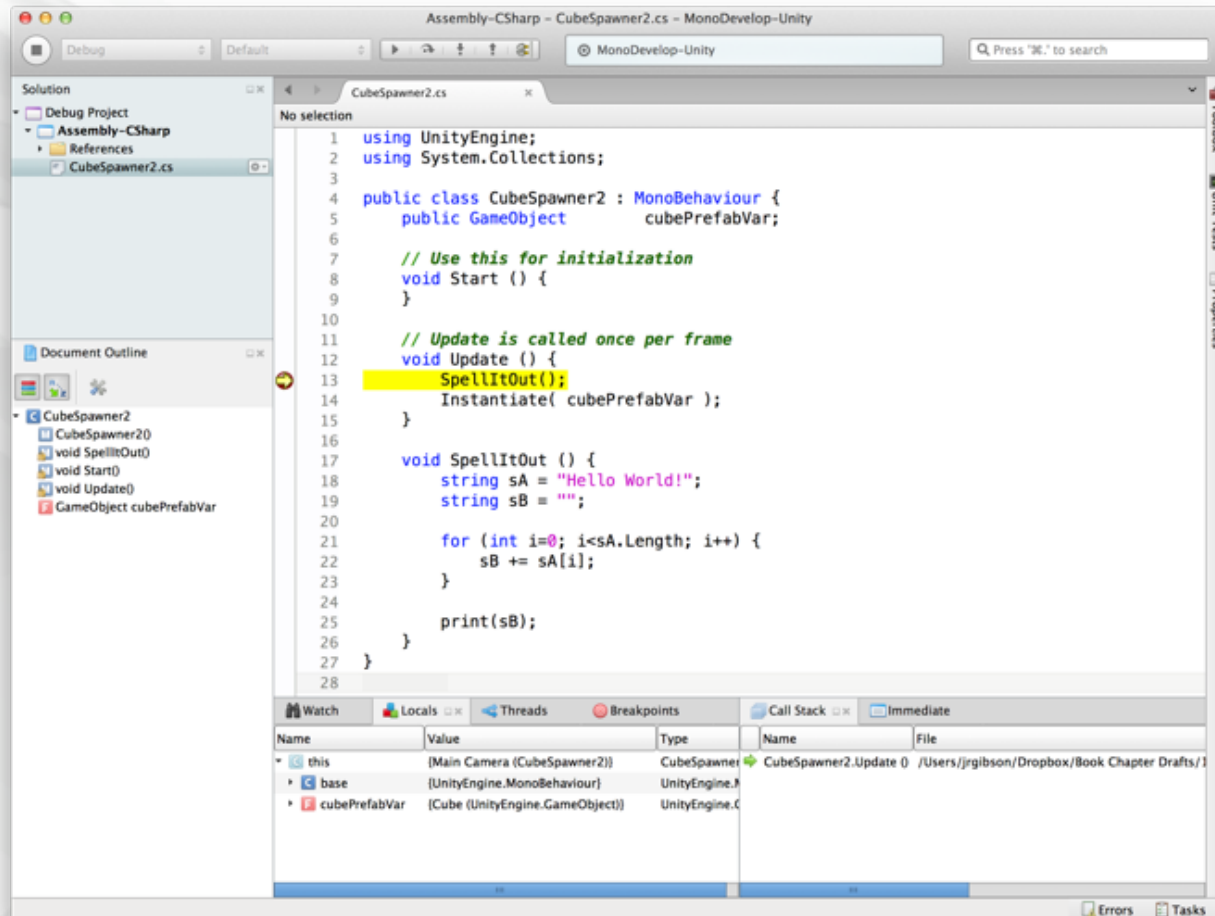


- Choose *Unity Editor (Unity)* from the process list & click *Attach*



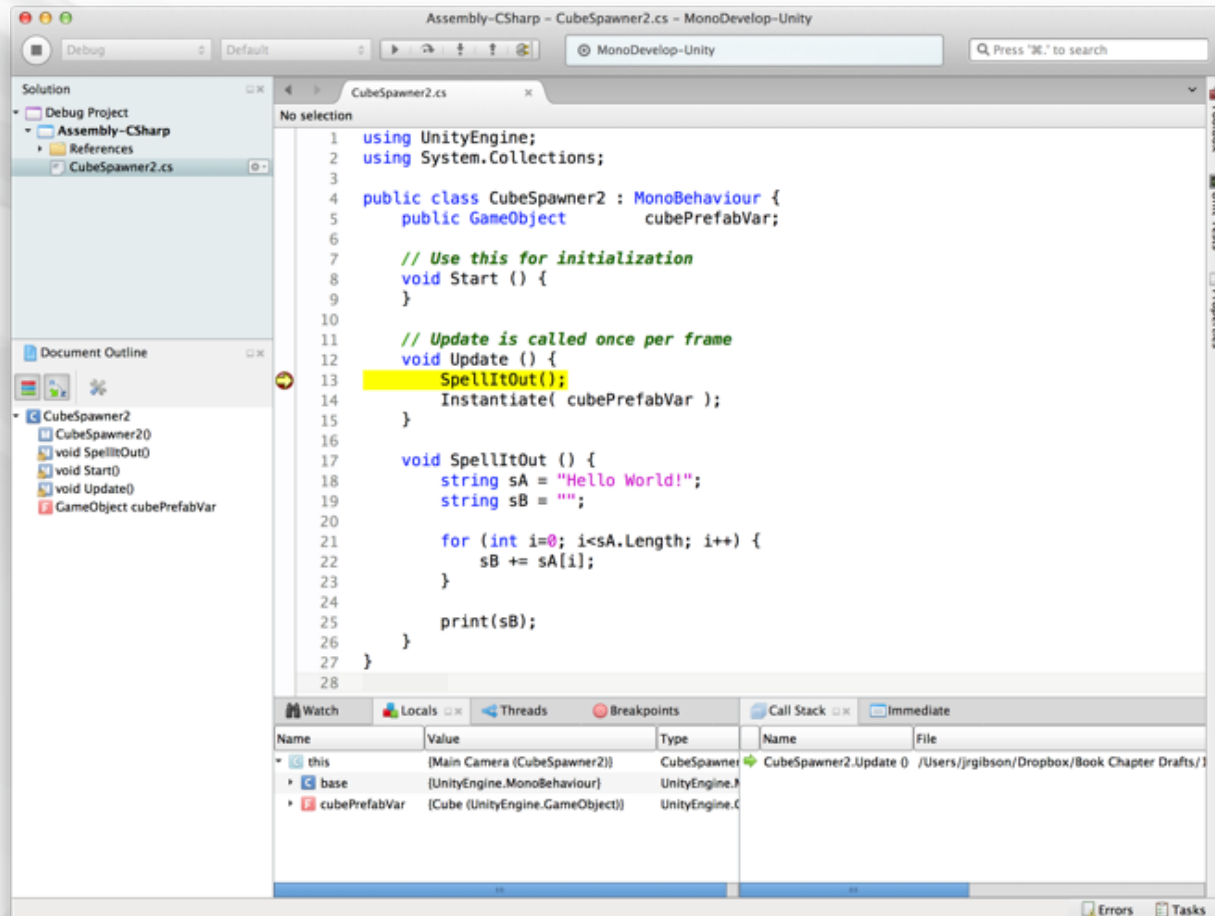
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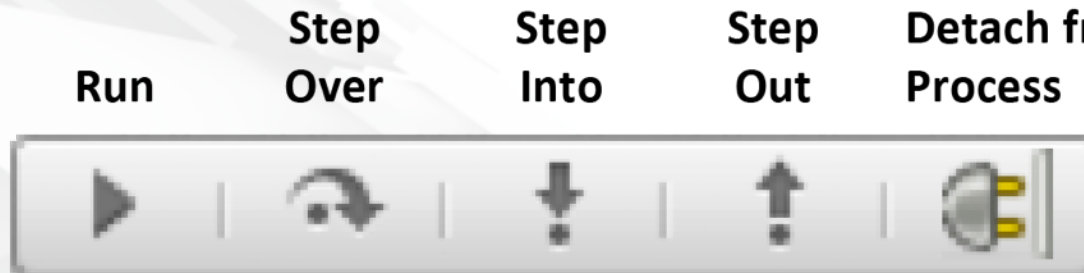
