Calling Web Services from Unity

Developing a web service

❖ This demo will use Node.js (https://nodejs.org/)
➢ Runs on command line -- you don't have to install Apache, IIS, etc. to work locally
➢ Makes sending and receiving JSON easy
❖ DotNetCore has a similar approach
❖ Really, any platform will work

Connecting to HTTP/HTTPS in Unity

❖ Unity supports this with UnityWebRequest
  ➢ Asynchronous; check isDone each Update/coroutine
❖ This demo will use RestClient (https://github.com/proyecto26/RestClient)
  ➢ Wrapper around UnityWebRequest for compatibility
  ➢ Asynchronous via Promises

Promises in C#

- ❖ Alternative to callbacks
- ❖ RestClient implements via
  https://github.com/Real-Serious-Games/C-Sharp-Promise
- ❖ Creating a Promise object begins an asynchronous process (defined as a function)
- ❖ Methods on Promise handle the result of that process:
  - ➤ .Then((result) => Debug.Log("Got response: " + result))
  - ➤ .Catch((error) => Debug.Log(error))
- ❖ Can chain multiple Promises and Then methods together

Hosting Node.js or DotNetCore

❖ Applications run their own servers, rather than being run through a standard web server

❖ The application is proxied through a web server like Apache or IIS, where other options (SSL, etc.) can be configured

❖ Many cloud services (Azure App Services, etc.) can handle these applications directly

❖ IIS can run Node.js via iisnode (https://github.com/Azure/iisnode)

❖ Apache and other servers can run through a proxy

Questions? Comments?

https://www.dylanwolf.com/

@dylanwolf