

Develop Job Finder Portal

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By

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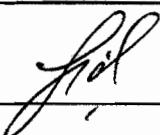
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ABSTRACT

The Internet has dramatically changed the ways both employees and employers think about job opportunities. The major benefits of Careers Online is the ability to reach a large number of job seekers at low costs, resumes can be checked and matches made more quickly. This study focused on development of a job search portal, a poor link between job portals frustrates job seekers in their job search and this project aimed at developing an easy to use portal. The applied design software engineering methodology was adopted and the job Finder was made of a simple design, high quality graphics and basic functionality and easy to use by users. The result from the development of the prototype portal was also discussed using screenshots from the prototype that was developed.

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CHAPTER ONE

1.0 INTRODUCTION

The online services are a set of standard technologies that allow applications to expose and consume functionality independent of operating system, programming language, and hardware. Online job portal is a search engine help the employees to search job and employers to post a job. The number of job postings and job searches is increased as the expansion in job market. Until 2006 there are 6,000 jobs online board competing to get the attention of employees and employers, and the number of the site stile grow but in user's minds, there is just a handful (Cramer-Krasselt, 2006).

Internet usage has been growing rapidly in recent years, especially in many developing countries and regions where more and more people are getting access to the Internet. Seventy three percent of households had access to the Internet in 2004 and (58%) and (28%) of adults used the Internet at home and work. The growing use of the Internet for recruiting purposes has opened up an entirely new dimension in online service to search a job (Stevenson, 2008).

The contents of
the thesis is for
internal user
only

References

- Ambler, S, W. (2004). The Object Primer: Agile Model-Driven Development with UML2.0. New York: USA.(PP 1-30) .
- Ambler, S. W. (2003) "UML 2 Sequence Diagram Overview" Retrieved: October 2009 Available from <http://www.agilemodeling.com/artifacts/sequenceDiagram.htm>.
- Ashish. (2007) Definition of software design Retrieved: October 2009, available from Available from <http://www.agilemodeling.com/artifacts/sequenceDiagram.htm> .
- Bevan,N.(2008) Classifying and selecting UX and usability measures. Valid Useful User Experience Measurement.(PP 1-6).
- Booch, G., Rumbaugh, J., & Jacobson, I. (2005). The Unified Modeling Language User Guide (2nd.). Upper Saddle River, NJ: Addison-Wesley. Retrieve: September 2009, available from [http://www.brighthand.com/article/InStatHandheld Predictions](http://www.brighthand.com/article/InStatHandheld_Predictions).
- Chan,S., Fang,X., Brzezinski,J.(2002).Usability for Mobile Commerce Across Multiple Form Factors. Electronic Commerce Research.(PP 187-199).
- Coakes, S.J, & stead, L. (2007). SPSS version 12.0 for windows. Analysing without English. WILEY. Retrieved: October 2009, available from: [http://ses.library.usyd.edu.au/bit stream/2123/1046/1/health sciences 2005.pdf](http://ses.library.usyd.edu.au/bitstream/2123/1046/1/health_sciences_2005.pdf).
- Collard, R. (1999). Test Design. Stqemagazine: Software Testing & Quality Engineering. Retrieved: October 2009, available from <http://softtesl.ordsif!.s/material/Rosscollard I.pdf> .
- Cramer-Krasselt.(2006) Effie Awards Brief of Effectiveness, EFFIE(PP 1-4).
- Daniel ,F ., Klaas.B. (2002) Internet Job Hunting: A Field Study of Application Experiences with ON-Line Recruiting (PP 175-192).
- Dennis, A., Wixon, B.H., & Tegarden, D. (2002). System Analysis & Design: An Object Oriented Approach Using UML.. New York: John Wiley & Sons, Inc.
- DEVA,S.(2008) Online Job Search, Department of Computing and Information Sciences,Kansas State University(PP 1 - 27).

