Airplane Checkup

Analysis and Design Document

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Revision History

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 19/03/2020 | 1.0 | Inception | Rus Tudor |
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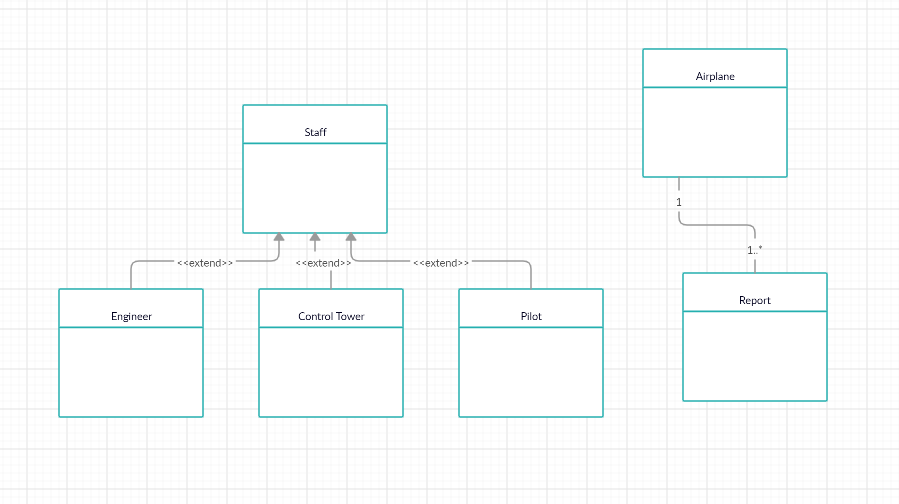
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# Project Specification

# Airplane Checkup is an web application designed to help airport stuff perform the pre-flight airplane checkup, preparing the aircraft for flight and reporting possible problems.

# Elaboration – Iteration 1.1

# Domain Model



# Architectural Design

## Conceptual Architecture

The conceptual architecture pattern chosen for this project is the Layered Pattern architecture.

## Package Design

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## Component and Deployment Diagrams

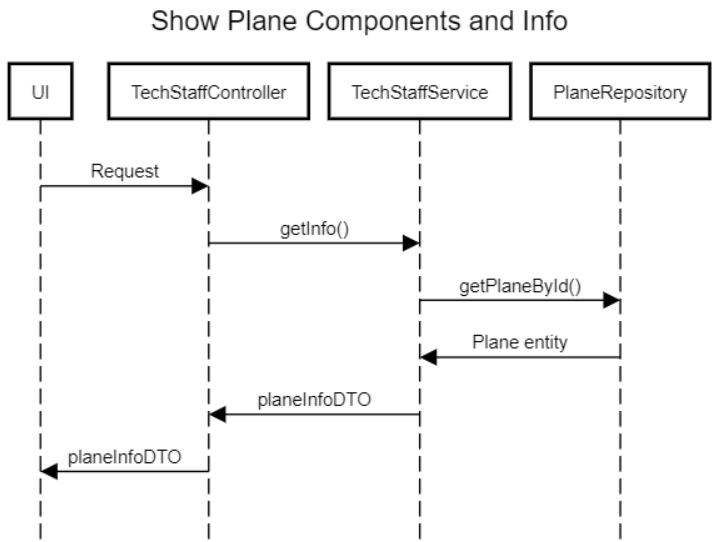
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# Elaboration – Iteration 1.2

