

Project: **Boquet-Manager, Channel list manager for DBOX2-Sattelite receiver**

Autor: **Client partially the public community of satellite receivers.**

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Datum: 25.06.2017

Dokument Version: 0.0.2

Target specification

1. Technical environment (Tools, Frameworks).
2. Use cases.
3. Description of software components.
4. Software development procedure model.
5. Description of the development plan goal.
6. Forecast about finishing this project.

1. Technical environment (Tools, Frameworks)

For the project implementation I decided to use opensource tool IDE **Eclipse**, this tool provide flexibility in working with source code and at the same time supports further frameworks for different task which is not include at the default.

For working with XML Files I decided to use **JDOM** , because SAX and DOM XML Frameworks in my opinion very cumbersome and difficult to use.

Due to the nature of this project I decided to use following build tool **Maven**, this build tool almost a standard in commercial projects, another reason it is the collaboration with other developers, this tool makes sure that all participating developers have one and the same set of developing environment.

For UI, I decided to use java core library **JavaFX**. JavaFX is one of modern UI under Java, you can compare it with WPF from Microsoft, it have nice UI which easy customize and develop.

For creating graphic user interfaces I decided to use **SceneBuilder** tool, which provides an opportunity to develop nice and easy to maintain UI widgets.

For the procedure model I decide to use TDD (**Test Driven Development**), there are in general no obligation from developer to write a test, but in my opinion it is one of the ways to produce high quality software which is flexible and easy adaptable for clients change requests.

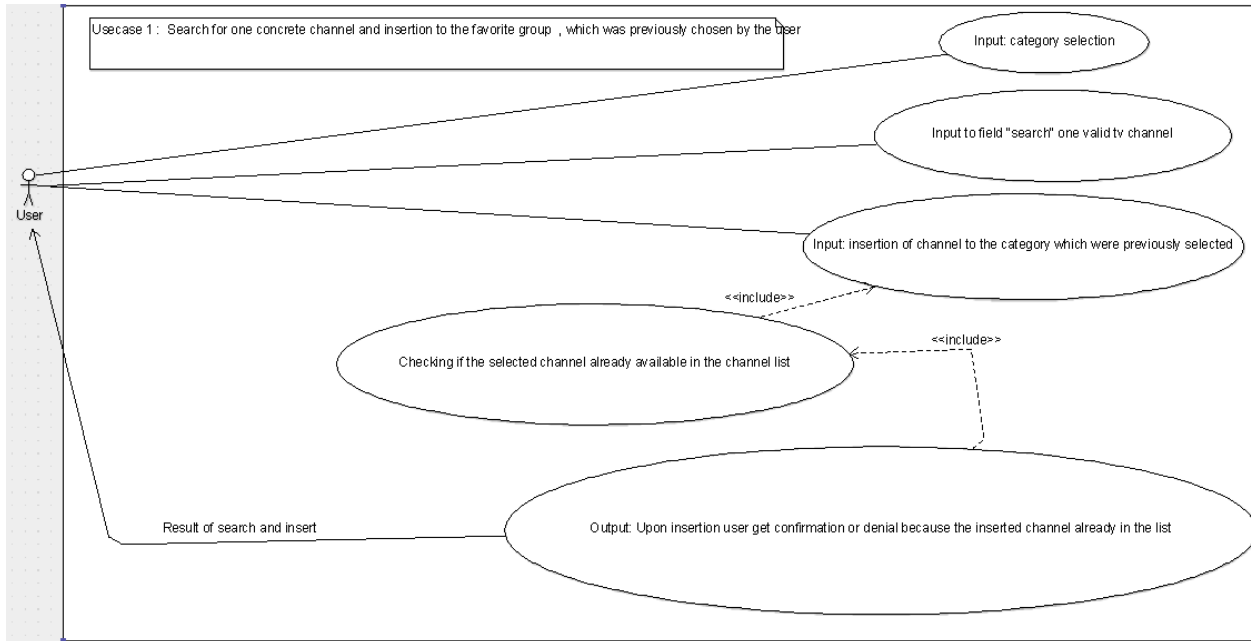
For version control I decided to use **Git**, reason behind this decision is following: this system is very wide spread and many developers using it for own projects and another reason is to be able to communicate and collaborate with other developers.