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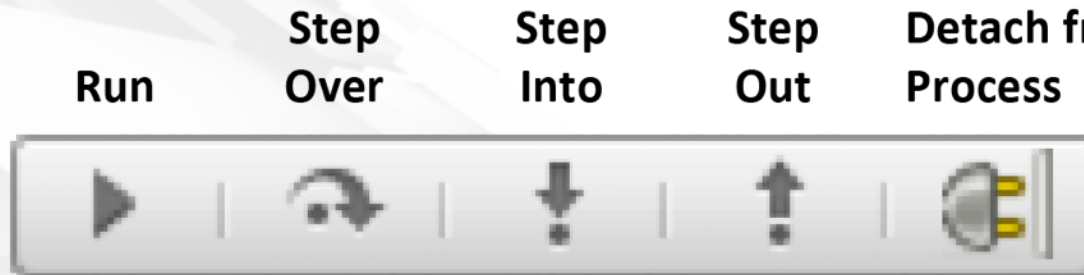
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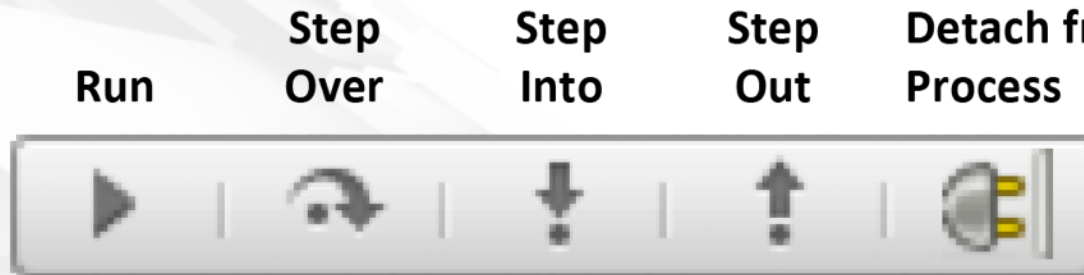