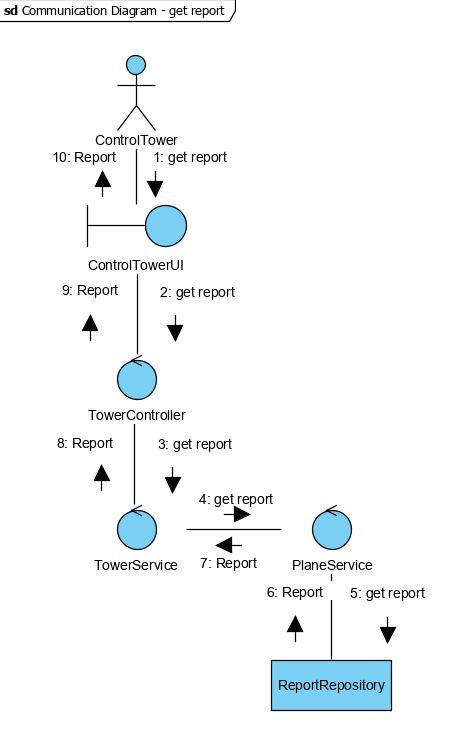
# Design Model

## Dynamic Behavior

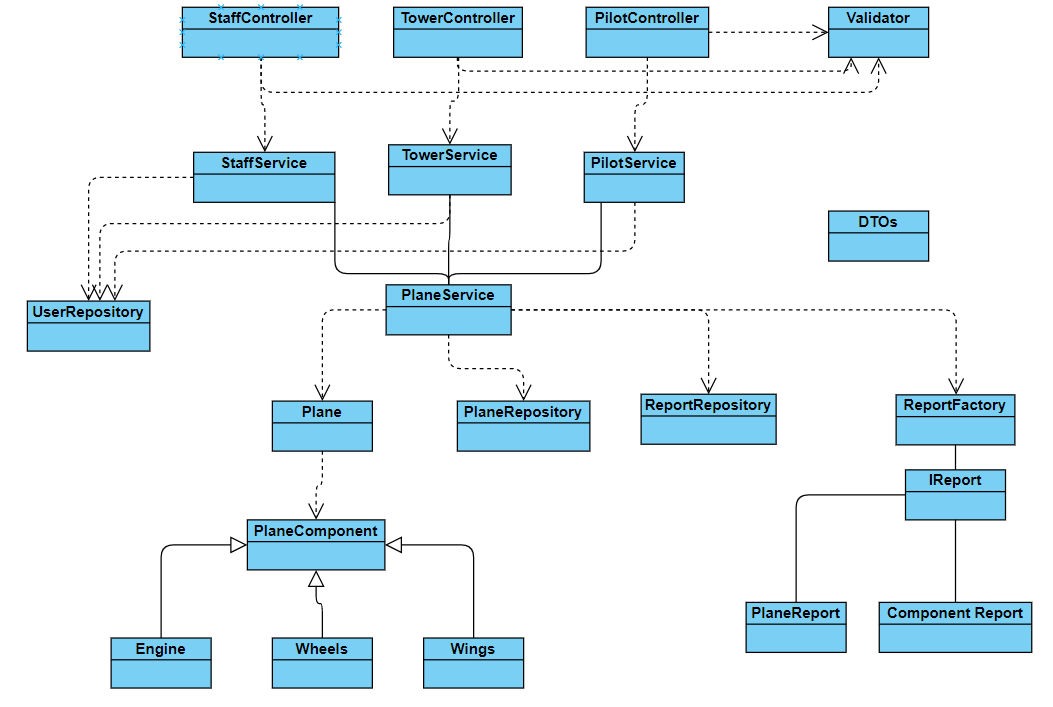
Sequence Diagram for showing plane components and information for the tech staff:

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Communication diagram:



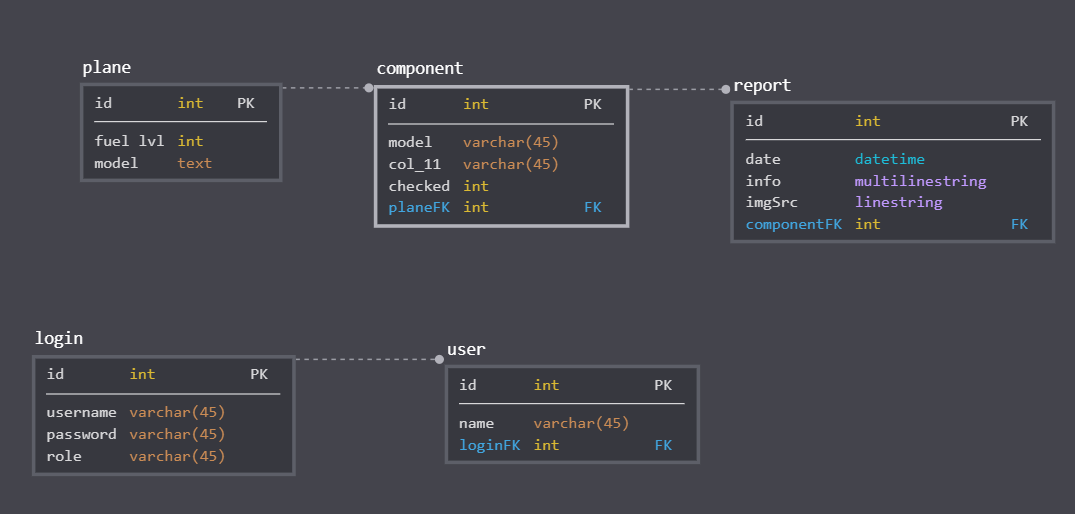
## Class Design

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Factory pattern: for creating different types of reports.

Observer pattern on the client side for notifying the pilot.

# Data Model



# Unit Testing

*[Present the used testing methods and the associated test case scenarios.]*

# Elaboration – Iteration 2

# Architectural Design Refinement

*[Refine the architectural design: conceptual architecture, package design (consider package design principles), component and deployment diagrams. Motivate the changes that have been made.]*

# Design Model Refinement

## *[Refine the UML class diagram by applying class design principles and GRASP; motivate your choices. Deliver the updated class diagrams.]*

# Construction and Transition

# System Testing

*[Describe how you applied integration testing and present the associated test case scenarios.]*

# Future improvements

*[Present future improvements for the system]*

# Bibliography