For the UML modeling I use **ArgoUML** , which is free and written Java, this tool have some limitations but it gives at least the ability to model the stuff without any further complications.

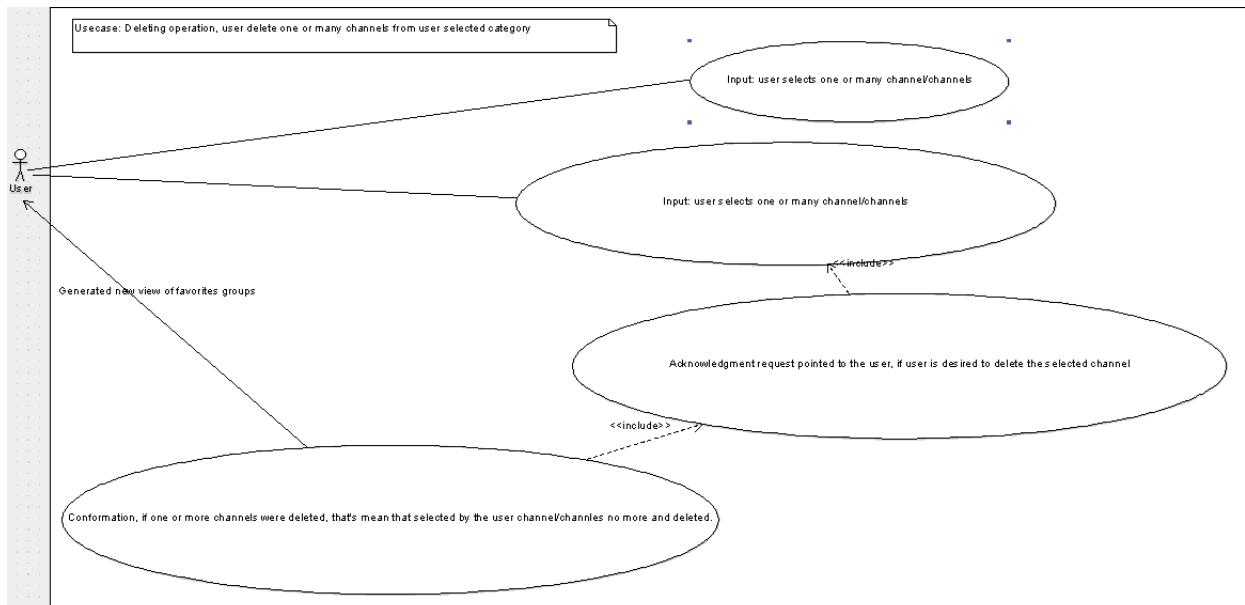
2. Use cases

Creation of use cases (time work for this topic 8 man hours):

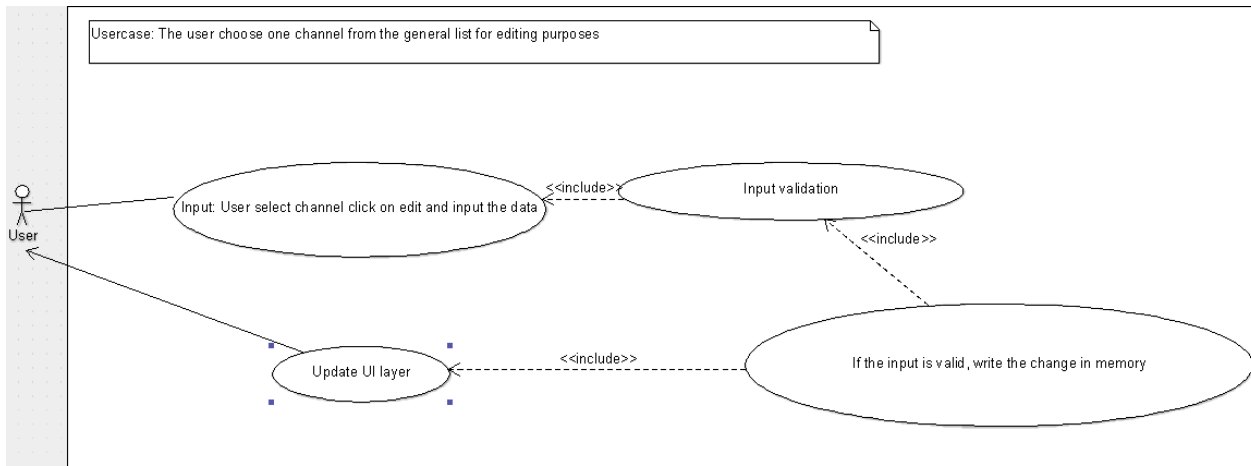
Usecase 1: Search for one concrete channel and insertion to the favorite group , which was previously chosen by the user



