Bruno Ritz

JDive.org – Dive Logging Tool
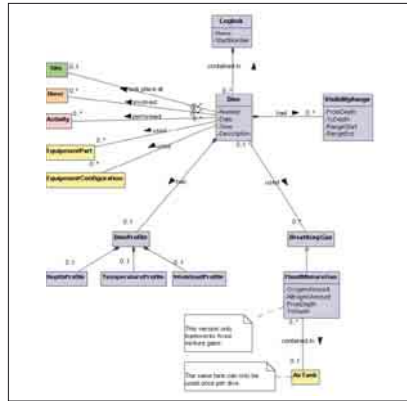
Graduate candidate	Bruno Ritz
Examiner	Prof. Stefan F. Keller
Co-examiner	Claude Eisenhut, Eisenhut Informatik AG, Burgdorf
Subject area	Software

Task: Divers need a way of documenting their dives properly. One way is to log each dive in a paper logbook. Some divers prefer logging their dives using specialized software. For almost every dive computer there is a dive logging software. This software is developed and maintained by the manufacturer of the dive computer or an external contractor.
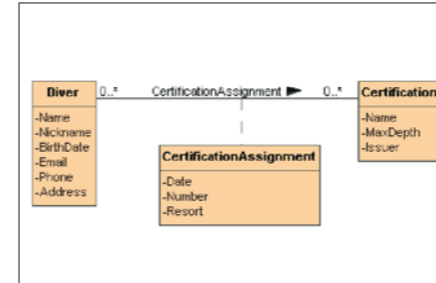
However, these programs are not compatible with each other, offer different functionalities, feature sets, differ in ease of use and usually only run on Windows. Divers using multiple dive computers have to use different programs for logging their dives. It would be of great value if a diver could use one single program for these tasks.
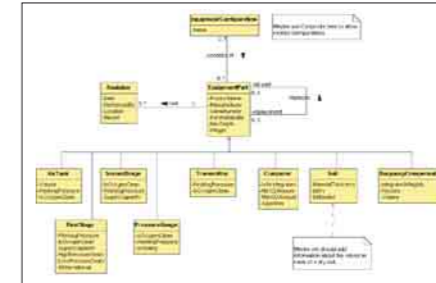
Project Goals: The JDive.org project aims at creating a unified dive management software platform that can easily be extended. It will be designed to be independent of the target operating system. The software being developed in the context of this diploma provides a solid base for implementing future modules and functionality.
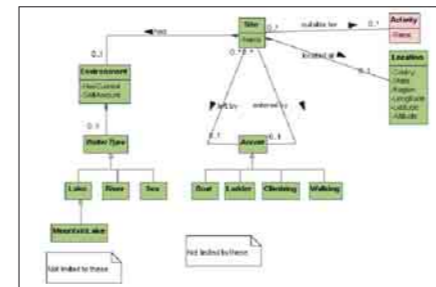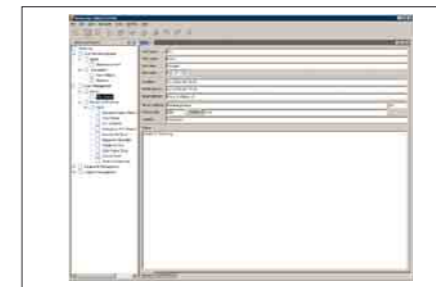

Logbook Domain Model

Diver Management Domain Model

Equipment Management Domain Model

Site Management Domain Model

Sample Screenshot

Solution: The software being developed is written in Java and is based on the NetBeans Rich Client Platform. It uses a relational database, PostgreSQL, for storing persistent data which is accessed through the Hibernate framework. The application is designed modularly to be easily extensible. It provides:

• Diver and Diving Certification Management
• Equipment Management
• Dive Site Management
• Logbook Management

The software being developed in this diploma thesis will not be the final version. After the diploma finishes, at least six more months of work will be needed to be ready for a stable release.

Further information and source code can be obtained from www.sf.net/projects/jdive/