AU Engineering

I4SWT Mandatory Exercise

Air Traffic Monitoring

Team 16-1-6

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CI build jobs

Unit tests:
`http://ci1.ase.au.dk:8080/job/Team%2016-1-06%20ATM%20(Unit%20Test)`

Integration tests:
`http://ci1.ase.au.dk:8080/job/Team%2016-1-06%20ATM%20(Integration%20Test)`

Code metrics:
`http://ci1.ase.au.dk:8080/job/Team%2016-1-06%20ATM%20(Code%20Metrics)`

April 20, 2016

Contents

1 Introduction

The purpose of this journal is to reflect upon the design, implementation and test of the Air Traffic Monitor system.
The exercise required not only a working system, but a special effort had to be made to obtain a generic design with an appropiate amount of tests which should be simple to maintain if changes in the exercise requirements were to be made.

2 Design

As earlier stated the design of this solution was given thought as it had to be extensible and adaptive to changes in requirements. This section describes the process of obtaining such design and the outcome of the reflections.

2.1 Design considerations

An effort were made to design the system based on the five basic principles of object-oriented programming and design, SOLID. These principles applied to a system tend to make this maintainable and extendable.

2.2 Implementation

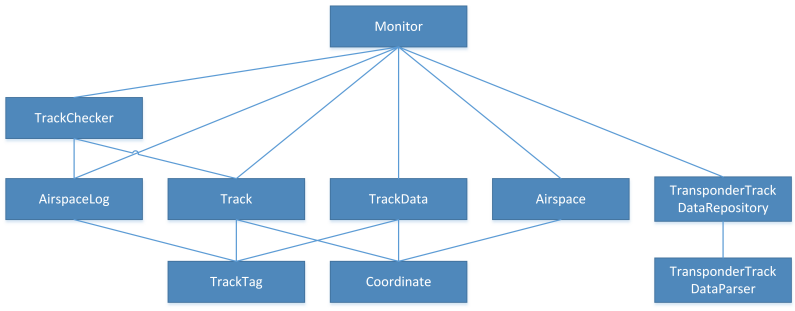

Figure 0.1. Dependency tree

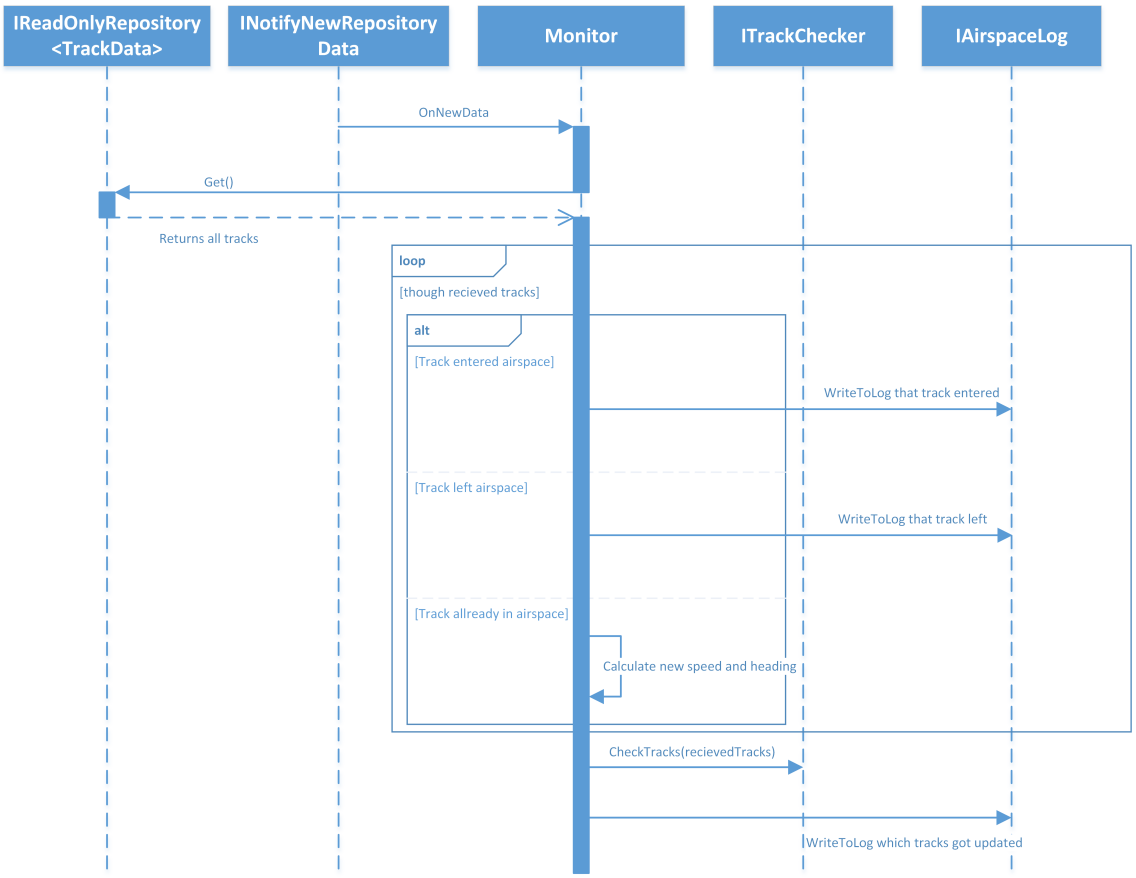

Figure 0.2. Sequence diagram for monitor

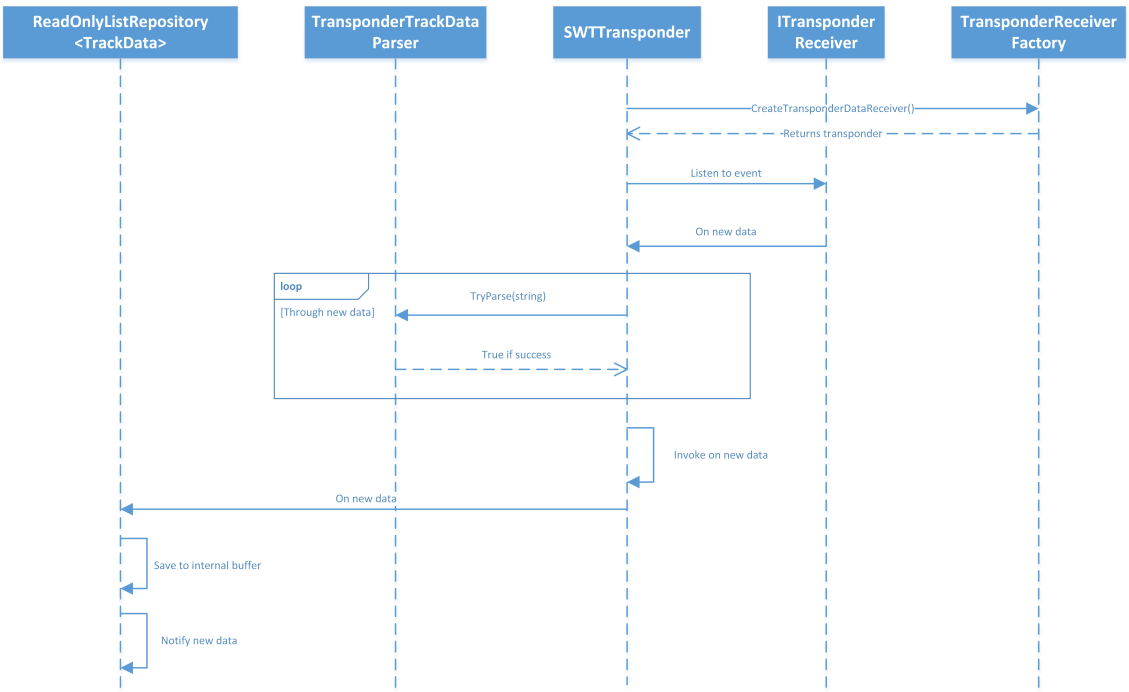

Figure 0.3. Sequence diagram for SWTTransponder

3 Test

3.1 Strategies

4 Teamwork

In this section the

4.1 Strategies

XP: Pair programming

4.2 Continuous integration

5 Conclusion