

InnoHubs – Accelerating innovation

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Abstract

We live in an era of digital world, which has brought business and technology together. In this world, innovation is a key factor in business development and overall betterment of society. If a creative and more effective idea gets a platform for proper guidance and implementation, it turns into an innovation. Industries are searching innovation through innovation centers. 'InnoHubs' is one such platform for transforming idea into innovation. It is to be built virtually for online mentoring by collaboration with industries, research organizations. This paper describes the working of InnoHubs, where a user will post his idea and will get guidance by expertise. The benefit of this system over traditional innovation centers is that, InnoHubs is not limited to a particular domain and eliminates the need of physical platform.

Keywords: Brainstorming, Innovation, Online-mentoring, Recommendation, virtual Incubator

1. Introduction

Exploring new idea is innovation. Innovation centers strives business development and betterment of industries and society. Innovation takes place when ideas are shared. Idea is transformed into innovation if guidance is provided properly. This platform can be physical as well as virtual. But physical platform is not always possible. Here, this project proposes the idea of 'Innohub-A virtual Incubator'. This incubator is a platform or place where people interact and work on innovative ideas. In InnoHubs any user will be able to post their ideas from various domains. Expertise from corresponding domains will guide to work on these ideas. It aims to provide a user friendly platform, attract talented mind having innovative ideas from various domains, accelerate speed of innovation by providing proper guidance and also it provides powerful recommendation system.

2. Advantages over the current System

Before online mentoring came into picture physical innovation centers' were used as a platform for innovation. But the problem with physical innovation centre was it was not possible all the time. There are many systems available for online mentoring but they are specific or they are related to particular area.

To address above challenges online innovation centre concept was proposed. For example online innovation center can provide online mentoring rather than taking mentoring by visiting physical innovation center.

3. Proposed system Architecture

Online innovation center system divided into following modules

A) Registration

In this module user will register into system as a user or mentor.

B) Recommendation

When user click on recommend button system will recommend list of mentors who belongs to same area of

interest as that of mentor.

C) Online Mentoring

In this module mentor will assign some task to the user and the dashboard will be maintained where mentor can give deadline to user to complete the assigned task and user will load his task with status such as completed, partially completed, Ok.

Other than above module there are multiple functionalities which are provided by Online Innovation center are

- User can view idea posted by other user
- User will have flexibility to choose mentor from recommended list
- User can comment on idea, like an idea
- User can invite RO and industry to view his idea

As illustrated in Figure 1, the procedures from (1) to (8) specify how online innovation system works:

In the first step user will login into system. He can either register as a user who wants to transform his idea into innovation or mentor who wants to share his knowledge.

1. User and mentor both enter their area of interest.
2. Recommendation system will match user and mentor area of interest.
3. According to area of interest the list of mentors will be recommended to the user.
4. User has the flexibility to choose mentor from recommended list.
5. One to one interaction between user and mentor get started.
6. Mentor will assign some task to user with respect to the idea elaboration. User will perform the task and mentor will evaluate the user.
7. Dashboard will be maintained for user's progress report.
8. User will get guidance at each stage of idea implementation.

4. Dashboard

It is one of the important modules of the system, describes the task allocation and completion of it in geographical format. Following is the activity diagram of dashboard:

