Homework

I’m finding it difficult to provide a useful homework assignment for this particular lesson. The students built and deployed basic projects in the first assignment, so that’s not the main goal here. And most of the hands-on labs provided by Microsoft require knowledge of storage, which the students will be getting in the next lesson. I’ll give them the guest book hands-on lab after that lesson, where it will fit well. It’s a little bit harder to fill this niche at this particular point in the journey, especially when these modules may be combined into radically different semester-long classes with radically different syllabi.

So I’m going to give several suggestions for how you might go here, and not insist on any specific one. If you have other ideas, just drop me a message at [dave@rollthunder.com](mailto:dave@rollthunder.com) and I’ll add it to the next iteration.

1. If you’re working primarily in ASP.NET, you could add code that would allow the user to click on a thumbnail, at which time your web role would fetch and display the full-size picture from the blob storage. This is a common UI pattern, which could be implemented in any number of ways.

2. If you want to go further in ASP.NET, add to the web role the capability of deleting the a photograph. It can then pass a different message to the worker role via the same queue, and the worker role can clean up the thumbnail.

3. If you want to go still farther into ASP.NET, have them add forms authentication to the web role and have separate accounts for each user. Probably each user would have his own blob container. If you’re really feeling masochistic, have them tie the forms authentication handler into your institution’s single sign on mechanism.

4. Have your students change the worker role so that it doesn’t poll. Use an asynchronous callback so it gets invoked only when a message comes in. Polling is wasteful, so 20th century.

5. If you like to have your students write, have them discuss the “at least once” construction of the thumbnail web role. Have them give examples of where it is and is not appropriate, and what they would do instead.

6. If you’re in an ASP.NET class, consider having them port the sample to MVC

7. If you’re in more of a web service mode and have some WCF experience, have them try the Windows Azure Role Communication hands-on lab. You will find it in the folder labeled “One Possible Homework Assignment.” It requires knowledge of Windows Communication Foundation, so you will probably find it most useful in more advanced classes.