Principle of Software Requirements

CRN-73612-LabGroup 12

LAB-2: Requirements Analysis-Use Cases

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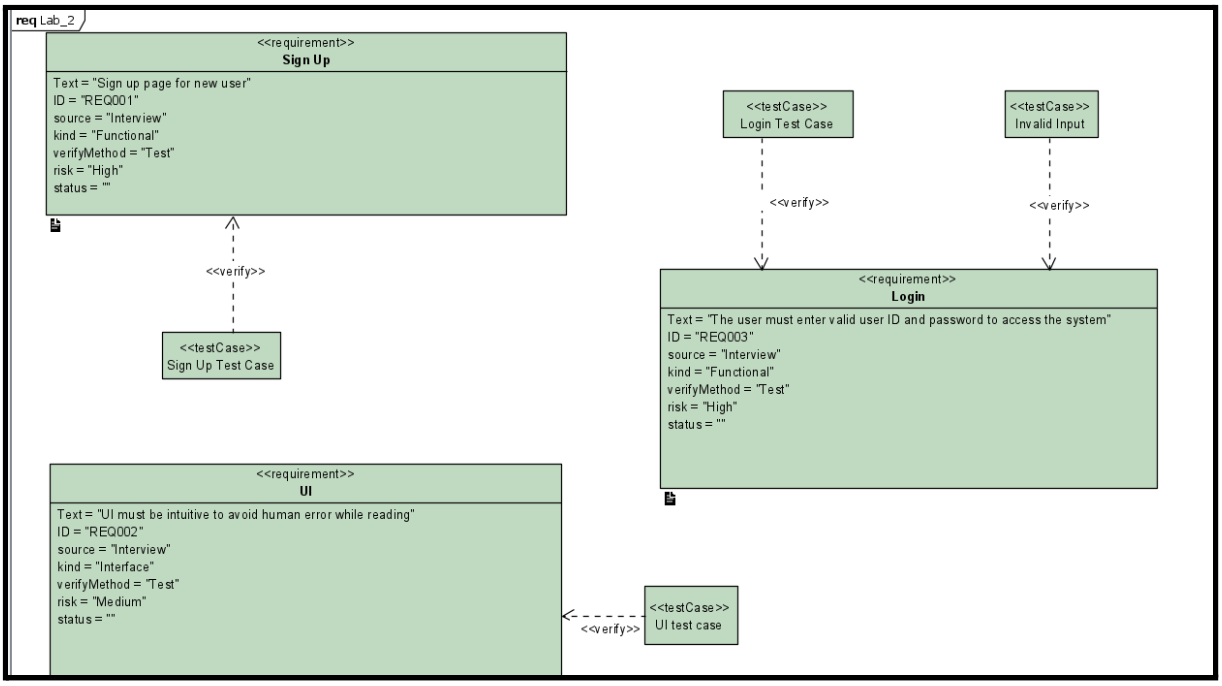
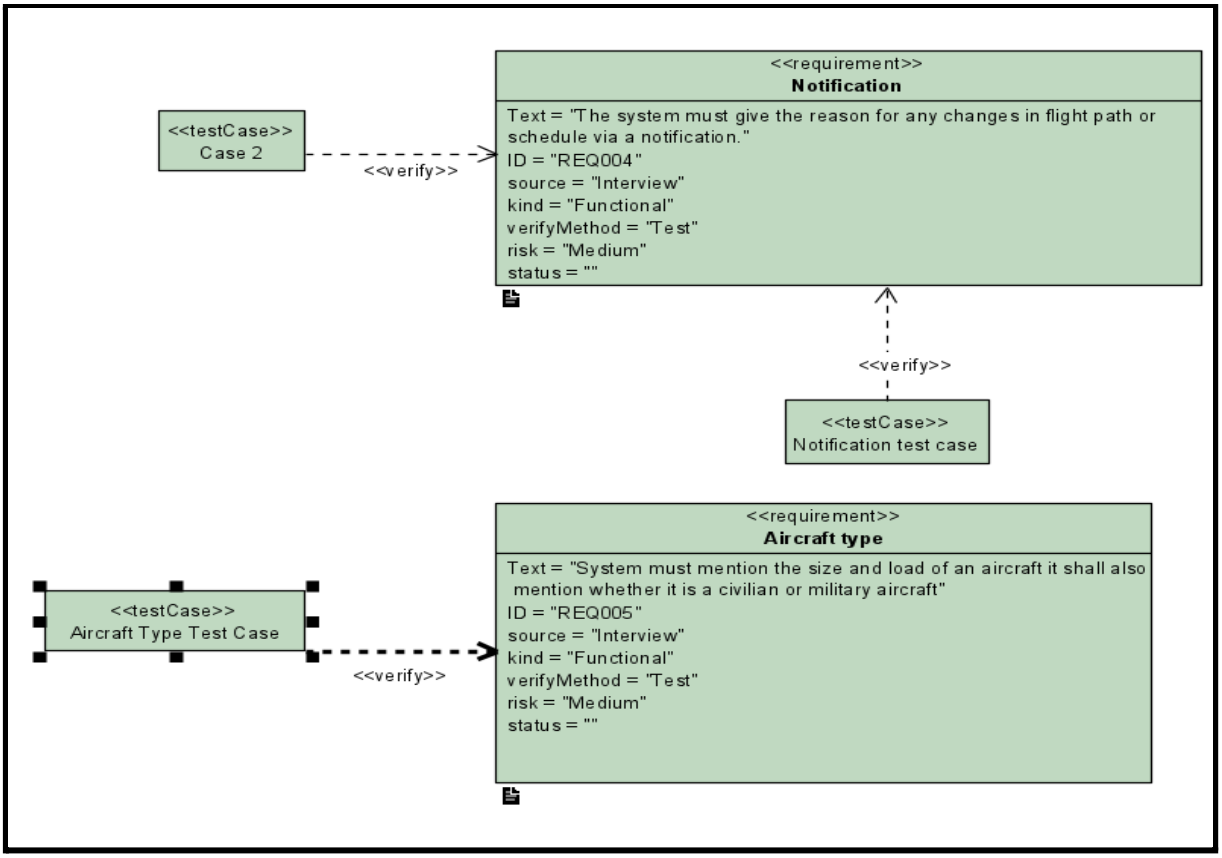
REQUIREMENTS LIST

