

RiskFirst – Technical Exercise

The below exercise is designed to test your understanding of microservices, whilst demonstrating your knowledge of .Net Core. Ideally, you shouldn't need to spend any more than 2-3 hours to complete the exercise.

Based on the data provided below, design an address book microservice that will return addresses grouped by city. The api should return the full list of addresses grouped by city.

Example: The sample data below should result in three groups: London, New York and Boston.

The web api must be implemented using Asp.Net Core.

```
[
  {
    "firstname": "John",
    "lastname": "Smith",
    "streetaddress": "Test St 1",
    "city": "London",
    "country": "England"
  },
  {
    "firstname": "Jane",
    "lastname": "Doe",
    "streetaddress": "Test St 2",
    "city": "london",
    "country": "England"
  },
  {
    "firstname": "Tim",
    "lastname": "Jones",
    "streetaddress": "Test St 3",
    "city": "New York",
    "country": "USA"
  },
  {
    "firstname": "David",
    "lastname": "Jones",
    "streetaddress": "Test St 4",
    "city": "New york",
    "country": "USA"
  },
  {
    "firstname": "Any",
    "lastname": "Body",
    "streetaddress": "Test St 4",
    "city": "London",
    "country": "England"
  },
  {
    "firstname": "Any",
    "lastname": "Body",
    "streetaddress": "1765 Long Street",
    "city": "boston",
    "country": "USA"
  }
]
```

Use the provided data as is, but feel free to choose any data source for the api (e.g. flat file, json file, database).

Please submit your solution as a Github repo. The code should be of production quality (including tests).