

Rwanda - Ebook

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Abstract

We will design and implement a web based database application to manage and share documents, articles, and information just for education and information purpose. This application will help Rwandese students and teachers who don't have enough access to the information and will support education. The users will be able to download and upload some documents to share in respect of copyright and rules of publications. With a limited access to the Internet connection for Rwandese students and teachers they could use this application to have information locally (intranet or local computers) or via Internet.

1 Introduction

The Rwanda like most of sub-saharian countries are still have a poor education and don't have access to the update documentation neither hard copies books or electronics copies. Van Dijk has demonstrated that in terms of physical access to computers and the Internet, the digital divide is closing in developed countries, whereas in developing societies it is still growing. In terms of skill access and usage access, the digital divide is both widening and deepening. So why we need to facilitate the access of information.

Table 3. Internet usage in Africa and on the globe 2006

| Region | Population (2006 Est.) | Share of world population | Internet users, latest data (March 2006) | Internet penetration (% population) | % Users in world |
|-------------------|------------------------|---------------------------|--|-------------------------------------|------------------|
| Total for Africa | 915,210,928 | 14.1% | 23,649,000 | 2.6 | 2.3 |
| Rest of the world | 5,584,486,132 | 85.9% | 999,214,307 | 17.9 | 97.7 |
| World total | 6,499,697,060 | 100.0% | 1,022,863,307 | 15.7 | 100.0 |

RWANDA - 11,055,976 population (2010)

- Country Area: 26,338 sq km Capital city: Kigali

- population 904,779 (2008) 450,000 Internet users as of Jun/10, 4.1% of the population, per ITU.
- 52,520 Facebook users on August 31/10, 0.5% penetration rate.

Although Africa makes up 14.1% of the world population, only 2.6% of all Internet users live in Africa. A case-study by Oyelaran-Oyeyinka and Nyaki Adeya (2004) on Internet access in Africa shows as an example of the global digital divide that the costs of Internet use in Kenya and Nigeria are extremely high: “The mid-2002 average cost of using a local dial-up Internet account for 20 h per month is about \$60 (including usage fee and local call time but excluding telephone line rental). In the US, the average cost is less than this cost including telephone charges” (Oyelaran-Oyeyinka and Nyaki Adeya, 2004, p. 71).

2 Executive Summary

Our concept is to introduce this idea in Rwanda and share the project with schools where they could integrate it according to their needs. It will be helpful for the Rwandese education. Actually we plan to use HTML, PHP or Python to develop that database and then after to let everybody (school and students) modify and implement according their needs. In other hand we need to share the idea of the impact of having information and documentation for education. We understand that is not something new in information technology, but our though is the way to facilitate that students who don't have access first for computers (fulltime) and who don't have access to the documentation for their studies. This is a special case for Rwanda. The update documentation still costly and rarely available in Rwanda. So we think to help that students and teachers to have access to the minimum we can of information of documentation.

This idea already exist in developed countries with database, libraries, e-journals, digital libraries, . . .

From the beginning of the project we will try to collect all information concerning about infrastructures (computers and their access), Internet connection availability. Then design and build the application in general and let open the source code to the school and students to adapt it to their needs and campaign for the idea to share the information.

3 Broader Impact

The effect on Society we have some points :

- The lack of “documentation” refers to a lack of elementary education.
- The lack of “material access” means a lack of possession of computers and network connections.
- The lack of “skill access” is a lack of digital skills because they don't have.

- The lack of “usage access” signifies the lack of meaningful usage opportunities.

And that means lack of access to the update documentation.

With the Loyola’s Mission : “preparing people to lead extraordinary lives” we have to think for something important for our society.

4 Dramatic impact on society

- We have to make sure everything respect the law of copyright and intellectual respect. Also not discouraging people who are involved in school business documentations (books, e-journals).
- We needs to keep in mind that all information at least must be screened for publication conformity, and the quality of contents.

5 Objectives

- Facilitate the access to the documentation
- Introduction the culture of sharing of information
- Encourage the usage of open source

6 Objectives/tasks/Milestones

Your project: [Rwanda-Ebook](#)

[Review 1 overdue milestone](#)

| Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|---|---|--|--|---|--|--|
| 6 <input type="checkbox"/> Due date for submit the project proposal - emmanuel N. | 7 | Today 8 <input type="checkbox"/> Finalize and post the project proposal - emmanuel N. | 9 <input type="checkbox"/> collect the needs informabo on the project - emmanuel A. | 10 <input type="checkbox"/> conception of the applicator - emmanuel N. | 11 <input type="checkbox"/> developm of the applicator - emmanuel N. | 12 <input type="checkbox"/> developm of the applicator - emmanuel A. |
| 13 <input type="checkbox"/> developm of the applicator - emmanuel N. | 14 <input type="checkbox"/> developm and test of the applicator - emmanuel N. | 15 <input type="checkbox"/> starting sharing the source code on bitbucket - emmanuel N. | 16 <input type="checkbox"/> update and test the source code - emmanuel N. | 17 <input type="checkbox"/> analysis of comment and suggestior to be integrated on the applicator - emmanuel N. | 18 <input type="checkbox"/> update and test the source code - emmanuel N. | 19 |

7 Evaluation of Outcome

7.1 Have a plan for testing/evaluating

We will create a benchmark and discussion group with some colleagues or end users from bitbucket

7.2 Peer review

Before integrate our project we have to show and let users analysis for the quality, contents and the utility of that project. After the feedback we can update and continuing working on project.

8 References

1. Africa and the digital divide
Christian Fuchsa, and Eva Horakb, <http://www.sciencedirect.com/science/article/pii/S0736585306000359>
2. Telematics and I nformatics Volume 25, Issue 2, May 2008, Pages 99-116