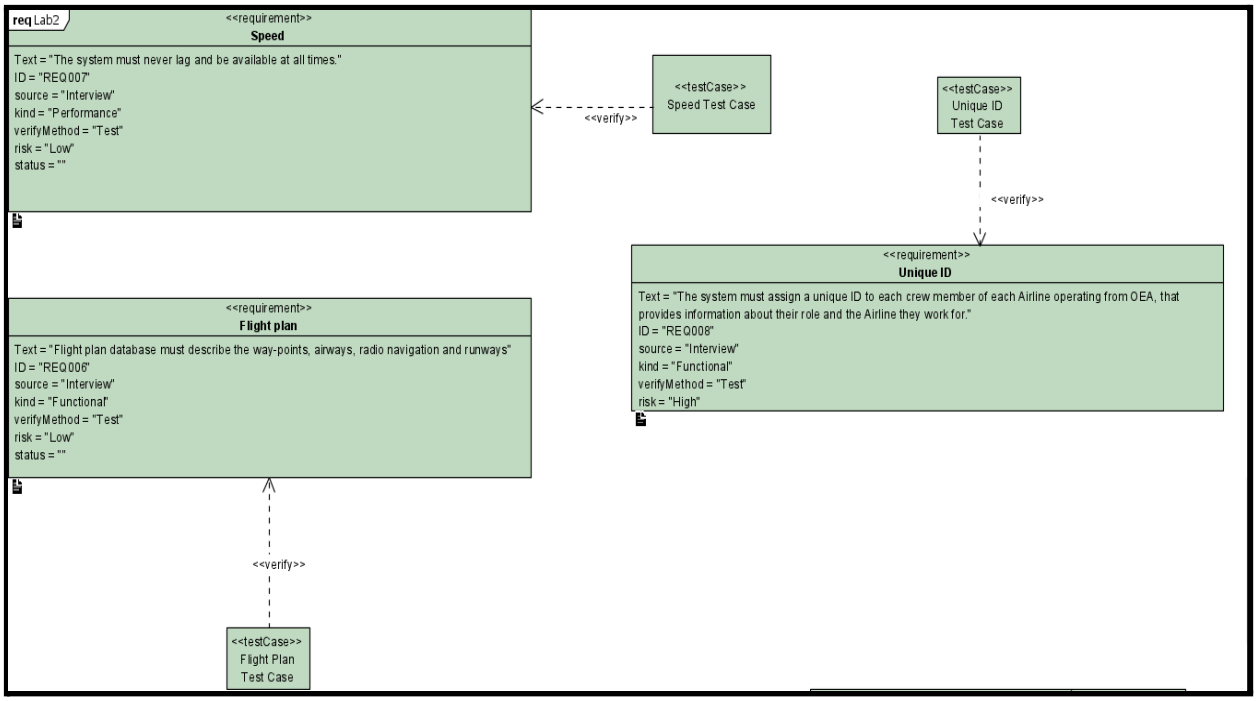
Name	ID ▲	Kind	Risk	Use Cases
Sign Up	REQ001	Functional	High	
UI	REQ002	Interface	Medium	
Login	REQ003	Functional	High	
Notification	REQ004	Functional	Medium	
Aircraft type	REQ005	Functional	Medium	
Flight plan	REQ006	Functional	Low	
Speed	REQ007	Performance	Low	
Unique ID	REQ008	Functional	High	

