



Maestría en Ingeniería en Sistemas y Computo Inteligente

Title

Design of Minv, a thematic social network

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 Design of MInv, a Thematic Social Network



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Abstract

A Thematic Social Networking (TSN) refers to web services that allow users to have a profile, a list of other users, share and create content of a specific domain. This work describes the design of MInv, a TSN to enable a collaborative community from published digital content of research methodology. A prototypical implementation is supported by the Ning platform.

1. Introduction

A social network (SN) refers to the communication between people who share common interests; this model a set of people and their links (such as friendship or labor relationships) [1]. Computationally, a SN is formalized as a G graph formed by a set of vertices (V) and a set of edges (E), $G=(V,E)$. Figure 1 shows an example of a SN, where there are 7 vertices, 5 labeled relationships and 10 edges.

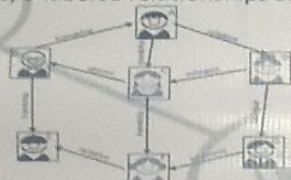


Fig 1. Example of a SN or social graph

A TSN is a SN where the elements of V and E share information about a specific topic. We are interested in research methodology.

2. Objective

To design a TSN to support learning of research methodology concepts.

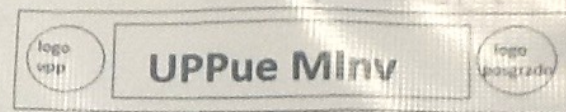
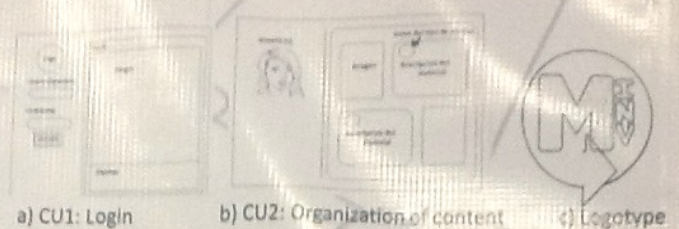
3. MInv design

In order to reduce the gap between potential users and MInv implementation, we applied User Centered Design (UCD), also known as *usability engineering*. This methodology takes into account the needs, expectations, motivations and capabilities of users.

UCD is a set of activities that enhance software usability through the implementation of the following key concepts [1]:

- *Focus early on users/tasks
- *Do iterative prototyping and evaluation
- *Involve users
- *First design the user interface

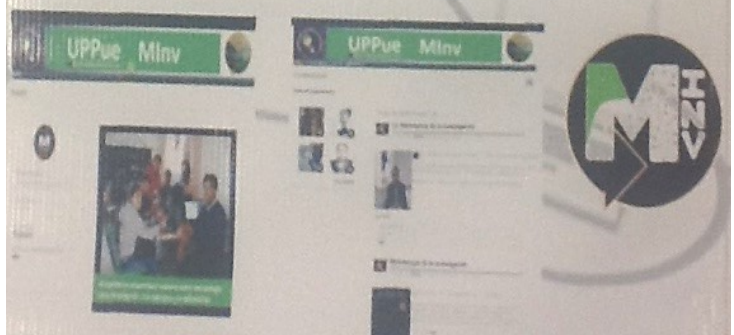
Two basic cases of use (CU) were identified: CU1 (Login) and CU2 (Organization of content). Figure 2 shows the selected mockups for these cases, this includes the design of a logotype and a banner.



d) Banner

Fig 2. Mockups of the cases of use of MInv

Figure 3 shows the implementation of the mockups using Ning, a software platform to cultivate communities. Some features of Ning are the following: content and data proprietary, social sign in, real time activities feed, management of user accounts, anti-spam tools and built-in SEO. MInv is available at:
<http://rs-uppue.ning.com/>



Conclusions

The use of UCD allowed us to analyze users and tasks of MInv and we have identified two cases of use. We considered that our main usability goals are safe to use, easy to remember how to use and effective to use. We presented an implementation of the graphic user interface. As future work, we plan to perform usability inspection and testing.

References

- [1] Boyd, d. m. & Ellison, n. b. (2007). "Social network sites: Definition, history, and scholarship". *Journal of Computer-Mediated Communication*, 13 (1). <http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2008.00408.x/full>.
- [2] Pradeep H. *User-Centered Information Design for Improved Software Usability*. 1998. Artech House Publishers.



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A decorative footer graphic consisting of a purple shape on the left that tapers to the right, overlaid with a gold band and a green band.

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