

Volere Requirement Specification

Appendix A in the textbook.

Template Table of Contents

Project Drivers

1. The Purpose of the Project

a) The Purpose of the Project

b) The Goal of the Project (Purpose, Measurement, Advantage)

Volere Requirement Specification

Template Table of Contents

2. The Stakeholders

- a) The Client
- b) The Customer
- c) Other Stakeholders
- d) The Hands-on Users of the Product
- e) Priorities Assigned to Users
- f) Maintenance Users and Service Technicians

Continued.

Priorities Assigned to Users:

Key users: They are critical to the continued success of the product. Give greater importance to requirements generated by this category of user.

Secondary users: They will use the product, but their opinion of it has no effect on its long-term success.

Unimportant users: This category of user is given the lowest priority. It includes infrequent, unauthorized, and unskilled users, as well as people who misuse the product.

Continued.

Examples of stakeholders:

- Client/sponsor
- Customer
- Subject-matter experts
- Members of the public
- Users of the current system
- Marketing experts
- Legal experts
- Domain experts
- Usability experts
- Representatives of external associations • Business analysts
- Designers and developers • Testers
- Systems engineers • Software engineers • Technology experts
- System designers

Continued.

Project Constraints

3. Mandated Constraints

- a) Solution Constraints (e.g. platform constraints)
- b) Partner or Collaborative Applications
- c) Off-the-Shelf Software
- d) Schedule Constraints
- e) Budget Constraints

Continued.

4. Naming Conventions and Terminology

5. Relevant Facts and Assumptions

a) Relevant Facts

The existing application is 10,000 lines of C code.

b) Business Rules

The maximum length of a truck driver's shift is 8 hours.

c) Assumptions

Road treatment stops at county boundaries.

Continued.

Functional Requirements

6. The Scope of the Work

- a) The Context Diagram
- b) Work Partitioning (Business Events and their Inputs and Outputs)
- c) Specifying Business Use Cases

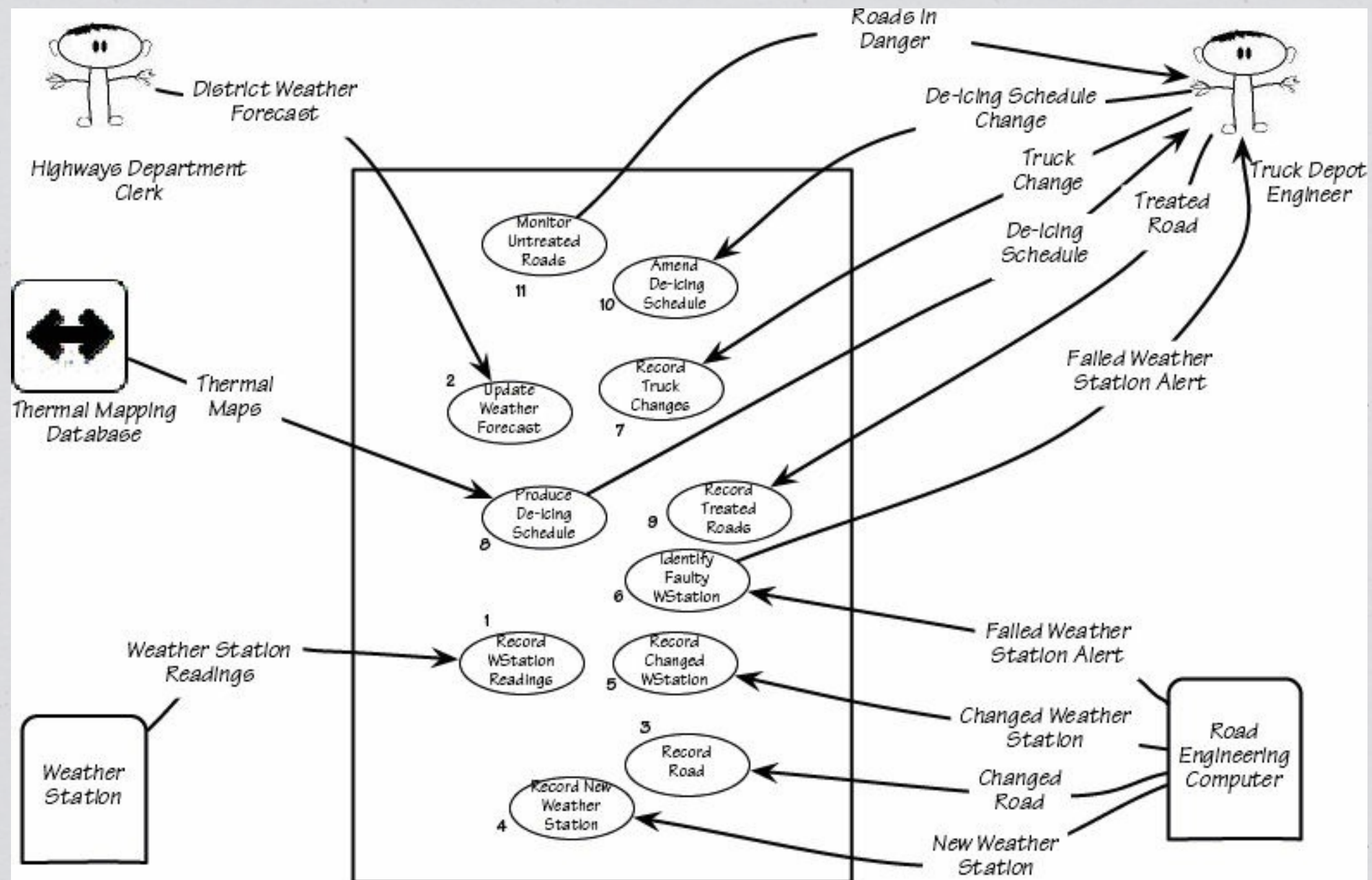
7. The Business Data Model and Data Dictionary