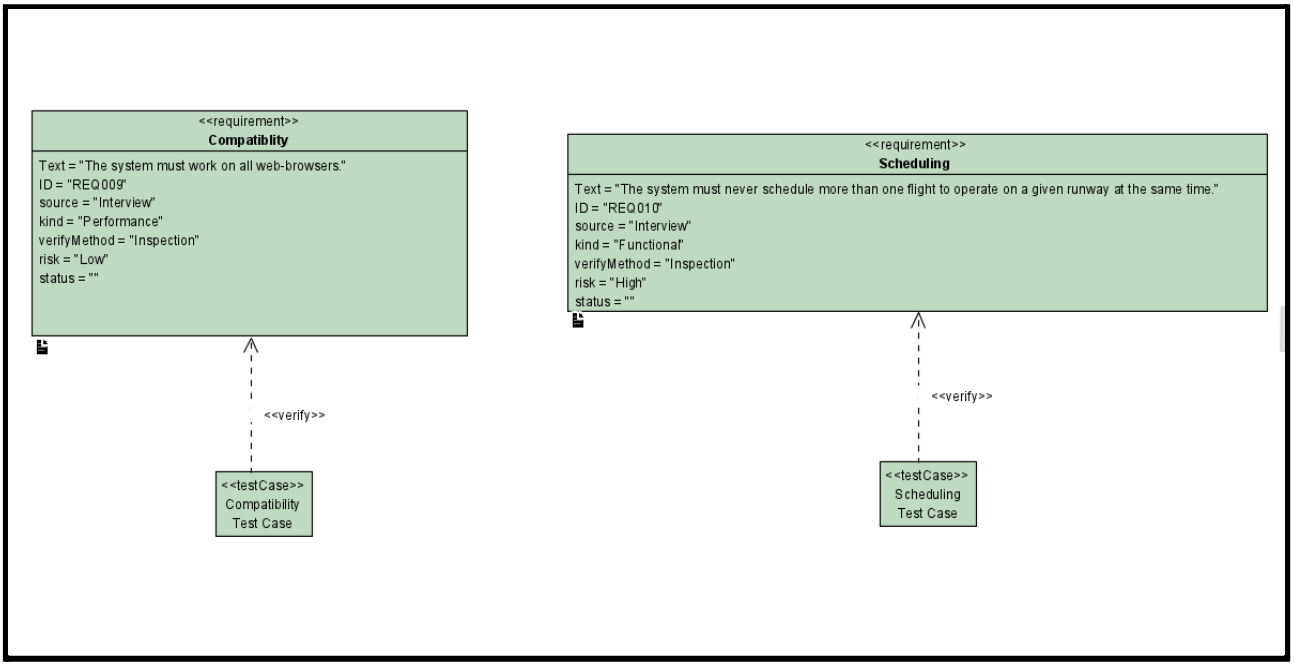
Compatiblity	REQ009	Performance	Low	
Scheduling	REQ010	Functional	High	
Weather Conditions	REQ011	Functional	High	
Sure Check	REQ012	Functional	Medium	
Emergency Landing	REQ013	Functional	High	
Emergency Plan	REQ014	Functional	High	
Security	REQ015	Performance	High	
Connection	REQ016	Functional	Low	