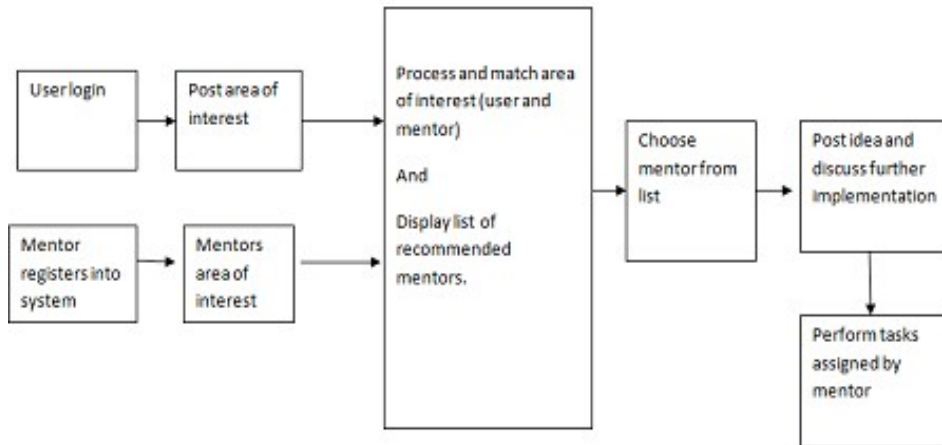


Fig 1: System Block diagram

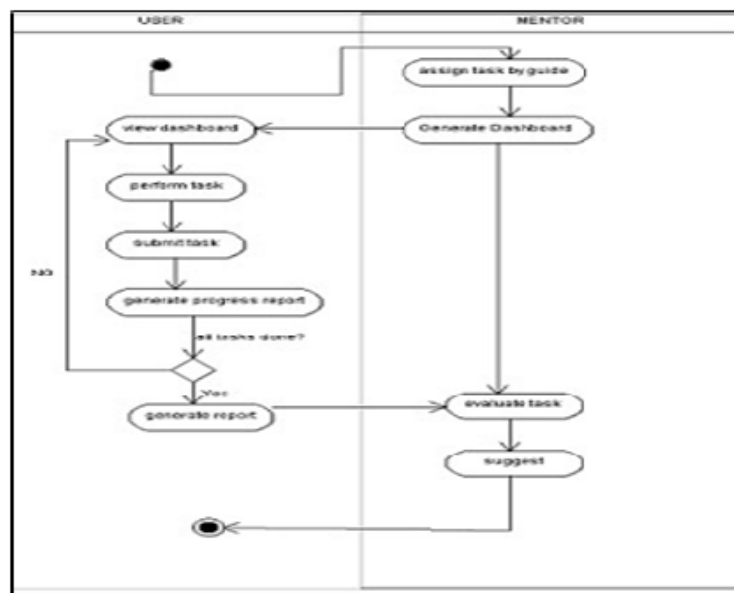


Fig 2: Activity diag of dashboard module

5. System Implementation

- Users can connect to the system by registering themselves by providing the necessary details.
- List of mentors will be recommended to the user according to their area of interest.
- From that list user will choose the mentor and

communication between user and mentor will take place. Dashboard showing the geographical report of their work will be generated.

- There will be collaboration of industries and research organizations also. The events which are organized will be notified to user.

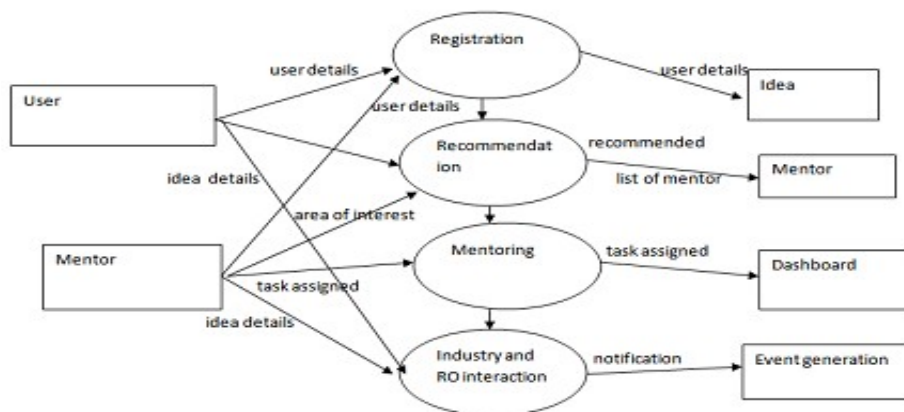


Fig 3: DFD of system

6. Use case model of system

Figure 4 shows the use case model of our system. This use case depicts the different roles played by actors in the System. Actors include

- 1) User
- 2) Industry
- 3) Research Organization
- 4) Mentor

The user is a person who wants guidance for his idea. The mentor is a person who will mentor the user. Research

organization and Industry will also provide mentors to the user who can refine his idea. User can register into the system as a user or mentor. When user registers into the system will provide them flexibility to post ideas, like the idea posted by other user, choose the mentor suggested by the system. Mentor can assign task to the user. When user submits his task to mentor, then mentor will evaluate him.

Research organization will arranged some events and notification about that event will be given to the user.

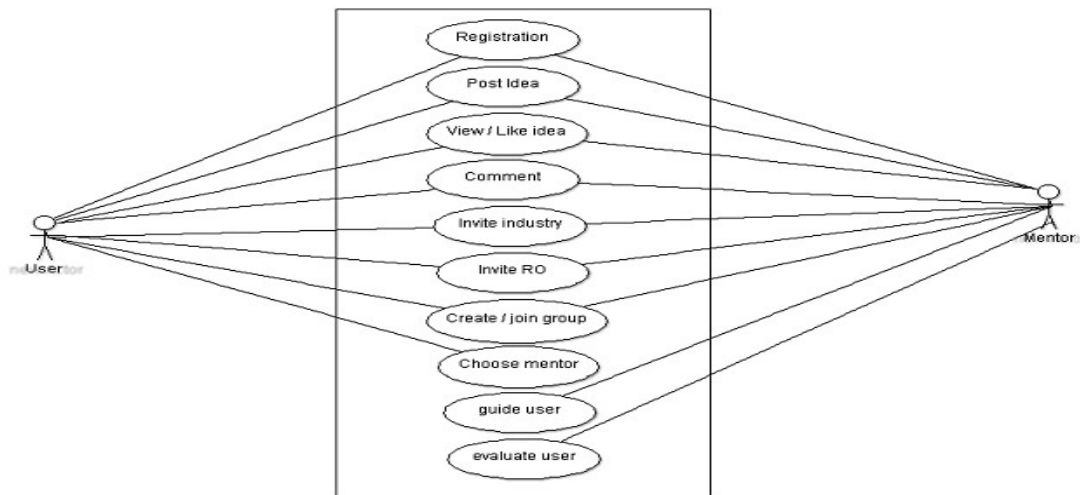


Fig 4: Use case diagram of proposed system

7. Algorithmic Approach

Recommendation system is implemented based on 3 algorithms- collaborative filtering, content based and semantic based algorithm. In our system we are using semantic as well as collaborative filtering. Collaborative filtering and a part of semantic based algorithm is used to match the area of interest of both users and mentors.

8. Conclusions

This system will be a great help for the people who have innovative ideas. They can get proper mentoring from the expertise of different domains for their idea implementation. This will be a great help to the industries as well, they can have innovation centers through such platform. Hence the system will be beneficial in those fields which input for the betterment of society.

9. References

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