## **SER 415 Assignment 1**

In this assignment, you will be analyzing some problems a customer has, determining the root cause of the problems, and suggesting potential solutions to those problems.

For *each* problem below, please do the following:

- In a few sentences, describe 1-2 possible root causes of the problem. Since you won't have the benefit of directly interacting with the customer, you can do individual research and/or use your imagination during your root cause analysis.
  - Please ensure that your root causes make logical sense as potential root causes of the problem.
- In a paragraph or two, describe 2-3 features of a product/system to address that root cause of the problem.

## **Problems**

- 1. Some of the candidates for open positions on my team report that the technologies (programming languages, frameworks and libraries, developer tools, etc.) listed in the job postings they apply for don't match the technologies they discuss with technical interviewers from my team which leads to unmet expectations and poor preparation on both sides. I have a very large team, and while I do have access to codebases and other development artifacts, I'm not too familiar with all the technologies my team uses. Our HR department writes most of our jobs postings because I don't want to require my developers to spend time writing them.
- 2. I'd really like to hire employees from any US state to work remotely for my software company. However, I'm reluctant because it seems like there are many differing local laws related to benefits, payroll taxes, and other employment regulations that I would need to comply with since my employees would be in so many different locations.
- 3. When a new developer starts on my team, it seems like the setup and configuration process they go through to prepare their development environment takes too much time and is a frustrating introduction to my team. Our team has many tools and complex configurations which comprise the development environment and which change frequently. Keeping setup-related documents up to date can be time consuming and is easy to forget.