

Herat university open source community: structure development

Fardin hakimi

Open Source seminar

June 2, 2013

Contents

Abstract	3
Introduction.....	4
Aim of the paper.....	4
Structure	5
Definition:	5
Structure in a Community	5
Structure in non-Open Source Communities	5
Structure in Open Source Communities	6
Open structure:.....	6
Herat university open source community (HUOC) structure	8
Structure of work.....	8
Open hierarchy chart	9
The Leader	10
Senior members:	11
Junior members:.....	11
Promotion system	12
Motivation system	12
Projects	13
Results.....	14

Discussion.....	14
Conclusion:.....	15
References	16

Abstract

This paper was researched and written to find a suitable structure for Herat university open source community known as HUOC. It contains different subjects that focuses on different aspects of a structure, first it tried to answer the question that "what is a structure?", then It moved on to talk about different structures in different communities like structure in non-open source and open source communities, the main focus of the research was to find a suitable structure for HUOC which is an open source community. As a result it was found out that open structure is widely used in standard open source communities, so based on this finding it proposed a solution, which is a sound and flexible hybrid structure that mixes both open and organizational structure, so as the main result a hybrid structure is proposed for Herat university open source community (HUOC) as the solution of the problem, and based on the research, It is believed that this structure is the best for a community such as HUOC.

Introduction

Open source has been around the software engineering world for a long time now , but day by day its importance is growing , because of its special characteristics such as its free price, low price, security, reviewability, and being open coded . It is basically a need to understand and use this type of software development, which has a lot of advantages for developing countries such as our country. So it is decided to create an open source community in our university which is the Herat University, but in order to create a standard and successful community a lot of effort is required, precise rules, clear structure, effective management, realistic plans and sharp policies are needed, and a part of this process, this paper tries to create a clear structure for the community, which is based on research and open thinking.

Structure is one of the most important parts of a community, because it functions as a setting or a platform for goals, plans, and management, when a community has a clear structure, every member can feel comfortable and he or she knows what is his or her job and where he or she can fit in. so it was really necessary to create a clear and effective structure for Herat university open source community, and this aim will be tried in this research, as the research tries to first identify the problem, find different solutions for it, and then come up with a suitable solution for the problem.

Aim of the paper

Over all the aim of this paper is to study different structures in different communities, none open source and open source communities, especially open source communities and then come up with a solution as a structure for Herat university open source community.

Structure

Definition:

A structure is something made up of a number of parts that are held or put together in a particular way [1].

Structure in a Community

Every community is made up of a number of different parts, these parts can be the staff, projects, rules, roles, management and so on. A structure's job is to specify how these parts communicate and collaborate, or it shows how these parts are put together, and as a result a community is functioning and doing its job. A structure in a community also shows how each one of the certain parts are made up of a number of smaller parts, for example staff.

Staff or members of a community can be of different rank and position, they can be arranged in different orders, and this order is called the hierarchy chart of a community, this is covered by the community's structure, a clear structure should specify who is who in the hierarchy chart and how they are working together, a clear structure should also specify every member's role in the community, and how can the member contribute to the community's growth.

Structure in non-Open Source Communities

Every community has a structure based on its nature and needs, based on its values and what does it want to achieve, because every community can be different comparing to

other communities. But if we categorize communities into two categories open source and non-open source, we will have different structures for each one of them.

Basically Non open source communities have “leadership roles” which is presented in an organizational structure chart, they are trying to work and put up their community based on the roles and different ranks that they have.

Structure in Open Source Communities

Open source communities have a different structure comparing to other communities, because an open source community work different and its parts work different with each other than other communities. An Open source community is made of Social network of volunteers, this is why they do not follow an organizational pattern, Instead of that an Open source community is a self-organizing and very dynamic entity, everyone that joins, he or she has to cooperate and work according to his or her free will with total focus and commitment. Example of open source communities can be credativ [2], open source for America (OSFA) [3], and the Linux foundation [4].

Open structure: based on the available information most of the open source communities follow an open structure, because Open source communities are made of Social network of volunteers, so too much structure will demotivate the people who make the most successful open source projects possible [5].

Open structure is making sure that those who want to do work can do it—that there are no roadblocks for those doing the work. This is why the hierarchical model almost always fails in an open source community, but the open structure prevails.

Open structure provides an intimate learning community with close relationships with all the members, which is a family more than an organization, where everyone is responsible for her or his Individual and Social responsibilities.