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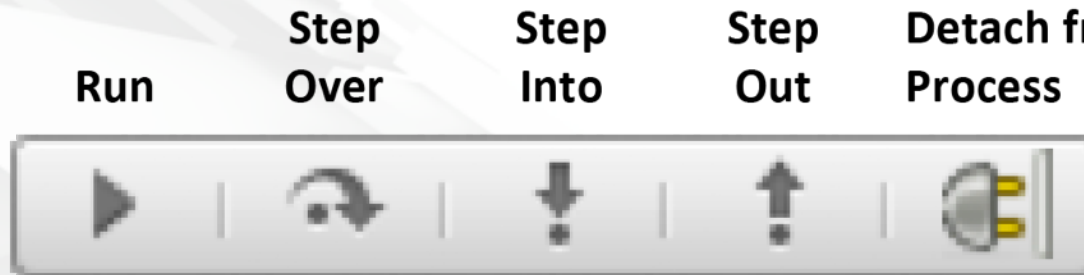


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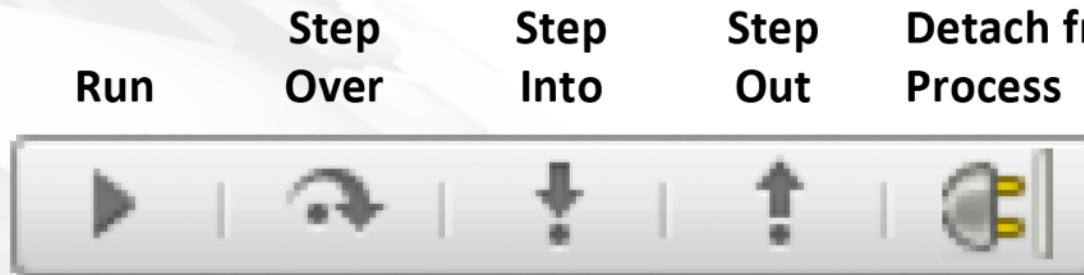


