Contact Management System

Problem Statement

Build a simple contact management system where contact contains first name, last name, phone number ([E164 format](#)).

Functionality
- Add/update contact(s)
- Search contacts (partial(prefix) or complete) (Note in all searches show the total count & search results)
  - Search by first name (search term is case insensitive)
  - Search by last name (search term is case insensitive)
  - Search by phone number

Expectations

- Identify all the entities and attributes required for the above functionality
- You can implement the functionality in one of the programming languages (Java, Golang, Ruby, JS or Python)
  a. Please don't create REST APIs or any UI for the same.
  b. You can test the functionality using unit test cases.
  c. The focus is on the core functionality and how it is implemented v/s how it is presented (UI or API structure).
- Use coding best practices (SOLID, DRY etc.) and ensure that you are writing modular & extensible code (to accommodate any future changes in functionality)
- The submitted code would be judged on both coding best practices and functional correctness.