

Take Home Exercise

Problem Statement

For this exercise, you will be developing 2 web services and a test suite to ensure the quality of the services.

You are allowed to use any development and/or test frameworks to aid your development.

1. Implement 2 RESTful web services based on the following specifications.

Event Mangement Service

Requirements
It shall provide an endpoint to add an event to the system
It shall validate that the event contains the following properties: name, date, location
It shall validate that the event location is a valid location using the Venue Service
It shall validate that the event location is available on the event date by using the Venue Service
It shall provide an endpoint to retrieve a specific event from the system
It shall provide an endpoint to retrieve all the events from the system
It shall provide an endpoint to retrieve events for a specific day from the system
It shall provide an endpoint to update an event
It shall provide an endpoint to delete an event

Venue Service

Requirements
It shall provide an endpoint to retrieve all venue locations
It shall provide an endpoint to determine whether or not a specific venue location is available on a specific date

2. Implement independent, functional test suites for each service, and an integration test suite that tests the system as a whole.