

## Object Oriented Analysis and Design –

### Workshop 2 Peer Review

- The program executes just fine on Linux, and presumably on other \*nix based operating systems as well. The persistence mechanism fails on Windows though. Consider changing the dir member variable in the FileHandler class to e.g. "data" + File.separator[1] to cater for operating systems that have other file separators than slash. I also found that the verbose list doesn't print the personal number/social security number. But other than that it is working just as expected.
- The class diagram looks okay but I have some observations. I believe that the Registry class should have a dependency[2] to BoatType and not Boat. Furthermore, Furthermore, I think that the MenuActions class should show an association[1] to BoatType, not a dependency, and the same class should also show a dependency to Member[2].
- The return messages in the sequence diagrams should be depicted with an open arrow[4], and not a closed arrow.
- I think the architecture looks sane. There is a model-view separation and I didn't find any leakage of the domain into the UI.
- The member ID is unique.
- The code is of good quality and seem to adhere to common coding conventions of Java[5].
- As a developer I feel that the diagrams are useful. They clearly depicts what is needed to start working on an implementation.
- I believe you adhere to the concepts of high cohesion[6] and low coupling[7] (not more than needed to be more precise). What could be worked upon, that ties into low coupling, to be make the solution easier to adapt to possible future changes is to introduce polymorphism[8] (use of interfaces).
- I think both the design and implementation are very good, but some minor observations that I have told above. The code is easy to follow and conforms to common coding conventions. What can be worked upon to further develop the solution is e.g. input validation (social security number) and using interfaces to be able to exchange parts of the implementation more easily.
- I believe that the work passes grade 2 as per the given criterias.

[1] Java Tutorials - System Properties, 2016-10-11, <https://docs.oracle.com/javase/tutorial/essential/environment/sysprop.html>

[2] Larman C., Applying UML and Patterns 3rd Ed, 2005, ISBN: 0131489062, page 260

[3] Larman C., Applying UML and Patterns 3rd Ed, 2005, ISBN: 0131489062, page 252

[4] UML basics - The sequence diagram, 2016-10-11, <http://www.ibm.com/developerworks/rational/library/3101.html>

[5] Google Java Style Guide, 2016-10-11, <https://google.github.io/styleguide/javaguide.html>

[6] Larman C., Applying UML and Patterns 3rd Ed, 2005, ISBN: 0131489062, page 314

[7] Larman C., Applying UML and Patterns 3rd Ed, 2005, ISBN: 0131489062, page 299

[8] Larman C., Applying UML and Patterns 3rd Ed, 2005, ISBN: 0131489062, page 414