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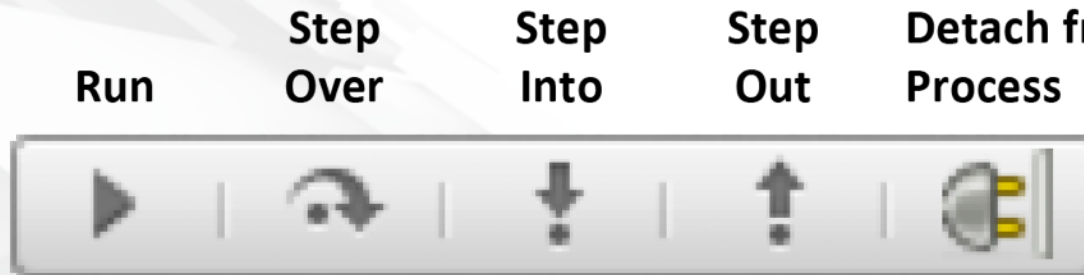


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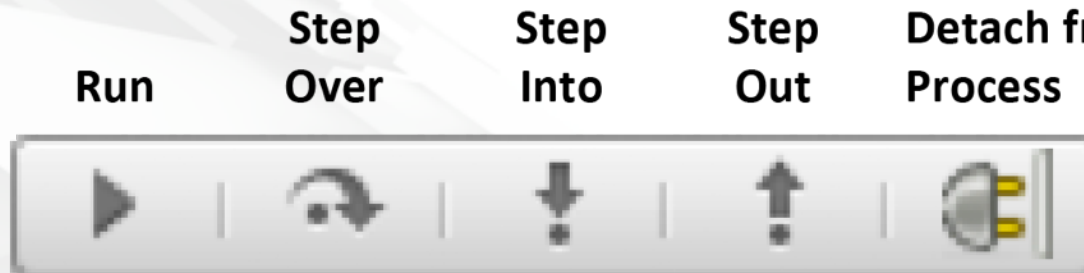


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