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Greatfree: the JAVA Apis and Idioms to Program Large-Scale Distributed Systems

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ABSTRACT

This paper introduces a series of APIs and idioms in Java SE (Java Standard Edition), GreatFree, to program large-scale distributed systems from scratch without adopting any third party frameworks. When programming with GreatFree, developers are required to take care of rather than be invisible to most of the implementation issues in a distributed system. It not only strengthens developers' skills to polish a system but also provides them with the techniques to create brand new and creative systems. However, taking care of many such issues is a heavy load because of the low-level of Java SE. To alleviate the burden to program with Java SE directly, GreatFree provides numerous APIs and idioms in Java SE to help programmers resolve indispensable distributed problems, such as communication programming, serialization, asynchronous and synchronous programming, resource management, load balancing, caching, eventing, requesting/responding, multicasting, and so forth. Additionally, as an open source tool to program, developers are able to strengthen their systems through not only adjusting GreatFree parameters but also upgrading GreatFree APIs and idioms themselves. According to the current intensive experiments, it is convenient for developers to program an ordinary or a large-scale distributed system from scratch with GreatFree.

KEYWORDS

Design Patterns, Distributed Systems, Wireless Network, Idioms, Application Program Interface, Distributed Programming, Concurrency

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Decorator Pattern in Web Application

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ABSTRACT

Design patterns refer to reusable program solutions that aim to solve similar design problem during development process. The good practise of using patterns is encouraged and efforts have to be taken to knowledge on design patterns. We use a decorator pattern to improving a web application. Web application is implemented using HTML language, ASP.NET, and C#.

KEYWORDS

Design Patterns, Decorator Pattern, Web Application

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Change Management: Implementation and Benefits of The Change Control in the Information Technology Environment

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ABSTRACT

In the competitive environment, companies have given increasing importance to the IT sector and the resources it delivers as strategic. As a result, IT becomes a living being within the company. This sector is being subject to continuous changes in this scenario. These changes can occur within the own IT sector or whether IT to other sectors of the company. For both scenarios, it is important to have a good change control to avoid unnecessary trouble and expense. This paper aims to show through a case study, the benefits and results obtained with the implementation of a process of managing and controlling changes in the information technology environment of a large government company in Brazil.

KEYWORD

Change control; Information technology, PMBOK, Software engineering.

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TRADITIONAL VERSUS BLENDED LEARNING METHOD: A COMPARATIVE STUDY ON ITS EFFECTIVENESS IN BUSINESS COMMUNICATION COURSE

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ABSTRACT

This article presents a descriptive comparative study on two methods of teaching, the traditional and blended learning pedagogical approach in a Business Communication course. Forty-four (44) students from the two controlled groups were enrolled in the course for the first semester of school year 2017-2018 participated in the study. The findings indicated that respondents' performance in ENGL118 (English Composition) had an effect on their performance in BUS261(Business Communication) and there was a significant positive relationship between year level and final grade in BUS261. Therefore, it was concluded that the year level and grade in ENGL118 have correlations on student's performance in BUS261. The results of the assessments of the two groups were compared and indicated a significant difference in the results which was influenced by respondents' year level and mode of conducting assessments. It is further concluded, that if the characteristics of both groups were the same, blended would have been more effective than the traditional method. This study recommends adopting the blended pedagogical approach not only in BUS261 course but also to other courses as applicable.

KEYWORDS

Flipped Class, Blended Learning, BlackBoard, Business Communication, Teaching Pedagogy

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EVALUATION OF HOSPITAL INFORMATION SYSTEMS IN SELECTED HOSPITALS OF IRAN

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ABSTRACT

Due to the information systems objectives, and to avoid duplication and to help improve care quality and reduce cost, it is necessary to conduct continuous evaluation to determine how to achieve these goals. This study was performed using evaluation indices of hospital Information systems (HIS) in selected hospitals of Iran. In this article organizational and server components of hospital information systems in selected hospitals are being assessed. This research is a descriptive cross – sectional study. The study population consisted of the information system of Shohaday Tajrish, Khatamolanbiya, Imam Khomeini and Milad Hospital. Data collecting tools were checklist of hospital information system Evaluation Index, which completed with direct observation and interviews with users. Data analyzed by statistics software SPSS, and presented as statistical tables and graphs. In the studied hospitals, although the most of the organizational components subgroups and hospital information system server components has been set up and used but pharmacy information system, decision support systems, communication services and telemedicine services hadn't been set up fully in the hospitals. Currently most subtypes of organizational components and hospital information system server components were fully in the designed software and considering all fields in 5 hospitals.

