IT314 Software Engineering Team 7

Feasibility Study Report

[Keywords: Feasibility, Entelechy, WordPress]

Version 1.0

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Overview

This is the feasibility study report for Entelechy Website, Team 7's IT314 Software Engineering course project.

Target Audience

Mentors
Developers

Document Revision History

Version	Priamary Author(s)	Description	Reviewer(s)	Date
1.0	Sandeep	Feasibility Study	Akash, Manjeet	15 January, 2013

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1. Introduction

'Entelechy', DA-IICT's campus magazine is published online by the student club – 'Press Club' since 2005. As the magazine has grown over the years, and as its writers and readers have increased, the technical platform on which it operates is becoming seemingly inadequate. The website – *entelechy.daiict.ac.in* is currently hosted on popular, open source publishing tool and content management system (CMS) – 'WordPress' (*wordpress.org*). Although WordPress provides lots of features and services, and the flexibility to develop one's own plugins, themes, etc but the website in its current structure and design is not able to make good use of them—there are number of issues which the editors of the magazine face while editing/publishing articles and managing the website, also there are many features which the readers would like to see on the website to enhance their reading experience[1].

The Press Club, because of its focus on 'writing' part of the magazine hasn't been able to work much on the technical platform so, there is an essential requirement for reconstruction and redesign of the Entelechy website in a systematic manner which could meet the needs of the Press Club as well as the DA-IICT community at large, which constitutes the readers of the magazine.

Our project would focus to deliver the requirements of our client – Press Club, and the readers of the magazine Entelechy – the DA-IICT community. We plan to rebuild the Entelechy website, and if required[2] we may also develop a mobile application for the same. The aim of this feasibility report is to evaluate and analyse the potential of the project and the practical concerns which we may face working in a team of ten people with different skill sets.

2. Feasibility[3]

2.1 Technical

As per the preliminary requirements stated by our client, we have to work on the WordPress platform instead of developing a website from scratch. The rationales behind this choice are:

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[1] Based on the inputs from our client – Press Club. We will analyze these claims in depth during our requirement gathering and user study phase.

[2] If our client is not satisfied with the level of optimization of the web site on a mobile device only then, we would consider developing a mobile application – for which we'll conduct a study of smart phone penetration in the DA-IICT community. Our reasonable hypothesis is that Android is the most used platform – within our group two members have relevant experience of developing android application. We'll revisit our feasibility study in case we decide to develop a mobile application.

[3] We have used the TELOS approach, (Keyes, 2008). As cited on Wikipedia.

- The volume of the work will fit in the project duration as we won't have to implement full fledged database management, etc.
- WordPress, being the most popular content management system[4], provides reliable stability and security which otherwise won't be feasible for us to provide, as most of our team members are first time web developers.

Working on WordPress will require web programming skills and command over HTML, CSS, JavaScript, PHP and MySQL. Currently four members of our team have relevant experience in web programming so, one of the challenges which we face as a team is to make sure the rest of the members or at least two more members of the team learn web programming during the course of the project and are able to contribute in the coding and design aspects.

Learning web programming, taking in to account that we have an technical elective – 'IT342 Web Programming' this semester for which eight of us have enrolled, would require around 10 person hours per week for the first month i.e., the pre-development phase. And the team members who are experienced in web programming can provide us with the relevant knowledge till then. So, by the time we begin with the implementation phase we as a team would have required expertise to execute the project.

Also, our project requires a proper analysis of inputs from the Press Club, from some person who has knowledge of their working. Our team leader is also a core member of the Press Club, and has relevant work experience and excellent understanding of their needs, and this will be helpful in designing and conditioning the software – website.

2.2 Economic

2.2.1 Cost Wise

All the software which we'll use in this project are free and open source so, no costs will be incurred by our team.

The deployment of the software – hosting of the Entelechy website will be done on DA-IICT servers as it is being done since the inception of the magazine. We have no financial deal or transactions to be made with our client, and there is no possibility having one in future. So, even the client will not incur any cost.

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[4] CMS Usage Statistics: http://trends.builtwith.com/cms. Retrieved 11 January, 2013.

2.2.2 Time Wise

As per our preliminary estimate we'll require around 50 person hours per week to finish the project.

2.3 Legal

Our clients are our seniors and good friends at college, and our product is of significance to the DA-IICT community at large. And all the software which we'll use in our project is open source. So, we believe we are free from any legal constraints.

2.4 Operational

The software which we'll develop – the revamped Entelechy website will essentially operate as it is being operated now – hosted on DA-IICT servers, accessible to anyone on DA-IICT intranet, and requiring webmail ID and password from anyone trying to access it from outside the campus. Accessibility and operational ability of the current web site is smooth, so we do not expect any operational constraints with our software.

2.5 Scheduling

We'll produce a detailed timeline for various project milestones in our project proposal. As per our preliminary estimates of technical knowledge to be acquired and person hours per week, we believe the project would be completed within three months.

3. Conclusion

As per the feasibility analysis furnished above, we conclude that the project is perfectly feasible, and would be of benefit to – us as it will provide various learning opportunities, to the Press Club as they'll get a much better website for Entelechy, and to the DA-IICT community at large as the campus magazine will become more robust and refined.

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4. References

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