SMALL AIRPORT  
**Functional Requirements**  
The system will:  
  
- Manage flights.  
- Identify if landing zones are free or not, if not a message will be sent to notify pilots/ other areas of the system  
  
- Store airplane related data including passengers data, plane capacity, which seats are booked.  
  
- Monitor departures and arrivals. These two types of information should be displayed in different monitors across the screens available in the airport.  
  
- To identify where planes coming from/destination/flight duration/landing location.  
  
- Provide search options - allow the user to search for flight or passenger info, depending on their level of access  
  
- Display seat allocations (if GUI display booked seats in red – user can’t click on them and display non booked seats in green?)  
  
- Handle security – check passengers identify, if ok let them pass through the airport  
  
- 5 officers at a time/ 10 in total – shifts display who is working/ maybe pay slip info?  
  
-Provide users services - Customers will be able to login, book seats, view flight info, go through security  
  
-Passengers/Security and Admin have different levels of access for the system  
  
What will be the operation system?

What ide/sdk will be used?

How many airplanes can land/departure at same time?

How many employees will be required? Security, ground force, etc..

How much time will be required to implement each feature? Note that this is restriction.

How are the data stored in the computer?

How are the tests going to be implemented? E.g. at the end of each system component or during the coding TDD (test-driven development).

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| **#** | **Requirement** | **Implications** | **Type of Requirement** |
| 1 | Manage flights | **Data structures required for handling:**   1. **schedules** 2. **Live departures/arrivals** 3. **Flight number** 4. **Flight time, etc** | **Functional** |
| 2 | Manage airport spaces and staff | **Data structures required for handling:**   1. **airport runways** 2. **airport bays** 3. **ground force** | **Functional** |
| 3 | Manage Passengers | **…** |  |
| 4 | Manage staff | **…** |  |
| 5 | Assign physical spaces to flights | **Correlate requirements 1 and 2. Generate error messages if there is an attempt to assign a runway/airport bay being used in a particular time slot.**  **Prioritise landings and departures.** | **Functional** |

**\*\*EXAMPLE FOR FIND PLANE IN THE AIR\*\*  
  
'want to find where about plane from London to Paris is?’  
  
75% of flight time/distance completed  
if total distance from London to Paris is 2000miles  
find 75% of 2000miles = plane is here on map.**