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Student Profile in College Management System

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ABSTRACT: The existing E-campus management system continues to develop intensely driving the service requirements towards a deep application base in data sharing and operation cooperation. The article introduces SOA technology and the superiority of composing services according to the requirements of an information system. This article also brings forward the architecture and construction of the E-campus management system based on SOA. A thorough discussion about every aspect of the architecture is made, paying special attention to the service bus and flow conformity, giving a service composition example to illustrate the availability and effectiveness of the system architecture. The system was evaluated in terms of functionality, user-friendliness, usability, security, performance and robustness. Results gathered showed that evaluators rated the software very satisfactory in terms of functionality, user-friendliness, usability, performance, and security; and good in terms of robustness. This implies that other colleges may adopt this system for more efficient information management and more effective management decisions.

KEYWORDS: dot net, microcontroller, keypad, IVR.

I. INTRODUCTION

Nobody can ignore the national and international contributions of higher educational institutions in terms of manpower development and knowledge creation that is why government and private organizations have established links and provided support to universities. Also, many systems have been designed and developed to facilitate their operations, and improve their strategic planning capacity. The system is supplied, deployed, monitored and administered by a single coherent infrastructure, which paves the way to its sustained development. Shanchuan Xu, Wanlin Gao, Zhen Li, Shuliang Zhang, Jianing Zhao proposes a hierarchical system of reusable IVR[1], which reduces the dependence between models and uses XML files as configuration file to make the IVR easily change by modifying the XML file. The new IVR system design which makes IVR system independent from requirements and become a reusable, configurable system as a module of call center. In 2009[2], Chang-Xing QI, Qing-Dong Du represented a smart IVR system based on application gateway. A IVR system that brings the interactive information by application gateways that communicate between the call center and business information system. This system is based on the function of traditional call center. The application gateway and the IVR system and the information system background resolve the question of format conversation among the various systems in company. Dusan D. Grujic, Aleksandar R. Milic, Jovana V. Dadic proposed application of IVRS in e-learning system in[3].

In this an interactive voice response solution is used within system for e-education. One of the methods used is open source system for learning the process management is modular object oriented development learning environment. And the system is IVR e-learning which is based on voice synthesis. A speech synthesis means artificial generation of human voice. A computer system used for this purpose is called voice synthesizer and it can be implemented in a suitable hardware or software.

In [4] A comprehensive study of design, development and implementation of an automated IVR systems is proposed by Mr. Ritesh Chauhan, Mr. Vivek Joshi. This system serves the bridge between people and computer by connecting the telephone network with instructions. The IVR uses the pre-recorded or computer generated voice response to provide information in response to an input from the telephone caller. The input may be in terms of touch tone or DTMF signal, which is generated when a caller press a key on telephone. T.J. Ndwe, Etienne Barnard describes that the access to information and communication is one of the most important need in any population group in correlation between rapid learn

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ability and user preference in IVR systems for developing regions[5]. This retrains to those who are either poor or illiterate or without having knowledge of computer. Hence the user choice of interaction modality between dual tone multi frequency and speech enabled IVR modalities and correlated the results with learn ability of the different modalities.

II. SYSTEM DESIGN

PURPOSE:

Purpose of College Management System for a College (CMS) Design Document is to describe the design and the architecture of CMS. The design is expressed in sufficient detail so as to enable all the developers to understand the underlying architecture of CMS. Logical architecture of JDBC driver, Server, DML, DDL, Session and Data Store are explained.

TARGET AUDIENCE :

This Design document is intended to act as a technical reference tool for developers involved in the development of College Management System (CMS). This document assumes that you have sufficient understanding of the following

III. PROPOSED TECHNOLOGY

Proposed system will contain following module: 1] Admin:

The role of admin module is to register student, teacher, subject registration, branch registration. To provide password to student and teacher. To keep security so that no one can use another user name and password. The admin can also post the blog.

2] Teacher:

The role of teacher is to take attendance, insert marks, delete marks, generating sectional report, sending important notice to student on blog, teacher can download or upload the document.