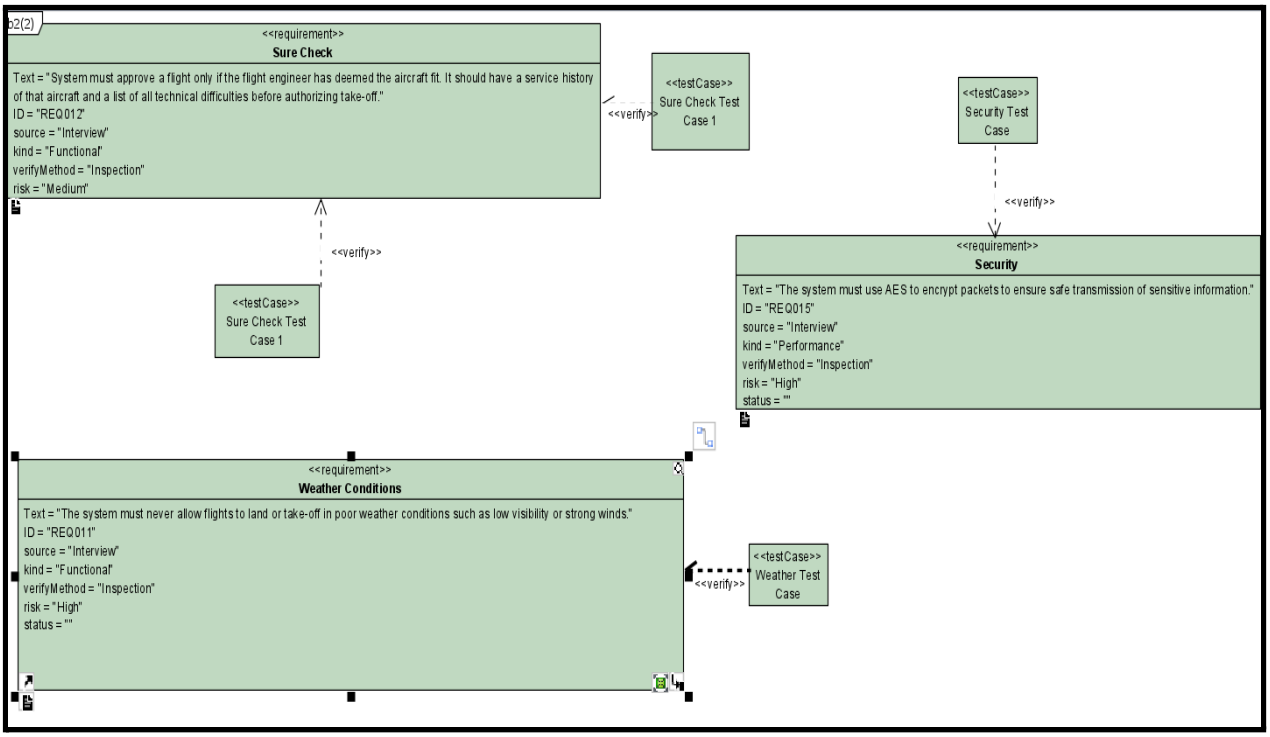
REQUIREMENT DIAGRAMS WITH TEST CASES

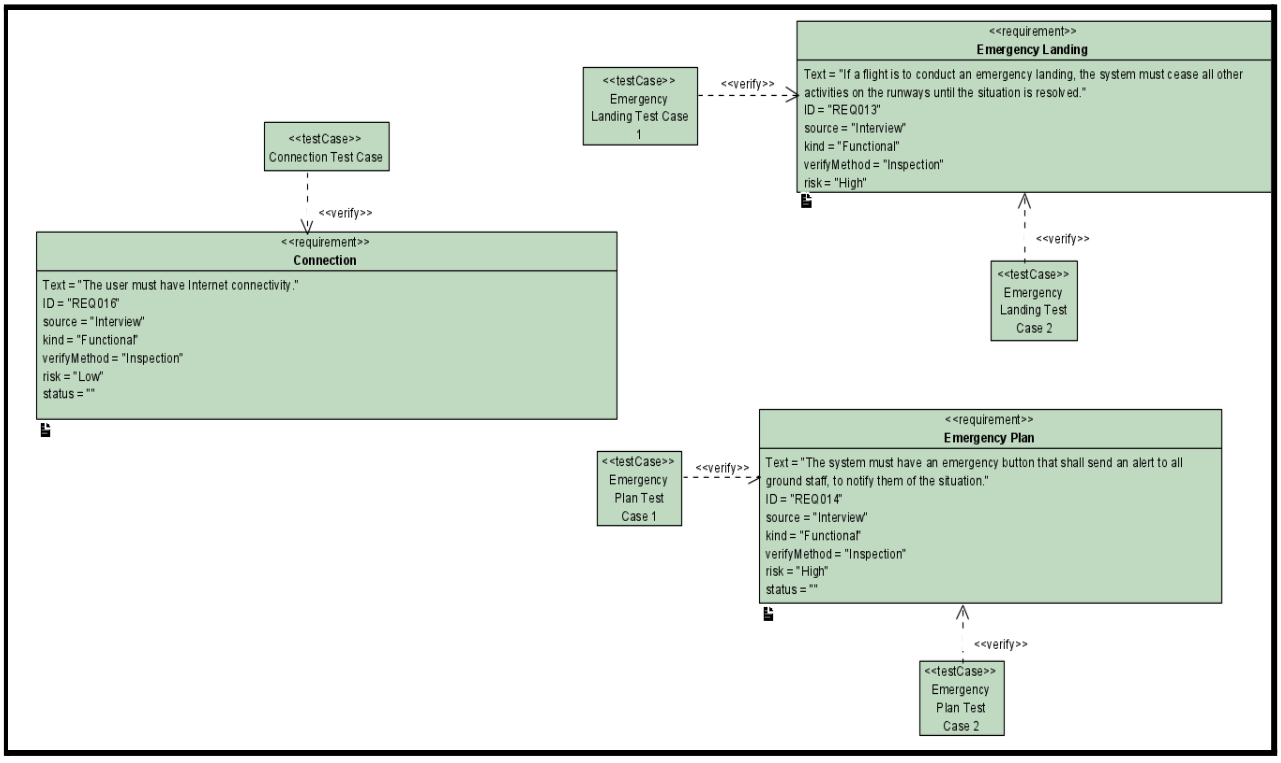




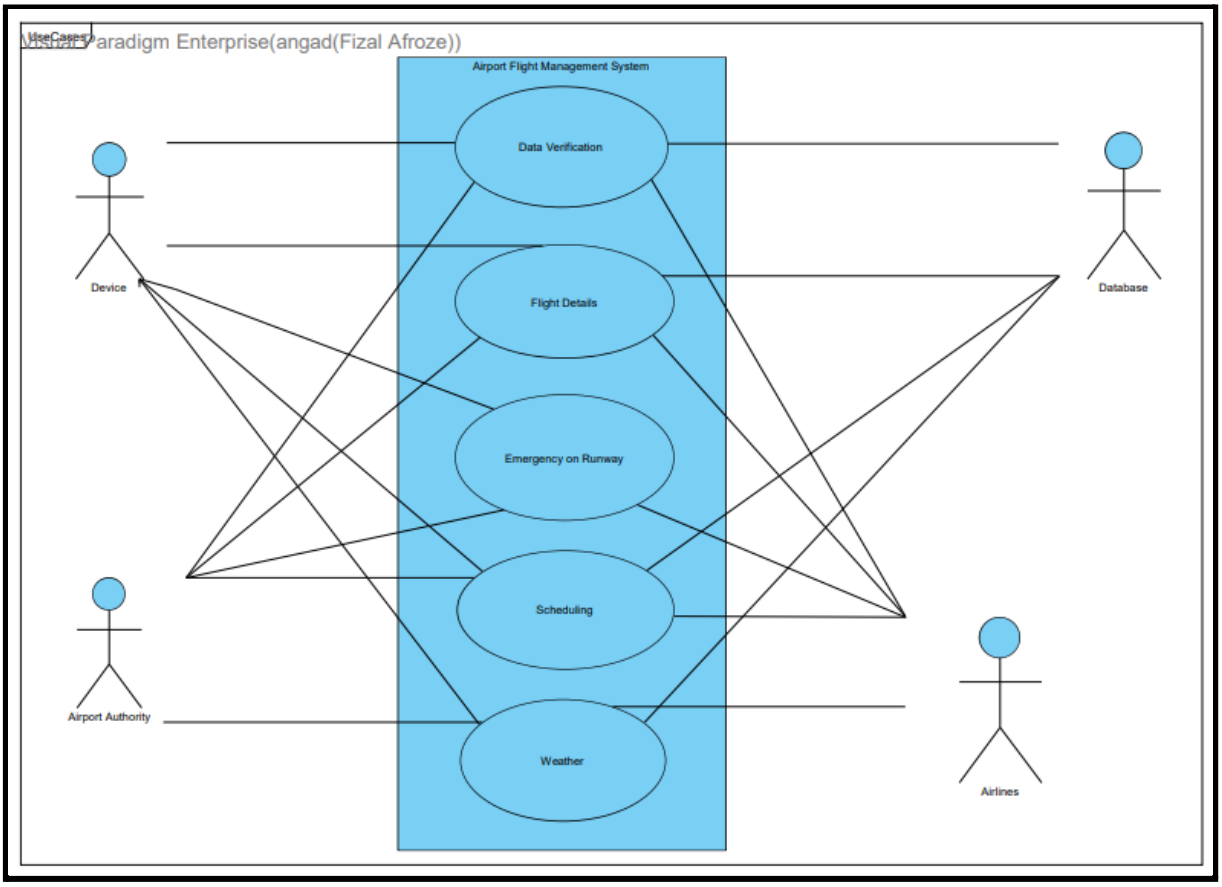

req Lab2
<<requirement>>
Speed
Text = "The system must never lag and be available at all times."
ID = "REQ007"
source = "Interview"
kind = "Performance"
verifyMethod = "Test"
risk = "Low"
status = ""
<<testCase>>
Speed Test Case
<<verify>>
<<testCase>>
Unique ID
Test Case
<<verify>>
<<requirement>>
Unique ID
Text = "The system must assign a unique ID to each crew member of each Airline operating from OEA, that provides information about their role and the Airline they work for."
ID = "REQ008"
source = "Interview"
kind = "Functional"
verifyMethod = "Test"
risk = "High"
<<requirement>>
Flight plan
Text = "Flight plan database must describe the way-points, airways, radio navigation and runways"
ID = "REQ006"
source = "Interview"
kind = "Functional"
verifyMethod = "Test"
risk = "Low"
status = ""
<<verify>>
<<testCase>>
Flight Plan
Test Case