With all this information, this question might come to mind that why open structure? It has a very simple answer, the open structure explores the possibility where everyone works for everyone, on the basis of one shared idea (aim), and it initiates a kind of collaborative work to which everybody can contribute services to [5].

Herat university open source community (HUOC) structure

A lot of research was done about structure, structure in different type of communities, and it was figured it that non open source communities have an organization pattern and open source communities follow an open structure, So based on the above findings we have decided to choose a hybrid structure for Herat University open source community, which is a mix of organization and open structure.

Herat university open source community (HUOC) is not after attaining “leadership roles”, we mostly emphasize on open contribution and open work, we encourage contributors instead of ordering them and there is no single community owner (We all own the community).

Structure of work

This part shows the big picture of the community, how many sections does the structure has and what is the link between them.

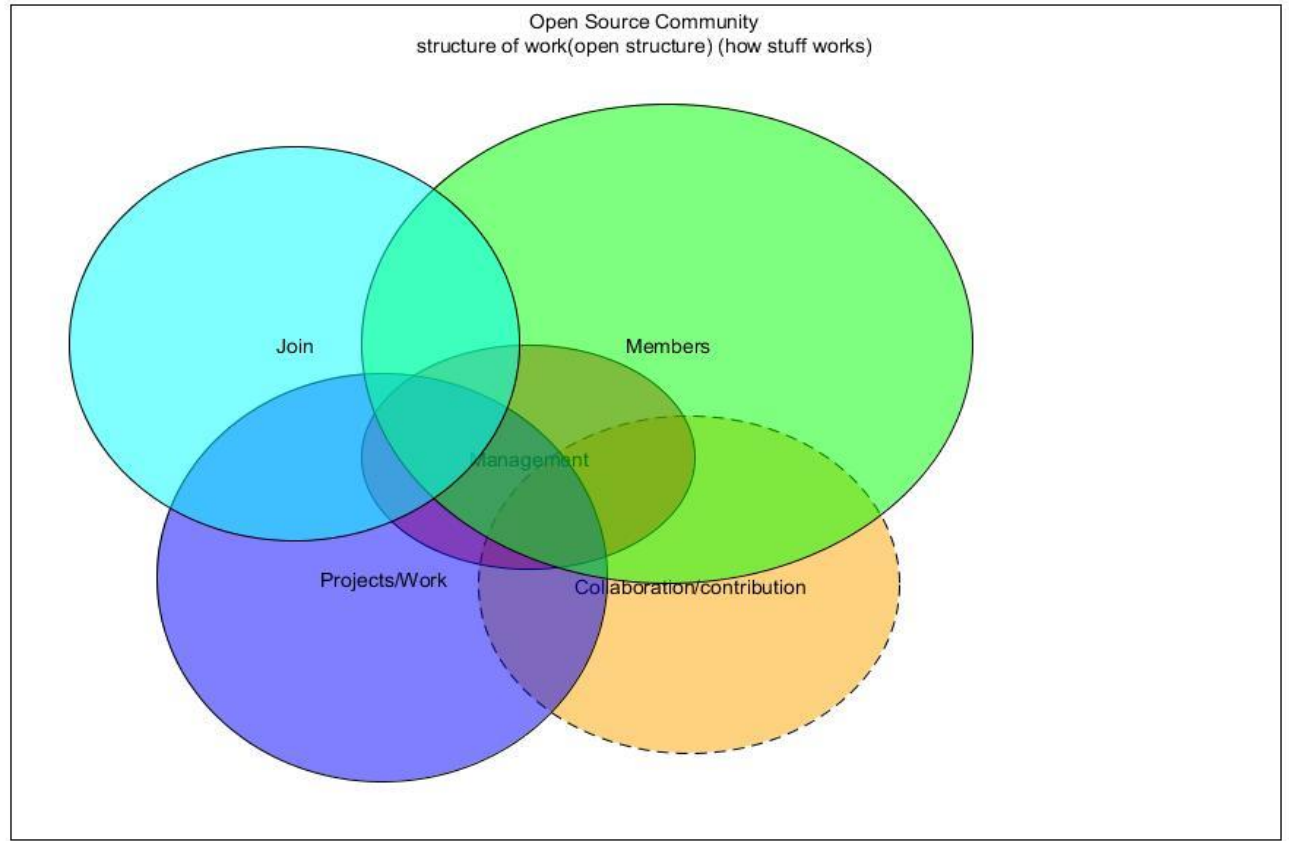


Fig 1: a conceptual view of work in Herat university open source community

Open hierarchy chart

The Herat university open source community's hierarchy chart is different from a typical hierarchy chart. HUOC's hierarchy chart is a loop like chain of contribution between its different types of members.

