

## **Design Goals:**

In our project, we shall consider 3 primary design goals:

### **Goal 1: High Cohesion**

We shall try keeping the classes and methods that are related to each other in a single place so that they form a logically single, atomic component. As an example, we combined the search engine along with the booking and payment functionalities in one component since they are highly dependent.

### **Goal 2: Low Coupling**

We shall try separating unrelated classes and methods as much as possible to make a single unit independent from others by minimizing the number of connections between two or more component. As an example, we separated the employee component into two individual components (HR, flight manager) since they work independently and irrelative to each other.

### **Goal 3: Robustness**

Our project is critical to the customer's profit and any failure shall cost them money and question their reliability (data lost/manipulated ...etc). So, our system must be as failure-tolerant as possible to all situations of failure. The servers used will be of good quality, and a back-up web and database servers which are located in a different place shall be provided as well.