**Problem Statement**

**Background:** This problem statement provides the high level design of the project that has to be implemented as part of hands-on assessment in order to complete the course Spring Basics.

InfyGo is an airline booking application that provides services to its customers to search flight details. InfyGo wants a light weight, loosely coupled application to be implemented using Spring.

Let us start with basic implementation using Spring core concepts for the following functionalities

* Add Flight
* Search Flight

As part of Spring Basics course, let us develop the business tier of this application.

Implement the application using following classes:

1. Domain class Flight with below details
2. public class Flight
3. {
4. private String flightId;
5. private String airlines;
6. private String source;
7. private String destination;
8. private Double fare;
9. private Date journeyDate;
10. private Integer seatCount;
12. *//Getter & Setter Methods*
13. }
15. Implement required repository using map collection

* FlightRepository interface
* FlightRepositoryImpl class

1. Implement Service layer of application

* FlightService interface
* FlightServiceImpl class

1. Implement client code to access bean of FlightServiceImpl class and perform below tasks in a menu based approach.

* Add Flight : Add flight details by auto generating FlightId starting from 1001 and accepting other flight details from the user
* Search Flight : User can Search flights based on source, destination and journey date
  + Before displaying search details to the user, if the provided journey date is during festival season(Dec to Jan) then increase the flight fare by 20% for all search results.

**Note**: Assume as of now the application is accessible to the user who can perform all the above functionalities.

Implement Spring application with following features:

* Use Spring Java code based configuration
* Use Autowiring through annotations for bean dependencies
* Implement LoggingAspect class for logging details whenever the new flight details are added
  + Advice should log Joinpoint signature, current date and time stamp on console
* Client code has to provide below menu based functionalities
  + Add Flight
  + Search Flight