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Moose Environment

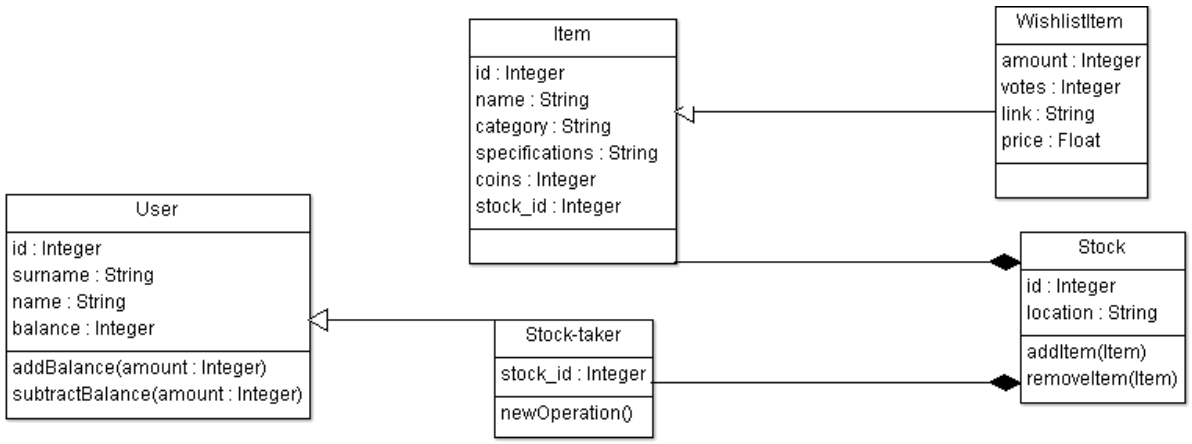
1. Problem description:

As an electronics hobbyist, you will encounter the challenge of component sourcing at some point. Currently there are two solutions, either to get them from local distributors, possibly receiving them the day after but at high costs, or to buy them from Chinese sellers, at a fraction of the price, but with very slow shipping, which can take from four up to ten or more weeks to be delivered. Because of this, many tend to buy components they may need at some point in advance, that way building up a rather big collection of components, which they probably never ever use.

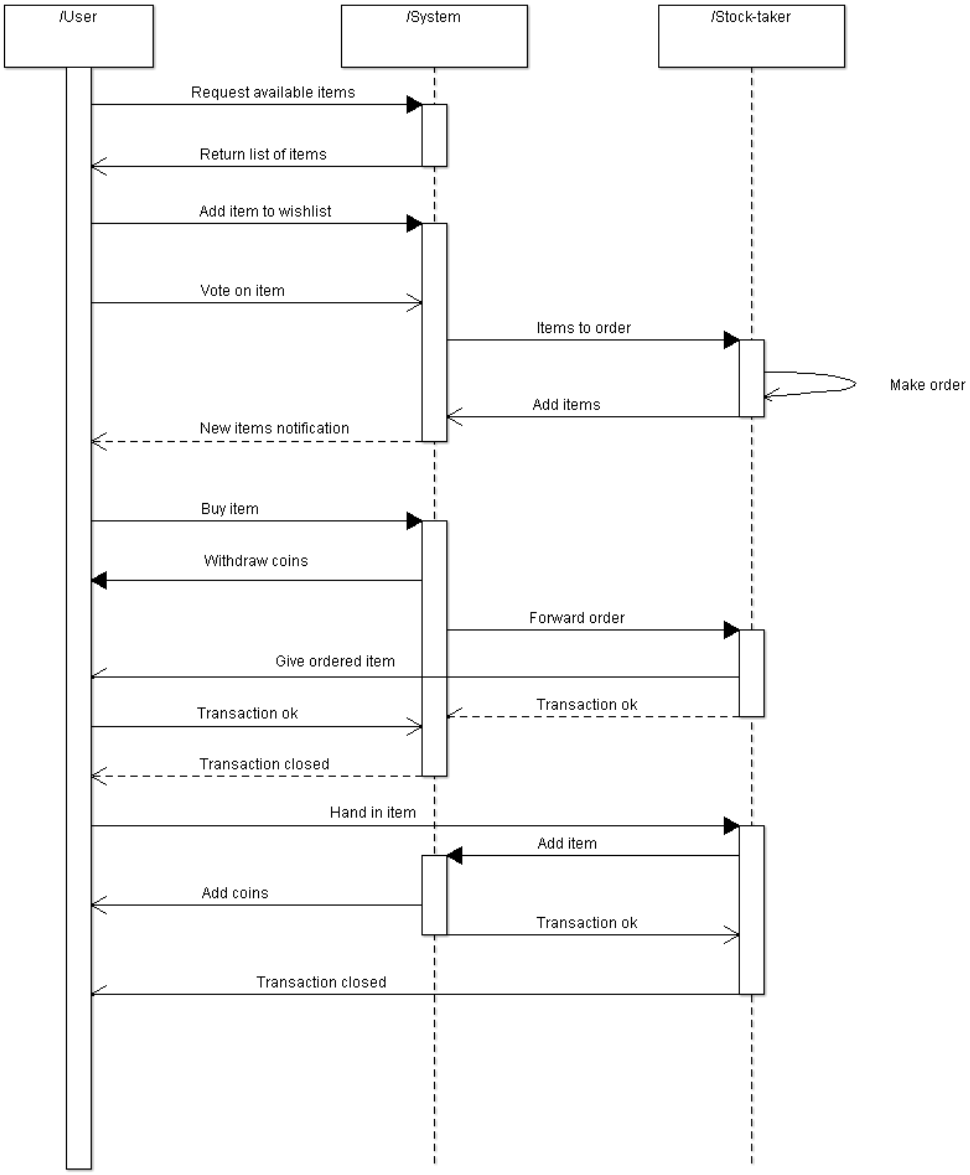
Our system is the solution for this problem. By grouping together multiple people we have the ability to have more components, while reducing the cost per person. Selected people act as stock-takers ordering successfully proposed items and keeping them available for others. The software gives the possibility to look up available components, request them from the respective stock-taker and to propose new items, which are ordered if enough users vote for them. Inside the system all the payment is done by credit points, which an user gets in exchange for real money, which then gets used to order new components.

