

Peer Review

of Carl Johan Håkansson's domain model
by Linda Ott Olander (lo222hd)

The first thing that strikes me is that there is no accompanying documentation, adding this would benefit the model. There is a line from Secretary to Person, I don't know what it's supposed to signify. It breaks the other lines and makes the model harder to read. This is one case where some text documentation would be good.

When it comes to use case 1, this domain model shows the "Authenticator" (system) as holding the Role. This should in some way be connected to the actual roles in the model I think. Such as Member, Secretary and Treasurer. It's important to remove duplicates in the model and this feels like the same information is repeated in two places. It might be difficult to deduce from the model that role is the same as Member, Secretary etc.

In use case 4, the cost of berth is not included in the model.

I can't see use cases 5 or 6 in the model.

In use case 11, a member lists the calendar event. I see that there is a duplication in the model here, with a "Person" object listing the calendar events, while the "Member" object does not. The model should be pruned so that there is no duplication.

Think like a map maker

The domain model uses the existing names in the territory [1, p239], except for the object "Authenticator" which does not exist in the problem description. To me this sounds like a primary actor. I think a better name would have been "Authentication system" or something like that.

Static vs. Dynamic view, or Requirements vs. Domain model

This domain model is quite good in showing a static view, which complements the requirements that are more dynamic. But the model could be simplified which would make the model support the requirements better.

Focus on reality, not software

I think the model does this well, but it misses some important information that could be expressed in the model. Such as the cost of berth, and the membership fee which could be added as a derived attribute.

Good naming (classes and associations)

The naming is good when it comes to the classes. The associations are good for the most part, except for "fee classification", which could be more descriptive.

Derived attributes/associations

There are no derived attributes or associations (with the symbol "/" before it [1, p258]) in this domain model. The aforementioned membership fee could be added as a derived attribute.

Correct UML notation

I don't see any major problems with the UML notation, except the attribute notation. Most modelers assume attributes have private visibility. [1, p257] In this domain model, the attributes are drawn with public visibility. There is no accompanying documentation, which would be good in order to know why the attributes need to be public.

Understandability/Readability

The model is simple and readable, but the duplicate objects and the line between Secretary and Person makes the model harder to understand. It could be made clearer by removing the duplicates.

As a developer would the model help you and why/why not?

In all, it is a helpful model, because it gives an overview of how the system works, the major objects and the associations between them. When it comes to the use cases though, the Treasurer should not be in the model. This would not be helpful to me as a developer, since the model does not support the requirements. (The treasurer is not part of the use cases in this iteration, that is for grade 2. He/she is not present in any of the use cases. So the treasurer should not be included in the model at this stage.)

Do you think a domain expert (for example the Secretary) would understand the model why/why not?

To a large part, yes, I think the Secretary would understand it. Some parts might be more difficult, like "fee classification".

What are the strong points of the model, what do you think is really good and why?

It is easy to read and understandable, has good naming for the most part and supports the requirements.

What are the weaknesses of the model, what do you think should be changed and why?

I think some documentation would be helpful, the Treasurer should not be included, for more opinions see what I've already written above.

Do you think the model has passed the grade 2 (passing grade) criteria?

Yes, I do.

References:

1. Larman C., Applying UML and Patterns 3rd Ed, 2005, ISBN: 0131489062