Developer – Knowledge required : SQL or Mongo DB and C# or Node.JS and Web Services/Rest API, JSON, Data Structures and Design Patterns.

**Resource Skill matching Algorithm**

**Situation :**

A manager is tasked with scheduling resource based on their skill and their availability to staff projects. Each project needs to be staffed based on task, required skills and date schedule.

Assume a list of Projects. For each project a list of tasks with a schedule date ( from and to ) and the skill required for the task.

Also assume a list of resources with skills and dates available.

Write an algorithm to find resources that will match the tasks, skill and the available dates for a given project

**Expected output :**

1. Sequence/Interaction Diagram.
2. Database Design
3. Sample Data
4. Working Web API/Rest Services code in the language of your choice.

**What will be evaluated :**

1. Design correctness
2. Usage of Design patterns
3. Logging and Exception handling
4. Code structure