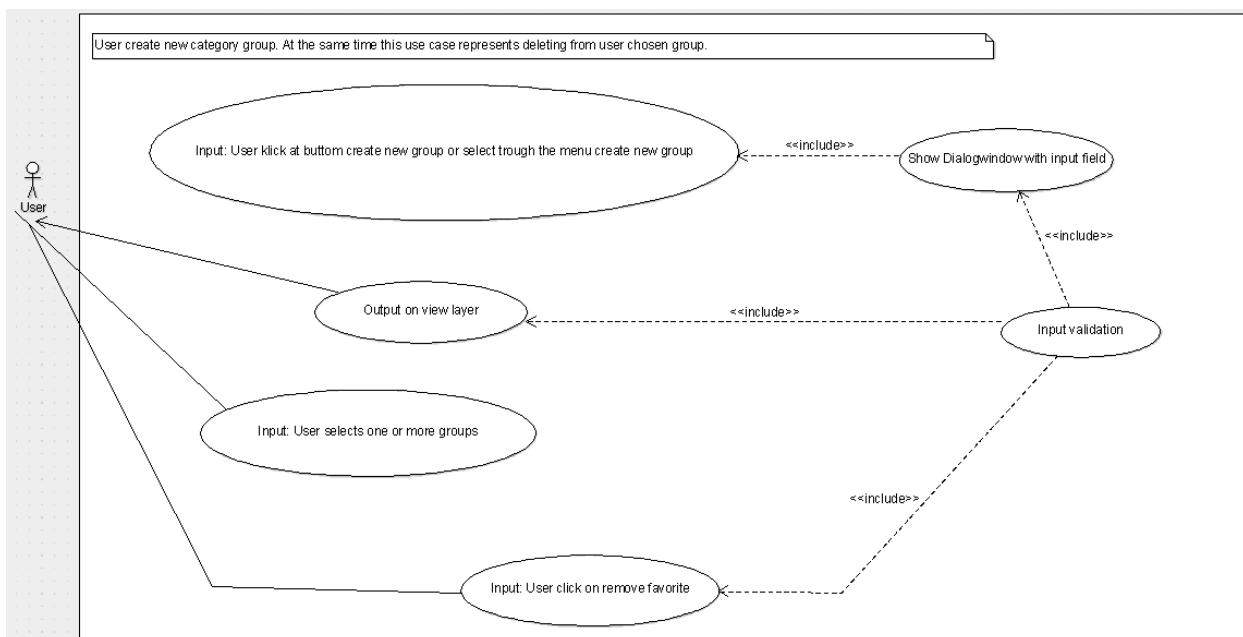
Usecase 2: User choose in favorite group one or more channels for deleting purpose.