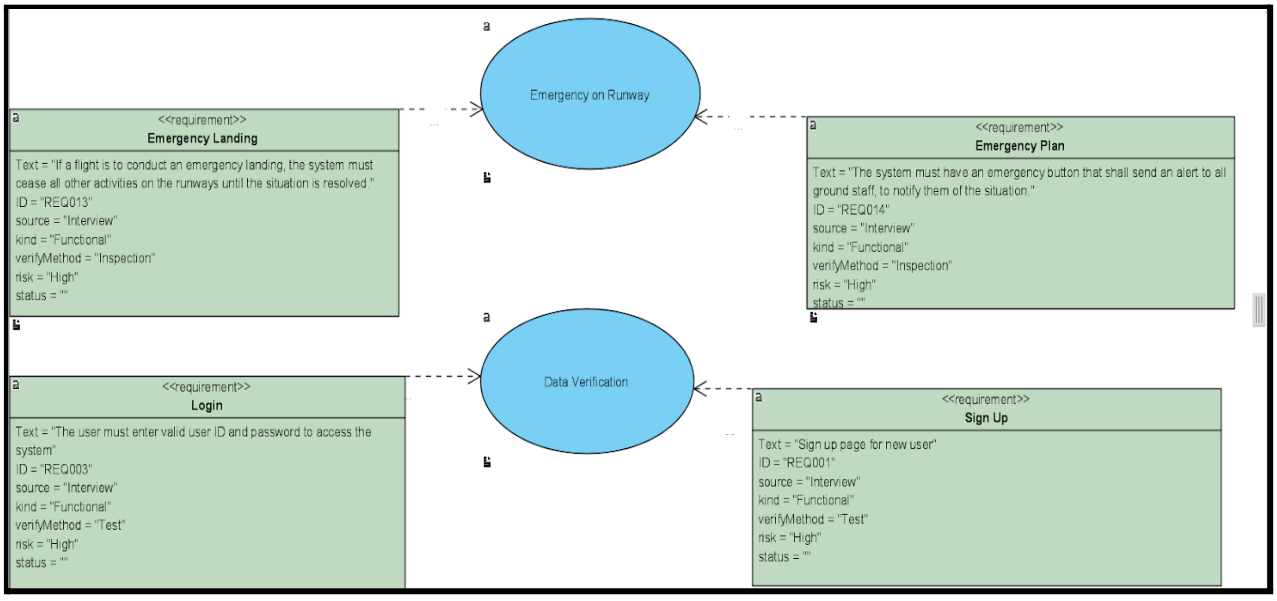

<<requirement>>
Compatiblity
Text = "The system must work on all web-browsers."
ID = "REQ009"
source = "Interview"
kind = "Performance"
verifyMethod = "Inspection"
risk = "Low"
status = ""
<<verify>>
<<testCase>>
Compatibility
Test Case
<<requirement>>
Scheduling
Text = "The system must never schedule more than one flight to operate on a given runway at the same time."
ID = "REQ010"
source = "Interview"
kind = "Functional"
verifyMethod = "Inspection"
risk = "High"
status = ""
<<verify>>
<<testCase>>
Scheduling
Test Case


b2(2)
<<requirement>>
Sure Check
Text = "System must approve a flight only if the flight engineer has deemed the aircraft fit. It should have a service history of that aircraft and a list of all technical difficulties before authorizing take-off."
ID = "REQ012"
source = "Interview"
kind = "Functional"
verifyMethod = "Inspection"
risk = "Medium"
<<verify>>
<<testCase>>
Sure Check Test Case 1
<<testCase>>
Security Test Case
<<verify>>
<<verify>>
<<testCase>>
Sure Check Test Case 1
<<requirement>>
Security
Text = "The system must use AES to encrypt packets to ensure safe transmission of sensitive information."
ID = "REQ015"
source = "Interview"
kind = "Performance"
verifyMethod = "Inspection"
risk = "High"
status = ""
<<requirement>>
Weather Conditions
Text = "The system must never allow flights to land or take-off in poor weather conditions such as low visibility or strong winds."
ID = "REQ011"
source = "Interview"
kind = "Functional"
verifyMethod = "Inspection"
risk = "High"
status = ""
<<testCase>>
Weather Test Case
<<verify>>


<<requirement>>
Emergency Landing
Text = "If a flight is to conduct an emergency landing, the system must cease all other activities on the runways until the situation is resolved."
ID = "REQ013"
source = "Interview"
kind = "Functional"
verifyMethod = "Inspection"
risk = "High"
