# Requirements Analysis

I decided to choose SOA architectural approach for this challenge to provide reusable web APIs that can be used by other applications. This will also provide easier maintainability, testability and loose coupling between different application tiers.

1. Create a SQL database table for data storage.
2. Create two sprocs one for reading and the other for inserting data.
3. Create restful web APIs to provide reusability and integration with other applications.
4. Optionally, web APIs could be designed as async as data I/O operations are involved which could block threads.
5. Develop uploading and reading functionality as two separate web pages in an MVC based web portal to provide cross platform compatibility, maintainability and testability.
6. Optionally, ensure to provide logging components for web APIs, web portal and database.