2. Proposed solution:

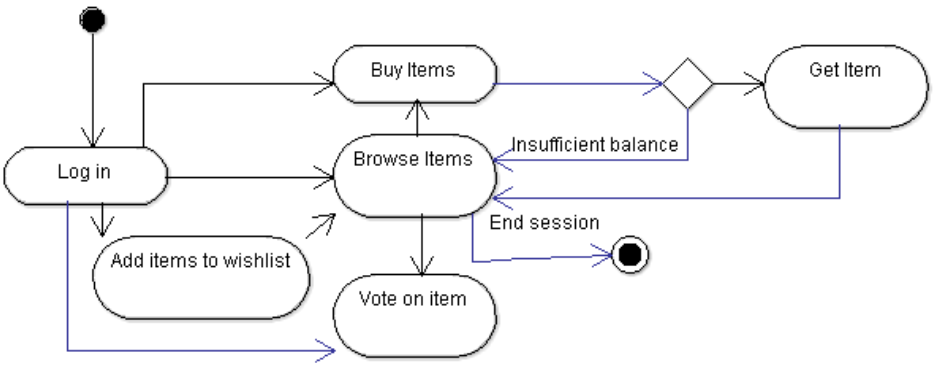
Class diagram:



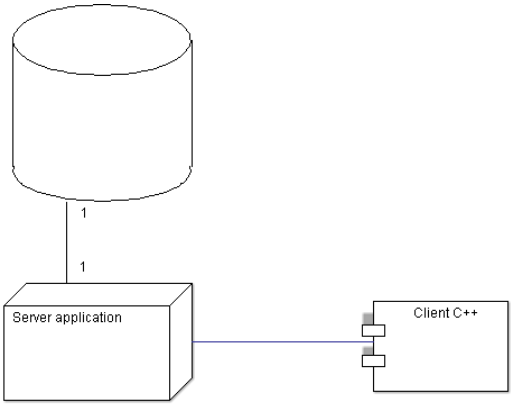
Sequence diagram:



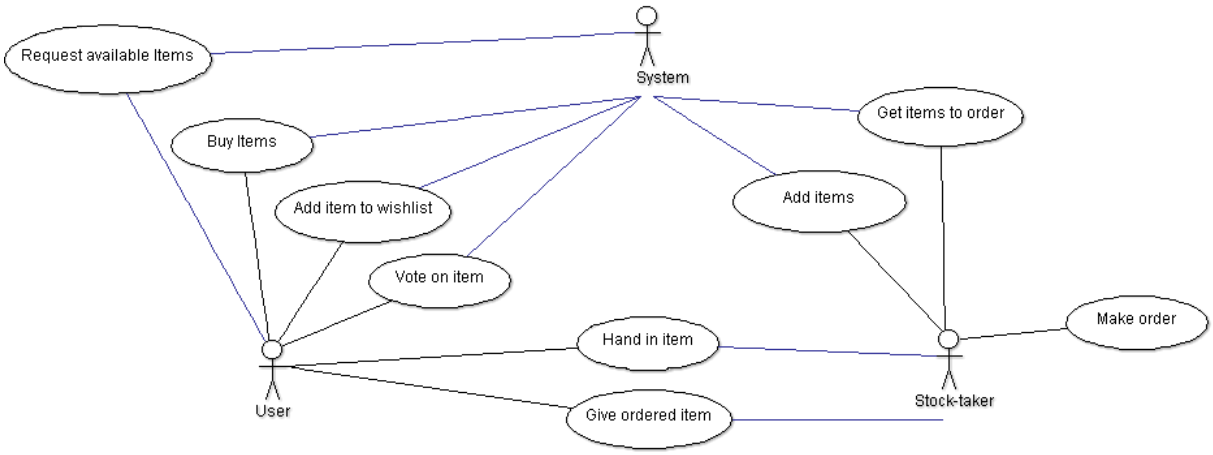
Activity diagram:



Deployment diagram:



Use Case diagram:



3. Plan of work:

Our overall timeframe is 7 weeks, from 13.04.2016 to 1.06.2016.

Time usage:

Week 1-2: Idea development, Creating the main structure behind the idea.

Week 3-4: Database connection, main functions available.

Week 5-6: User interface development.

Week 7: Testing.

Our team consists of two members, as we lost our third member already in our early stage.
One member, namely Daniel, makes sure that we are working on our goals; the other checks that what we already did really is what we wanted to accomplish, Matthias will do this. As already stated, Edward had to leave our team because of overlapping courses.

The implementation itself will be as follows:

First of we have to work on the database connection. We then start implementing the basic functions for the user, add the possibility to add Items and remove them, then add the coin system, which will enable payments. The user interface will follow next, enabling the user to browse stored items, add new items to the wish list and buy items.

After each weekly iteration, we make minor testing stages, checking the given functionalities.

After these 7 weeks we expect to have a working system, giving the user the functionalities as specified in the problem description.