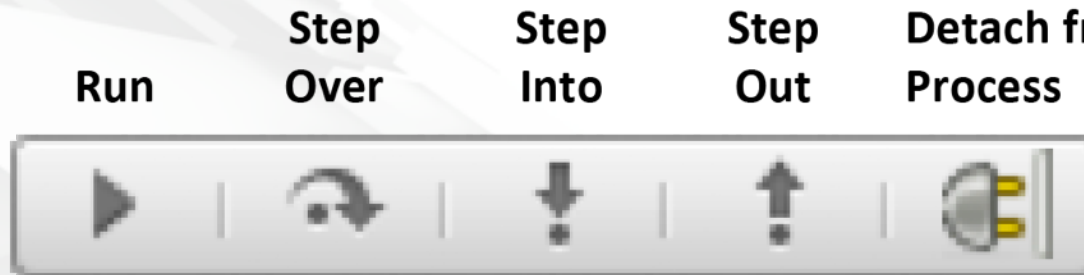


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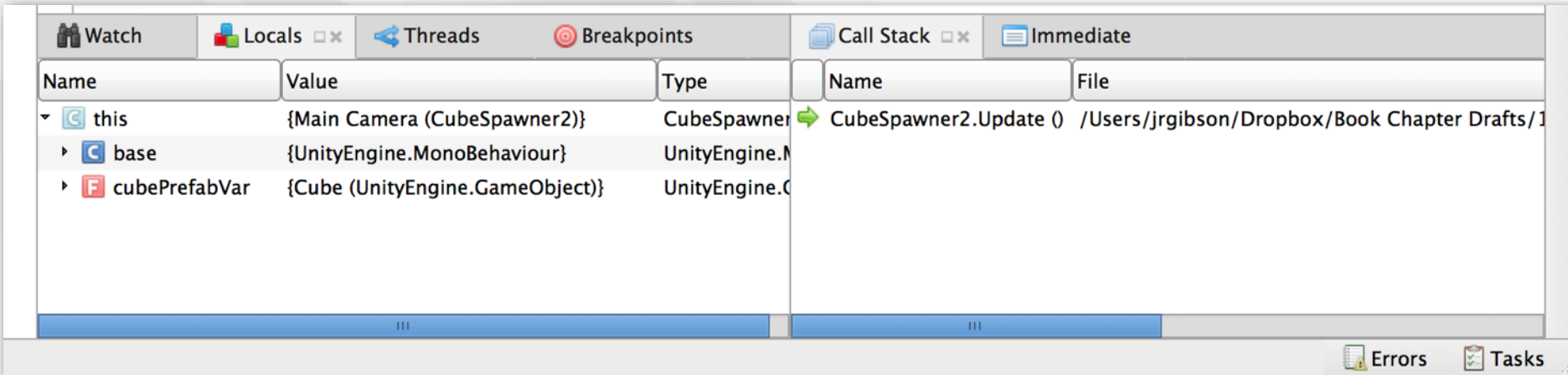
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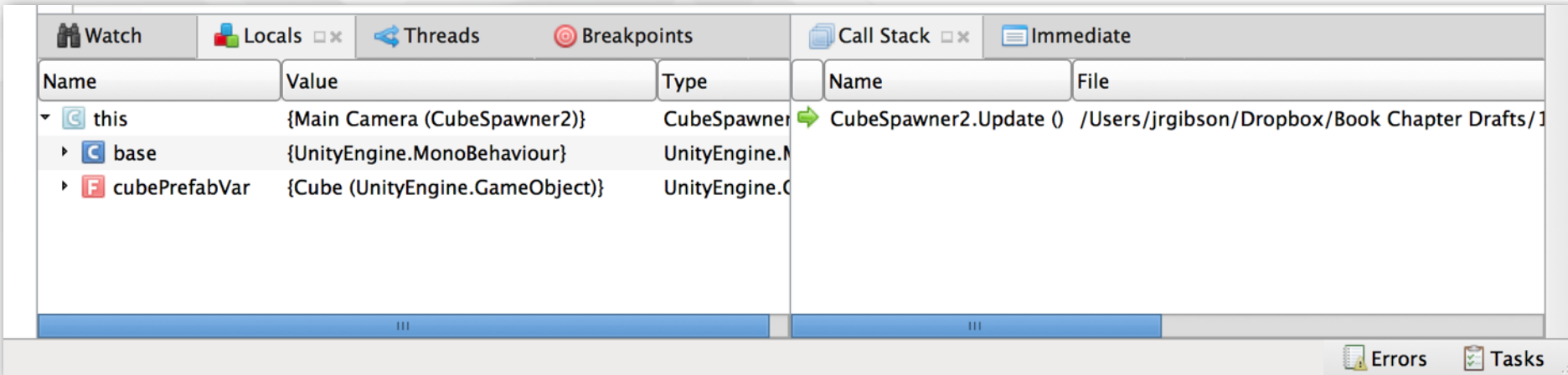
