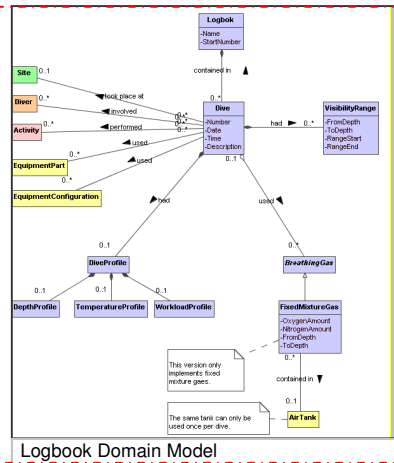


Diplomand / in	Ritz, Bruno
Examinator / in	Keller, Stefan
Experte / in	Eisenhut, Claude
Themengebiet	Information Systems, Dive Management/Logging
Projektpartner	-



Introduction (Ausgangslage):

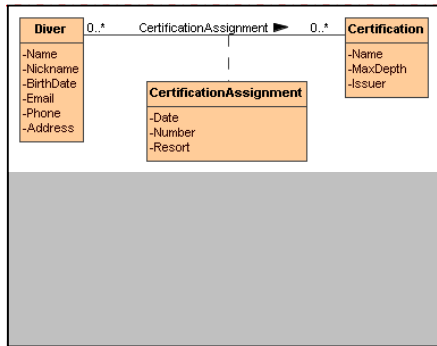
Divers need a way for properly documenting their dives. One way is to log each dive in a paper logbook. Some divers prefer logging their dives using specialized software. For almost each dive computer there exists a dive logging software. This software is developed and maintained by the manufacturer of the dive computer or an external contractor.

However, these programs are not compatible between each other, offer different functionality, feature sets, differ in ease of use and usually only run on Windows. Divers using multiple dive

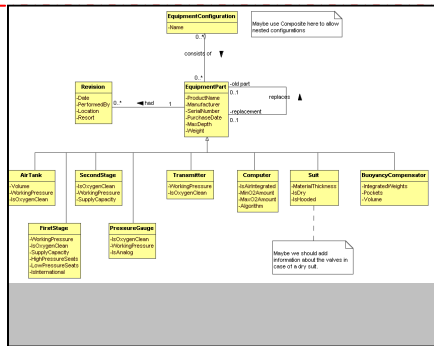
computers have to use different programs for logging their dives. It would be of great value if a diver could use one single program for these tasks.

Goals (Ziel der Arbeit):

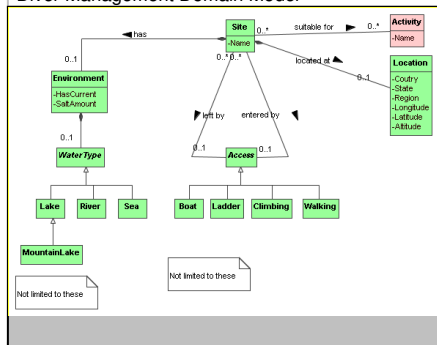
The **JDive.org** project aims at creating a unified dive management software platform that can easily be extended. It will be designed to be independent of the target operating system. The software being developed in the context of this diploma provides a solid base for implementing future modules and functionality.



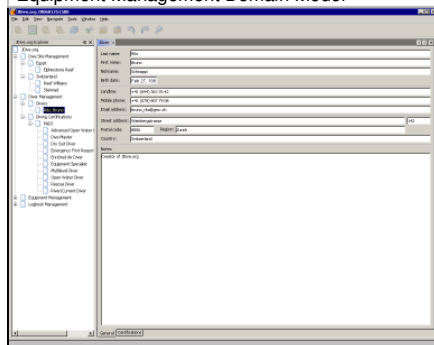
Diver Management Domain Model



Equipment Management Domain Model



Site Management Domain Model



Sample Screenshot

Solution (Lösung):

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 Certifications 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, there will be at least six more months of work needed to be ready for a stable release.

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