KEYWORDS

Assessment Index, Evaluation, Hospital, Hospital Information System

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THE IMPACT OF SOCIAL MEDIA ON ACADEMIC PERFORMANCE OF SELECTED COLLEGE STUDENTS

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ABSTRACT

The purpose of this article is to assess the impact of social media on academic performance of selected college students. In this article, the authors raise the actual impact of daily communication of youth in social media. Descriptive research design was utilized to gain accurate profile of situation. Sixty (60) Business Administration and Management Information System students who are actively using social media are the respondents of the study. It was conducted during the summer semester of academic year 2017- 2018. Summing-up, social networks becomes an integral part of the students' full life, took up most of their free time. Undoubtedly, in social networks, there are also things useful for the development of the students. In addition, communication with peers through social networks can help a student socialize, find new friends, discuss with them issues related to studies. Thus, it can be concluded that social media have a dual impact on student achievement, and it is necessary to approach adolescents' use of social networks with ultimate responsibility.

KEYWORDS

social network, social media, Saudi Arabia, impact of electronic technology, social media effect

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INFLUENCE OF ICTS ON WORKFORCE PRODUCTIVITY IN EGYPTIAN INDUSTRIAL ORGANIZATIONS

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ABSTRACT

Present study aims to investigate the influence of ICTs dimensions (Information Technology (IT), Management Information System (MIS), Office automation (OA), Intranet and Internet) on workforce productivity for a group of industrial organizations in Alexandria - Egypt. The population of the study was managers and staff members working in different areas related to ICTs in the selected industrial organizations at various managerial levels. Descriptive-statistical combined research study was conducted. The selection of the participating industrial organization done using simple random sampling technique. Data collection done using questionnaires. In order to check the validity of the study instrument expert comments were used and the reliability of the questions calculated as 79% using Cronbach's Alpha coefficient. The analysis of instrument data done using single variable t-test, Friedman and variance analysis. The study findings revealed that the specified dimensions of ICTs positively affect workforce productivity of industrial organizations in Alexandria - Egypt.

KEYWORDS

ICTs, Workforce Productivity, Egypt, Industrial Organizations

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CRITICAL SUCCESS FACTORS FOR INFORMATION TECHNOLOGY INFRASTRUCTURE LIBRARY IMPLEMENTATION IN PUBLIC SERVICE ORGANIZATIONS: AN EXPLORATORY STUDY

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Abstract

In recent years, market competitions and internal efficiency requirements derived many Information Technology (IT) functions to shift their paradigms from IT asset management to IT service management (ITSM). Consequently, a growing number of public and private organizations are implementing the ITIL (IT Infrastructure Library) “best practice” as a framework for improving IT service management processes. This paper presents an exploratory in-depth case study of two public service organizations in the kingdom of Saudi Arabia deemed successfully implemented ITIL V3 processes. The case studies identify several critical success factors (CSF) associated with ITIL implementation success. These CSF are then compared with factors identified in the literature to shed light on success factors and challenges to offer a learning experience for organizations currently undergoing or planning ITIL implementation.

Keywords

ITIL, IT Service Management, critical success factors, Saudi Arabia, project, process.

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ACTIVE CONTROLLER DESIGN FOR THE GENERALIZED PROJECTIVE SYNCHRONIZATION OF THREE-SCROLL CHAOTIC SYSTEMS

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ABSTRACT

This paper discusses the design of active controllers for generalized projective synchronization (GPS) of identical Wang 3-scroll chaotic systems (Wang, 2009), identical Dadras 3-scroll chaotic systems (Dadras and Momeni, 2009) and non-identical Wang 3-scroll system and Dadras 3-scroll system. The synchronization results (GPS) derived in this paper for the 3-scroll chaotic systems have been derived using active control method and established using Lyapunov stability theory. Since the Lyapunov exponents are not required for these calculations, the active control method is very effective and convenient for achieving the generalized projective synchronization (GPS) of the 3-scroll chaotic systems addressed in this paper. Numerical simulations are provided to illustrate the effectiveness of the GPS synchronization results derived in this paper.

KEYWORDS

Active Control, Chaos, Chaotic Systems, Generalized Projective Synchronization, 3-Scroll Systems.

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