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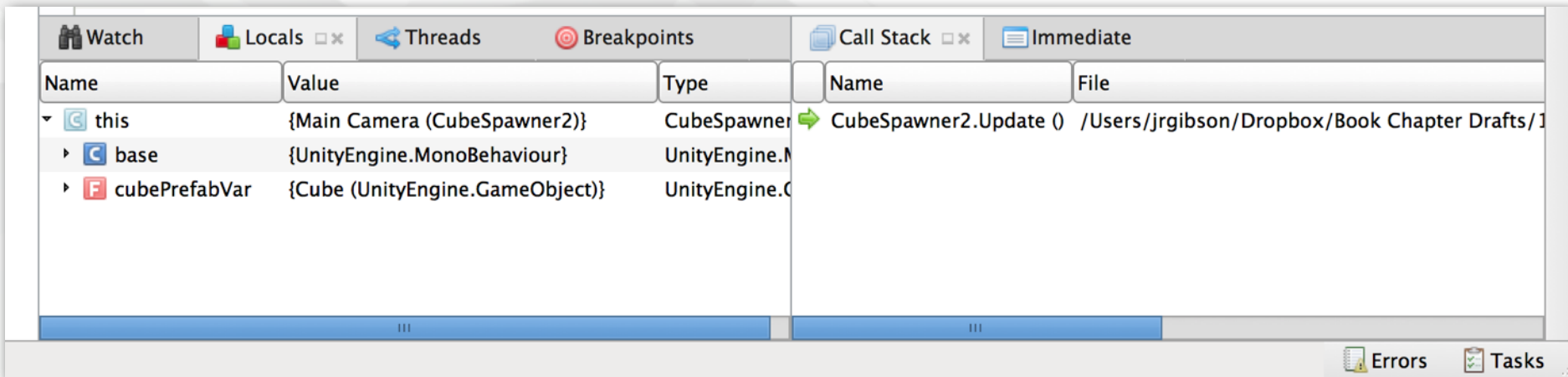
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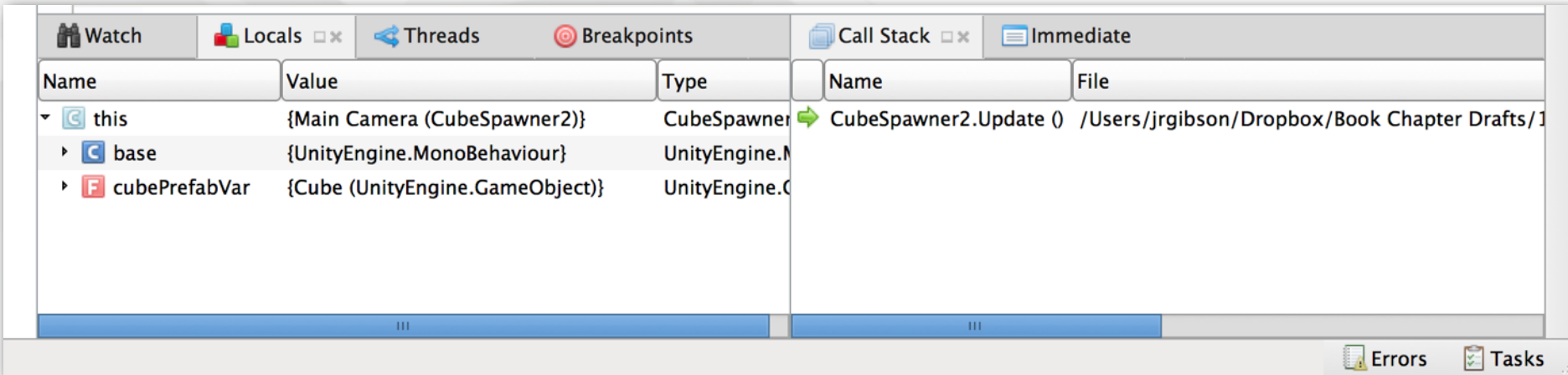