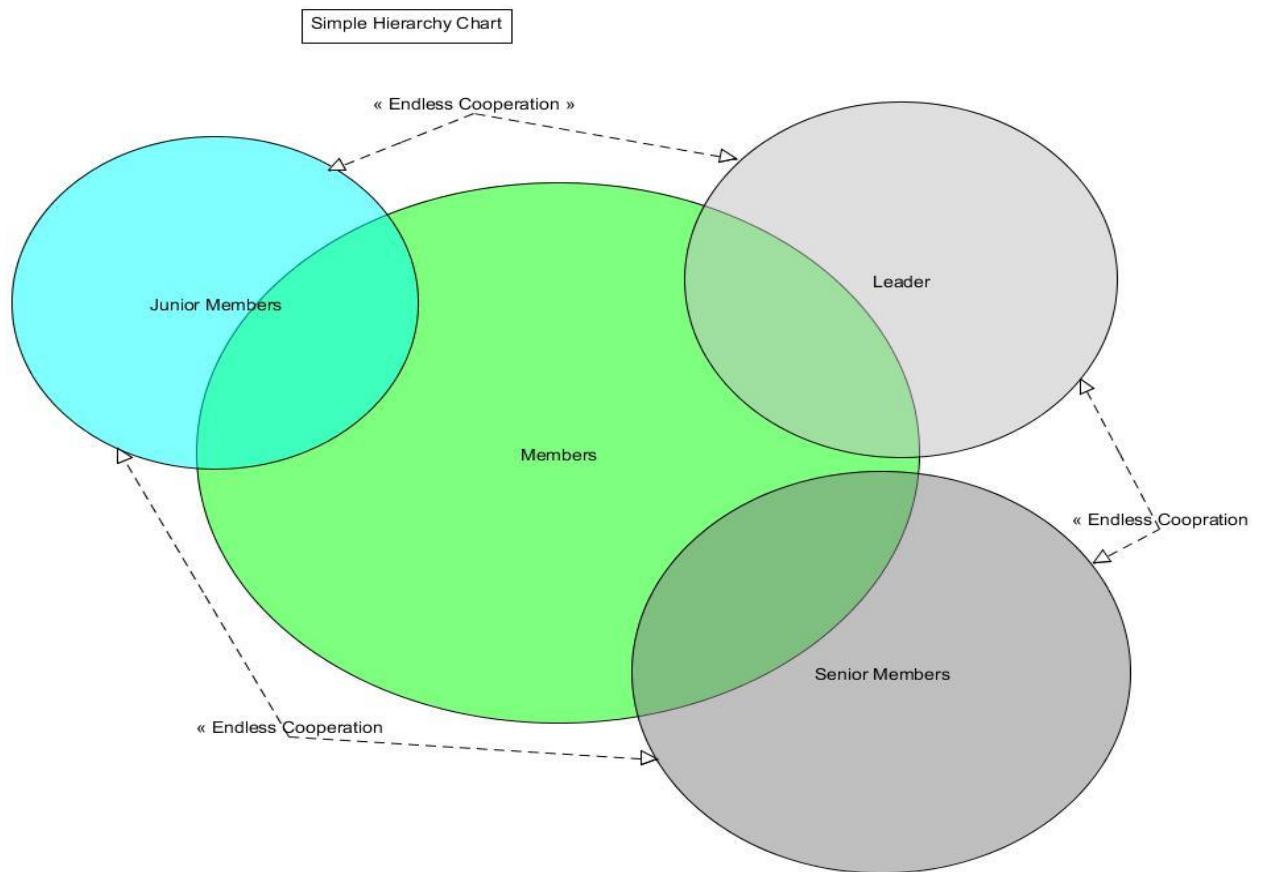


Fig 2: open hierarchy chart of Herat open source community

This hierarchy chart consists of all the members, there are three types of members in HUOC, which are the leader, senior member, and junior member.