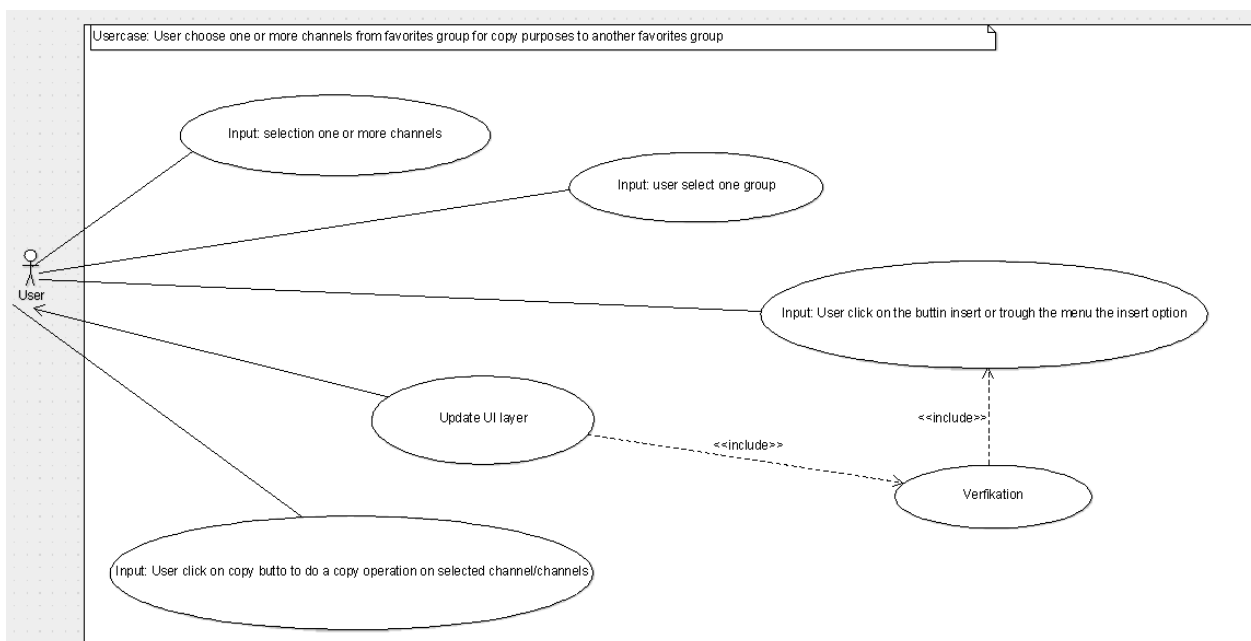
Usecase 3: The user choose one channel from the general list for editing purposes



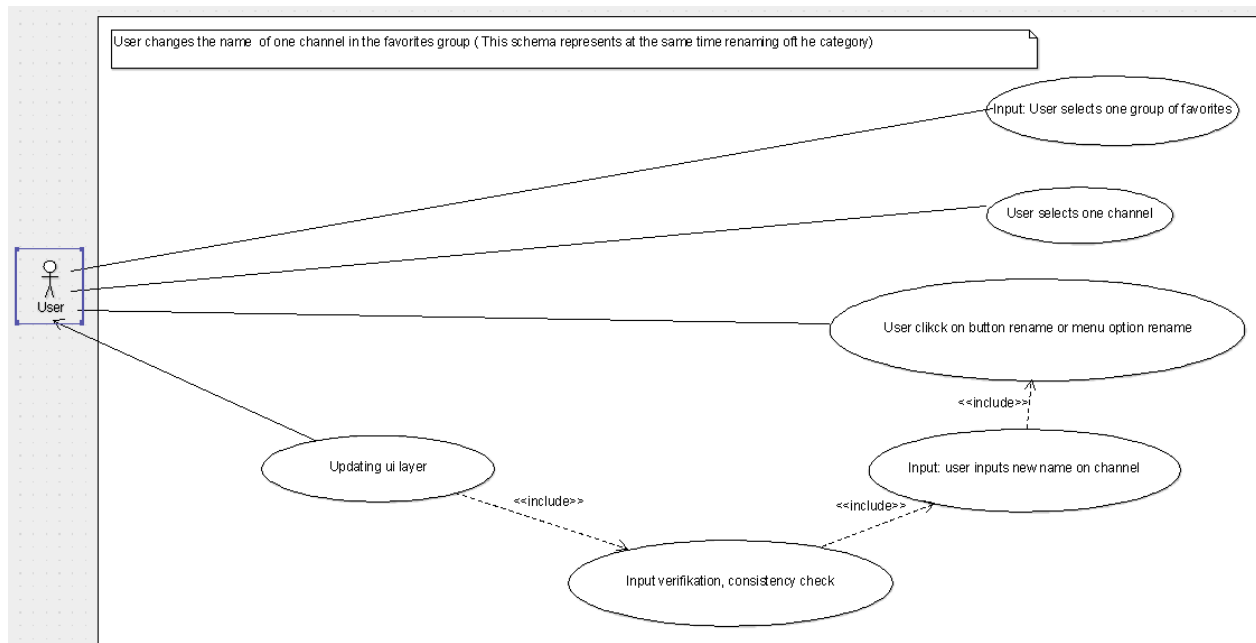
Usecase 4: User create new category group. At the same time this use case represents deleting from user chosen group