- Garone, S. (2000). Accelerating embedded development: Rational Rose Real Time, Guide (2nd.). Upper Saddle River, NJ: Addison-Wesley. Retrieve: September 2009 from <http://productdevelop.blogspot.com/2007/09/definition-of-software-design.html>.
- Hullman,b.(2009) Online Job Seekers Find More Work Where Employers Post Free, Global Press Release Distribution(PP 1-2)
- Jacobson, I., Booch, G., & Rumbaugh, J. (1999). The Unified Software Development
- JISC .(2003). Developing port.hull –The University of Hull Portal. Ian Dolphin & Robert Sherratt e-Services Integration, The University of Hull.(PP 1-32).
- Johan (2004) “Information Systems Analysis and Design” (PP 1-14).
- Kramper,m., Marcotte,s , Stevenson,j.(2009) Well-designed Career Sites Improve Recruiting Effectiveness Even in a Down Economy, insightout,(PP 1-5)
- Li,X.,He,Q.(2005).WAF: an Interface Web Agent Framework.(PP 102 – 105).
- Lynch,s., Vahlberg,v., Oh,S , Yun,W.(2009)How to Become Easy to Use Online, Media Management Center(PP 1-13).
- Mariage,C., Vanderdonckt,J., Pribeau,C.(2003).State of the Art of Web Usability Guidelines. Université catholique de Louvain.(PP 1-25).
- Microsoft Corporation.(2006)SQL Server 2005 Express Editions(PP 1 -2).
- New Riders Publishing. Retrieved: September 2009, Available from:
http://www.idemployee.id.tue.nl/g.w.m.rauterberg/lecture_notes/ISO9241part11.pdf.
- Nielsen, J. (2000). *Designing Web Usability: The Practice of Simplicity*. Indianapolis: New Riders Publishing. Retrieved: September 2009, Available from:
http://www.idemployee.id.tue.nl/g.w.m.rauterberg/lecture_notes/ISO9241part11.pdf.
- Perthel,G.(2008) Job Search and Resource Guide for the 50+ Job Seeker(PP 1-27).
- Petrassi,J.(2008). WEB 2.0 – POTENTIAL IMPACT ON BUSINESS. CSC Global Business Solutions.(PP 1-22).
- Pofeldt,E.(2009) The Long-Range Job Hunt, CBS Interactive (PP 1-4)
- Prabhakaran,T.(2008) Recommender Agent for Job Application ONLINE System, School of Computer Engineering University Malaysia Perlis(PP 1-15)
- Process. Reading, Mass: Addison-Wesley. (PP 1-6).

- Quesenberry,W.(2001).What Does Usability Mean:Looking Beyond ‘Ease of Use’. Society for Technical Communication.(PP 1-9).
- Rational Software Corporation, USA. (PP 1-3).
- RNA Studio. (2008) Website Development Process, From Planning through Design and Production to Launch and Ongoing Support (PP 1-11).
- Sirekpwski,B.,Rhodes,C.,Goveia.W.(2001)Creating Usable Simplicity in a Text-Dased”Quick Help”Website, ACM.(PP 264-265).
- Stevenson,B.(2008) The Internet and Job Search, The Wharton School(PP 1-27)
- Uimonen,T.(2000). Case: Rational Rose 81940 A Seminar on Reverse Engineering, Software Systems Laboratory (PP 1-4).
- Vaishnavi, V., & Kuechler, B. (2007), Design research in Information Systems Retrieved: June 22, 2009. From: <http://www.isworld.org/Researchdesign/drisISworld.htm>.
- VanLengen.C., Haney,J.(2004) Creating Web Service Using ASP.NET (PP 262-275).
- Williams, J, R. (2009). Usability Testing. Retrieved: September 2009, available from Web site: <http://www.synergeticapplications.com/usability.htm>.
- Wanarsup,W. , Pattamavorakun,S., Pattamavorakun,s.(2008), Intelligent Personalization Job Web Site, IEEE(PP 959-964)
- Xiao,L., Dasgupta,S.(2006).User Satisfaction and Web Portal Use, Twelfth Americas Conference on Information Systems.(PP 1-10).