- a) The Data Model
- b) Data Dictionary

8. The Scope of the Product

- a) Product Boundary (Product Use Case Diagram)
- b) Individual Product Use Cases

Product Use Case Diagram



Product Use Case Scenario

Product Use Case Name: *Passenger checks onto flight.*

Trigger: *Passenger activating the machine.*

Preconditions: *The passenger must have a reservation.*

Interested Stakeholders: *Passenger, check-in agent, marketing, baggage handling, reservations, flight manifest system, workflow, security, destination country's immigration.*

Actor: *Passenger.*

- 1. The product asks for the passenger's identity or record locator.*
- 2. The passenger supplies one or the other and the product locates the passenger's reservation.*
- 3. The product asks for a frequent-flyer number if it is not already attached to the reservation.*
- 4. The product asks for and scans the passport if needed.*
- 5. The product shows the allocated seat and accepts the passenger's changes if needed.*
- 6. The product asks for the number of bags and for answers to the security questions.*
- 7. The product checks the baggage onto the flight, and prints the bag tags.*
- 8. The product prints the boarding pass or sends it to the passenger's phone.*
- 9. The product directs the passenger to the bag drop and departure gate.*

Outcome: *The passenger is recorded as checked onto the flight, the bags are assigned to the flight, a seat is allocated, and the passenger has a boarding pass and bag claim stubs.*

Continued.

9. Functional Requirements

Requirement #: **75**

Requirement Type: **9**

Event/BUC/PUC #: **7, 9**

Description: **The product shall record all the roads that have been treated**

Rationale: **To be able to schedule untreated roads and highlight potential**

Originator: **Arnold Snow - Chief Engineer**

Fit Criterion: **The recorded treated roads shall agree with the drivers' road treatment logs and shall be up to date within 30 minutes of the completion of the road's treatment**

Customer Satisfaction: **3**

Customer Dissatisfaction: **5**

Dependencies: **All requirements using road and scheduling data**

Conflicts: **105**

Supporting Materials: **Work context diagram, terms definitions in section 5**

History: **Created February 29, 2010**

Volere

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Continued.

Non-functional Requirements

10. Look and Feel Requirements

11. Usability and Humanity Requirements

12. Performance Requirements

13. Operational and Environmental Requirements

14. Maintainability and Support Requirements

15. Security Requirements

16. Cultural Requirements

17. Legal Requirements

Continued.

Non-functional Requirements

Also use snow cards

Description:

The product shall appear authoritative.

Fit Criterion

After their first encounter with the product, 70 percent of representative potential customers shall agree they feel they can trust the product.

Continued.

You need to write snow cards for the following non-functional requirements:

- The product should be easy to use.
- The product should be easy to learn.
- The product should ensure the security and integrity of data.
- The product should ensure the privacy of users' personal data.
- The product should be compliant with the branding standards of the client's company.
- The product should be available in both English and French.
- The Product should be accessible to all users.

Continued.

- The product should provide search results of flights fast.
- The product should be fault tolerant, i.e. it should work properly even in cases where there is huge overload on the network due to large volume of users.

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Continued.

- The product should have the capacity to handle 5000 users simultaneously.
- The product should require maximum maintenance of 2 hours every 3 months.
- The product should be available to run on all available browsers.
- The product should run on both web and mobile app.
- The product should allow auditors to audit the financial, flight and accounting data.

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- The product should not be offensive to any religious or ethnic group.
- The product should be fully compliant with the privacy laws of Canada.

Continued.

Project Issues

- 18. Open Issues
- 19. Off-the-Shelf Solutions
- 20. Risks
- 21. Costs
- 22. Ideas for Solutions

Continued.

- You will be graded for piecing together the deliverables that you already wrote.
- Product Use Case Scenarios, and Non-Functional Requirements will carry more weights in grading.
- You will be also graded for the interview with the TA.
- Grading: 4% for the interview. 8% for Non-Functional Requirements. 6% Product Use Case Scenarios. 2% for piecing the report together.