Fall 5: User choose one or more channels from favorites group for copy purposes to another favorites group

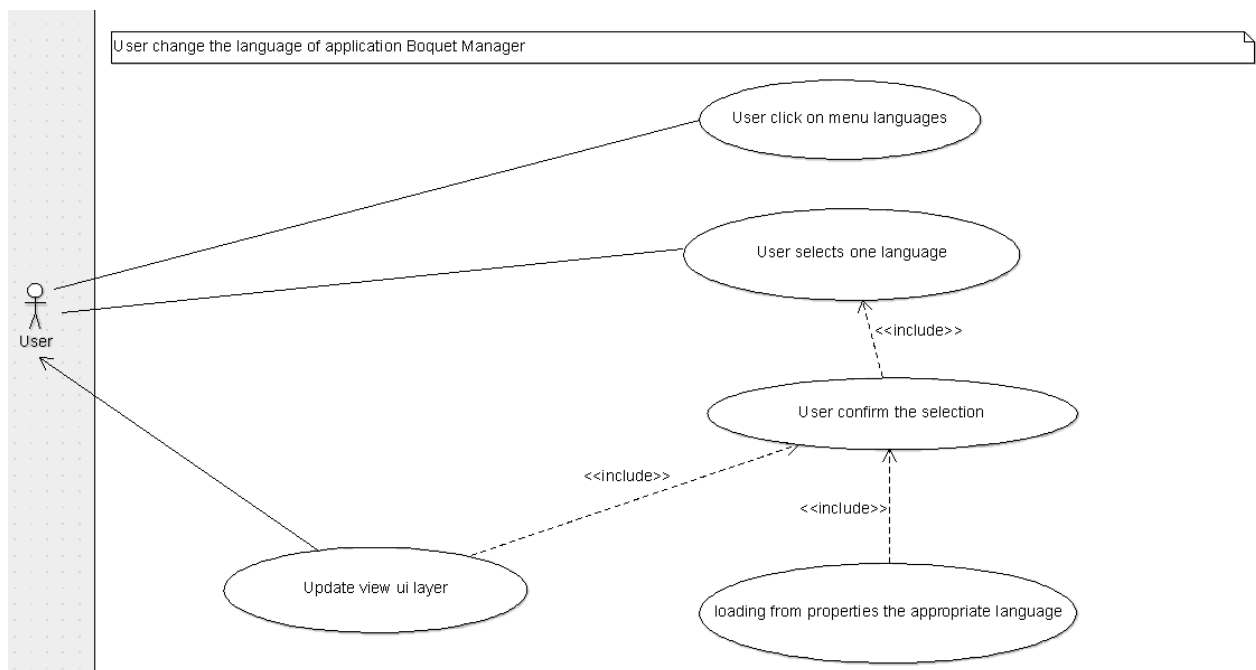


Fall 6: User changes the name of one channel in the favorites group (This schema represents at the same time renaming of the category)