<<testCase>>
Emergency Landing Test Case 1
<<verify>>
<<testCase>>
Connection Test Case
<<verify>>
<<verify>>
<<testCase>>
Emergency Landing Test Case 2
<<requirement>>
Connection
Text = "The user must have Internet connectivity."
ID = "REQ016"
source = "Interview"
kind = "Functional"
verifyMethod = "Inspection"
risk = "Low"
status = ""
<<requirement>>
Emergency Plan
Text = "The system must have an emergency button that shall send an alert to all ground staff, to notify them of the situation."
ID = "REQ014"
source = "Interview"
kind = "Functional"
verifyMethod = "Inspection"
risk = "High"
status = ""
<<testCase>>
Emergency Plan Test Case 1
<<verify>>
<<verify>>
<<testCase>>
Emergency Plan Test Case 2

USE CASES


UseCase1
Visual Paradigm Enterprise(angad(Fizal Afroze))
Airport Flight Management System
Data Verification
Flight Details
Emergency on Runway
Scheduling
Weather
Device
Database
Airport Authority
Airlines


Emergency on Runway
<<requirement>>
Emergency Landing
Text = "If a flight is to conduct an emergency landing, the system must cease all other activities on the runways until the situation is resolved."
ID = "REQ013"
source = "Interview"
kind = "Functional"
verifyMethod = "Inspection"
risk = "High"
status = ""
<<requirement>>
Emergency Plan
Text = "The system must have an emergency button that shall send an alert to all ground staff, to notify them of the situation."
ID = "REQ014"
source = "Interview"
kind = "Functional"
verifyMethod = "Inspection"
risk = "High"
status = ""
Data Verification
<<requirement>>
Login
Text = "The user must enter valid user ID and password to access the system"
ID = "REQ003"
source = "Interview"
kind = "Functional"
verifyMethod = "Test"
risk = "High"
status = ""
<<requirement>>
Sign Up
Text = "Sign up page for new user"
ID = "REQ001"
source = "Interview"
kind = "Functional"
verifyMethod = "Test"
risk = "High"
status = ""