The Leader

The leader's roles in the community are the following:

- Consoling
- Encouraging
- Leading the community
- Doing official work

- Planning
- Determining the main Focus

Senior members:

The senior member's roles in the community are the following:

- Coding
- Training juniors
- Managing projects
- Managing juniors
- Finding sponsors
- Promotion
- Learn

Junior members:

The junior member's role in the community are the following:

- Debugging
- Reviewing
- Documenting
- Helping seniors
- promotion

Promotion system

Promotion system shows how a member can upgrade its rank

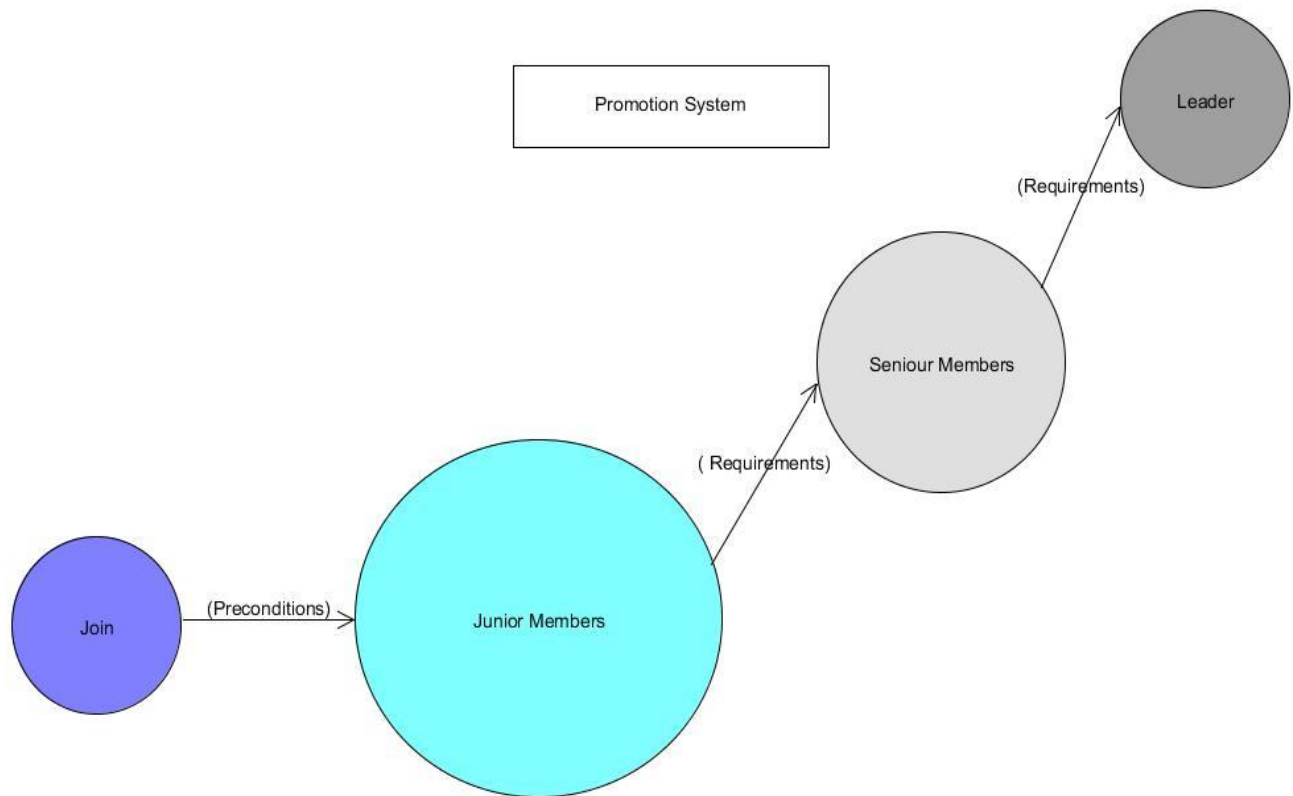


Fig 3: Herat university open source community's promotion system

Motivation system

What do students get from joining HUOC? , following are some of the factors that might keep them interested in HUOC.

- HUOC is a place to grow
- HUOC provides a platform to a better future

- HUOC provides a place to learn new materials
- HUOC provides an opportunity to gain recognition