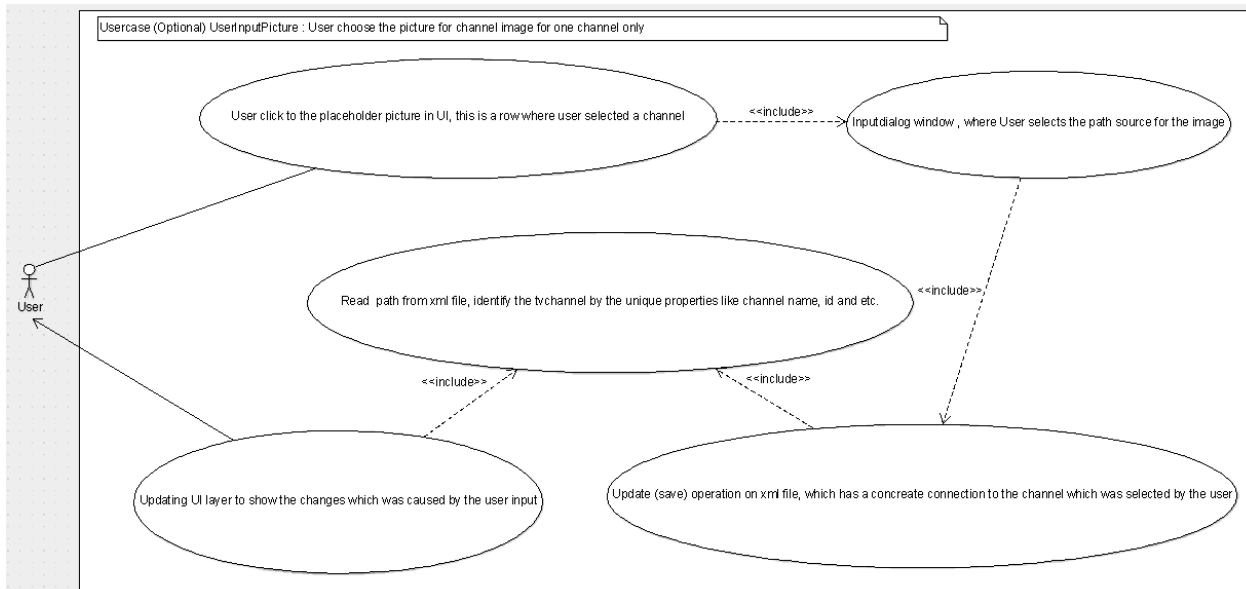


Fall 7: Channel insertion, this is 100% the same usecase like in case 3, because you have here same consistency checking.

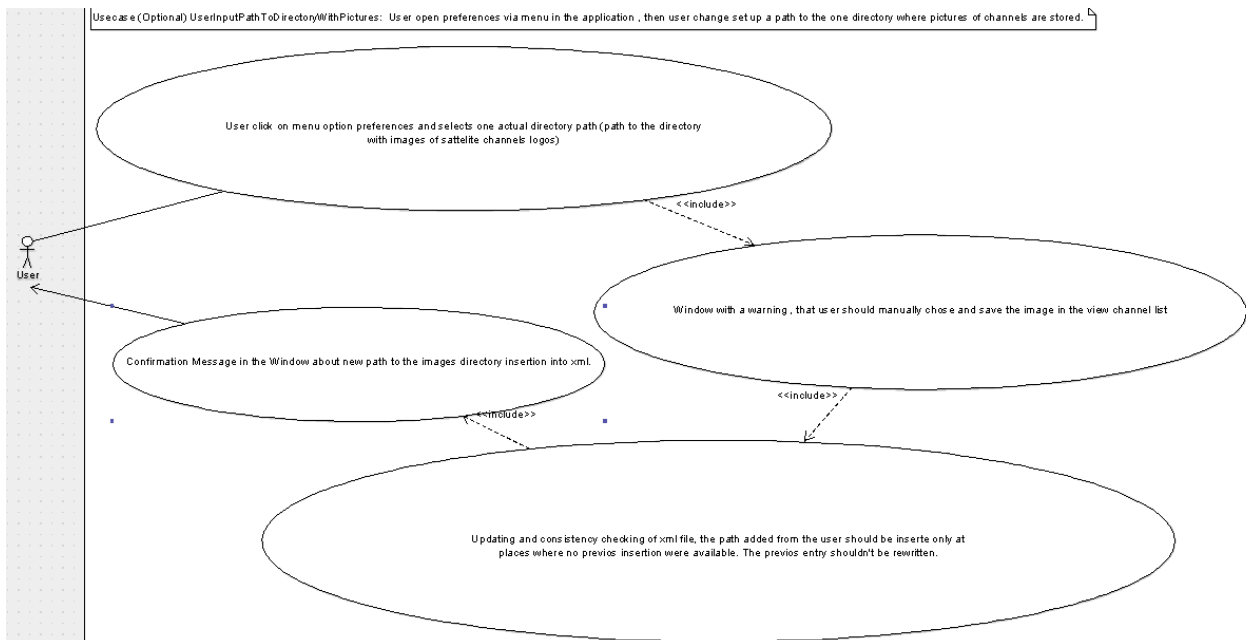
Fall 8: User change the language of application Boquet Manager