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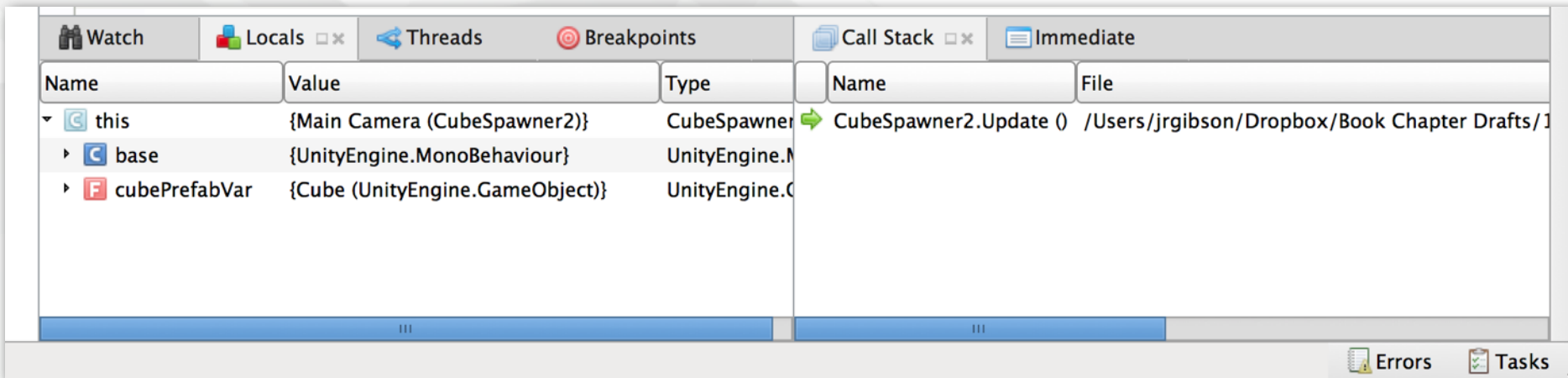
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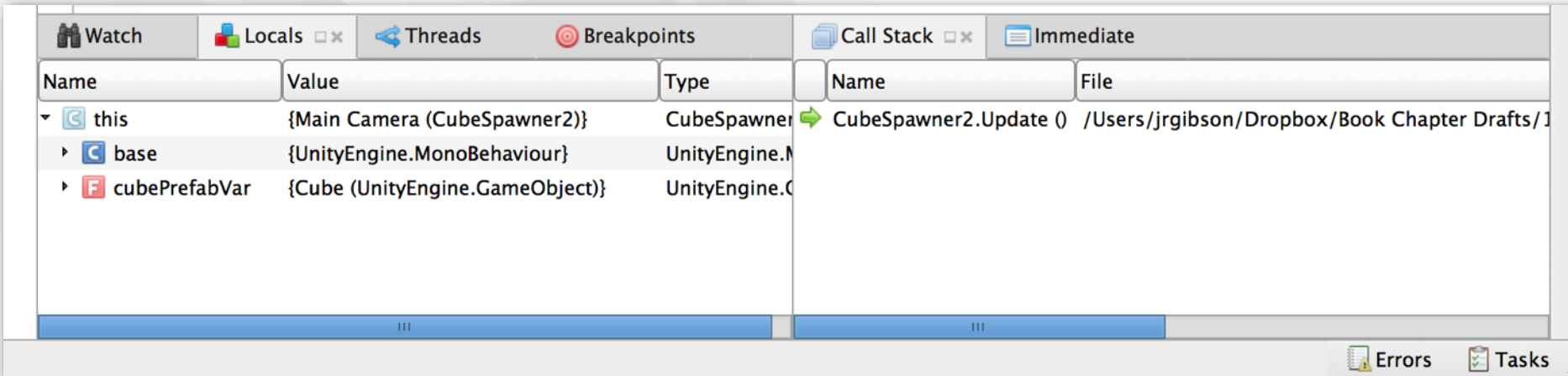
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