Projects

The HUOC community will mostly work on the projects that are listed as below

- Promotional projects
- Software development projects

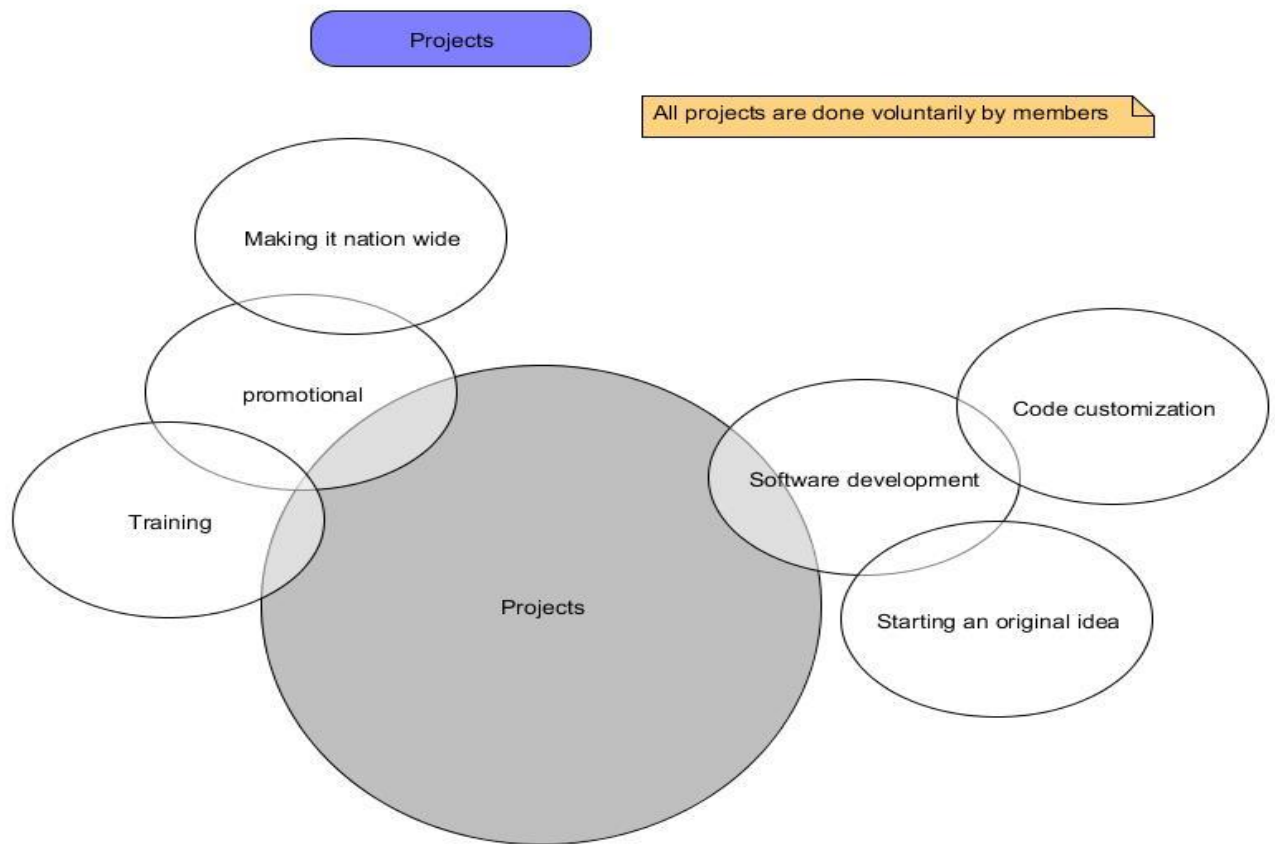


Fig 4: conceptual view of Herat university open source community's projects

Results

After writing and researching a lot about different structures, a hybrid structure was chosen for Herat University open source community, this structure is a mix of organizational and open structure, so this structure is the biggest and the most important result of this paper.

Discussion

While researching about different open source communities it was found out that most of them use a structure that we can call it an open structure, this open structure does not act or behave like an organizational structure but rather everything is done voluntarily by the community's members, but HUOC's structure which is also the most important result of this paper, is a mix of organizational and open structure, so it is a very flexible structure, it can change and adapt according to the situation, it acts as an organization when required and behaves as an open community when needed. The reason behind this flexibility is need, according to the current situation we needed such a flexible and different structure for better results.

Conclusion

At end of this paper it can be concluded that a clear structure is the most important part of a community, a community without structure is no community and a community without a clear structure is a lame community. That is HUOC members made their best effort in this part, in building a proper and working structure for the community, and it was done, we came up with a flexible and highly effective structure for the community, and we can conclude that this structure is the best structure for our community at the moment.

References

1. <http://www.thefreedictionary.com/structure>(accessed [04/06/13])
2. <http://www.credativ.com/>(accessed [09/06/13])
3. <http://opensourceforamerica.org/>(accessed [09/06/13])
4. <http://www.linuxfoundation.org/> (accessed [09/06/13])
5. <http://hookeroak.chicousd.org/Open-Structure/What-IS-Open-Structure/index.html>(accessed [04/06/13])