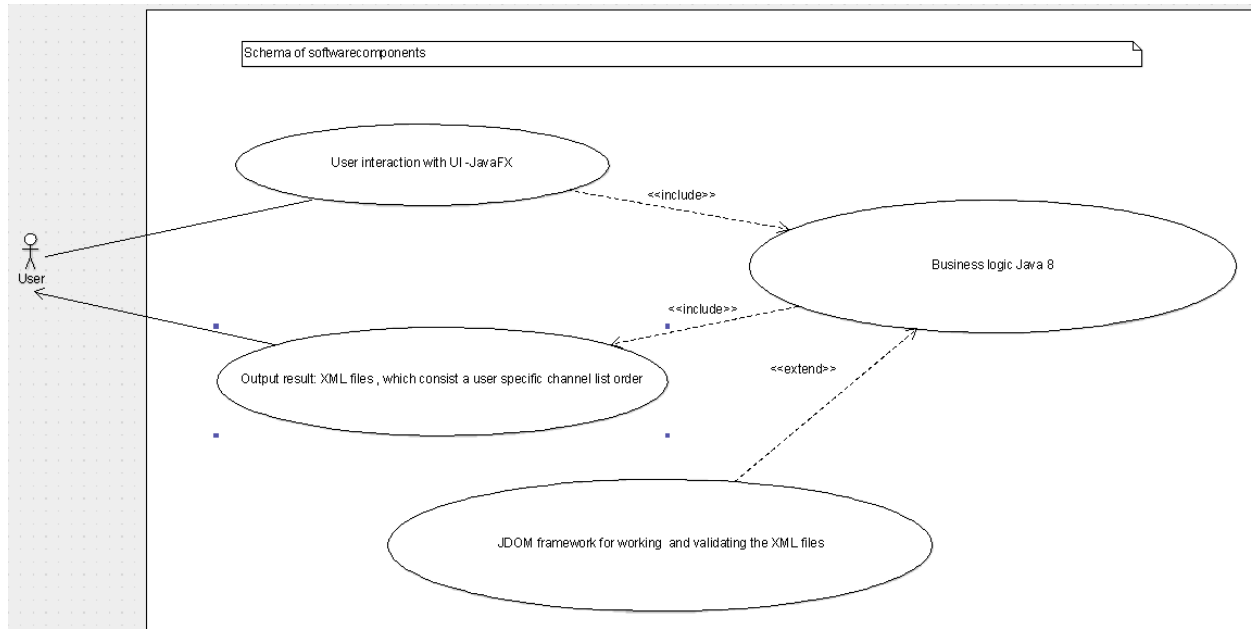
Fall 9 (Optional) UserInputPicture : User choose the picture for channel image for one channel only



Fall 9.1 (Optional) UserInputPathToDirectoryWithPictures: User open preferences via menu in the application , then user change set up a path to the one directory where pictures of channels are stored.



3. Description of software components



4. Software development procedure model

For the procedure model I decide to use scrum, but the main driver engine of this project is test driven development, this means write the test first, then derive from this test appropriate sourcecode so the acceptance test can be passed very easy. Main challenge will be to work with XML and JDOM , JavaFX is not so big challenge if it done properly, I forecast that I take a lot of man hours in research and writing test for JDOM part but time will show, the bumbs can sometimes happens unexpected.

5. Description of the development plan goal

Goal of the project to create user friendly interface , which gives a nice positive experience to the users of (Neutrino/Neutrino HD) by providing to the users an opportunity to create individual and very customizable channels list with clear separation in favorites groups.

6. Forecast about finishing this project

I chose to use procedure model (Scrum+TDD), the worked is done when all here described uses cases are fully implemented and no additional change request are available.