

## The Code Camp Problem

We are hosting a code camp event on an upcoming Saturday for IT Professionals in the area to attend. We'll be bringing in a number of different speakers who will be presenting sessions on all different technology topics. Right now, we are anticipating that we'll have 4 talks running concurrently throughout the day in different rooms, with 5 total talks scheduled for each room. We want you to build a website that will help us get the word out about our Code Camp event. At a minimum we need to:

- List all of the sessions and a schedule of sessions that will be presented at the code camp so area IT professionals can plan their day in terms of what sessions they want to attend
- For each speaker, we want to be able to present a short bio on the website
- We are expecting people to present on all different types of topics (.NET, Java, Database, Servers, Methodologies, etc.), so we want to make it easy for someone browsing the site to find talks they are interested in
- We have some sponsors for the event, and they will be providing a catered lunch. So we need to allow a way for participants to register on our site so we know how many people to expect.

From a requirements perspective, you are free to ask us any questions. Some requirements have been deliberately left vague just like in real life, so feel free to ask for clarification.

## What Are We Looking For

We are looking for how you would design this system. This includes all of the important components, how these are split into layers, the data to be captured and the technology choices you would make. There is no one "right" answer to this problem. This is really about your thought process and for you to explain the design decisions you would make and what the tradeoffs are.

Some things that we would like to see:

- A block level diagram of the major components of the system and how they interact. From this, you should be able to trace an operation through the entire system and explain what happens in each component.
  - Include your thoughts on the structure of a Visual Studio solution.
- A UML-ish diagram that illustrates the important classes and or interfaces in the design, how they are organized and how they interact
- What technologies are you using to implement each component?
  - Plain old .NET Components?
  - An ORM? A JavaScript framework? Again, there is no "right" answer, but please explain why you are making the choices you are making
- Make assumptions to clarify requirements
- Feel free to note areas where you feel you would need to research, and move onto other areas you feel more comfortable

Good luck!

## Sample Speaker Bio Data

### **David Berry**

David Berry is an IT Manager with Ameriprise Auto and Home Insurance in De Pere, WI. Starting as a Java developer over 15 years ago, he has spent his last 9 years developing applications in .NET. He has worked with both SQL Server and Oracle relational databases with a special interest in database performance tuning. In his free time he enjoys road cycling in the summer and cross country skiing in the winter

## Sample Session information

### **Understanding Relational Databases for Maximizing Application Performance**

By David Berry

Database performance remains a critical factor in overall application performance and scalability. This session is targeted at application developers who wish improve their understanding of database performance and how applications interact with the database. This session will target SQL Server, though the concepts are applicable to most large scale enterprise databases. This session will focus on how to query SQL Server's Dynamic Management Views (DMV's) to identify the performance bottlenecks in an application. It will also cover how to interpret how the database is processing your queries and how to tune your queries to run faster. Finally, I'll cover some of the most common database performance issues encountered by application teams and discuss some strategies for addressing them.

Room: Keller Hall 3-115

Time: 9:00 -10:15 AM