3] Student:

The student can view marks, check his/her performance, status of attendance, student can download and upload the document. He/she cannot have the permission to change any data. If required the access will provide by the admin

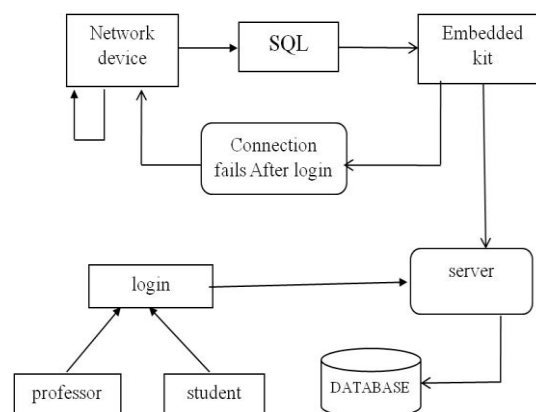


Figure 1: Flow of Student Information

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IV. COMPONENTS USED IN STUDENT PROFILE

1.External Interface Requirements:

Simple, Attractive, User Friendly ,Self-Contained, Consistent, Self-Explanatory .Robust.

2. Main modules of the system:

Campus Information: This module gives the information about how many company he/she placed.

Exams: This gives the information about how many subject he/she may fail on semester and also internal examination . **Fees:** This gives the information about he/she paid the full fess amount and remaing balance details also.

Attendance: this module gives the information about the attendance percentage about he/she.

V. WORKING OF SYSTEM

A. The System Framework Model

This paper puts forward an upgrade for the E-campus

Management System based on SOA. Its architecture is a sixtier layered service composition framework, including application interface layer, application integration layer (Enterprise Service Bus), flow integration layer, application component layer, application service and portal. Each service, which is a relatively independent application, is loosely coupled based on messages and cooperates with each other via the service bus.

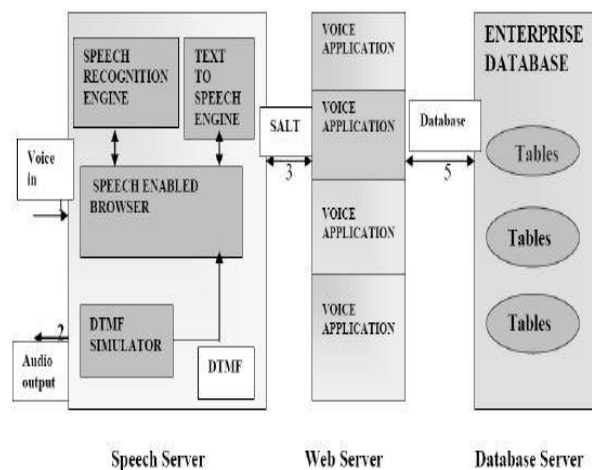


Figure 2: Software Architecture Model

B. Instance of Service Composition

Taking the example of adding an audit component into the process of deferring tuition payment, Figure 2 describes a service composition process between the application integration layer (Enterprise Service Bus) and the flow integration layer.

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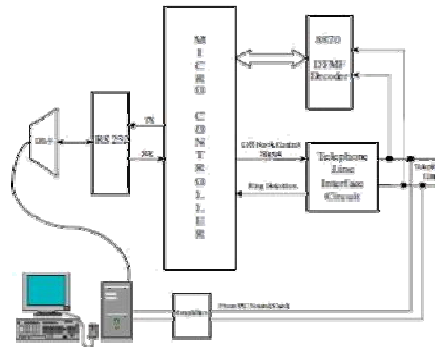


Figure 3: Hardware Architecture Model

When it is required to add audit functionality into the business process of deferred of tuition payment, the application integration layer will be configured to setup an integrated method for connecting to audit database, which can communicate with the audit database (read or insert data) using a standard data format. During communication, we will directly configure a node in the flow integration layer mapping this process. Obviously, using this manner of service composition we can easily respond to business requirement changes and directly implement direction changing support for the ECampus management System.

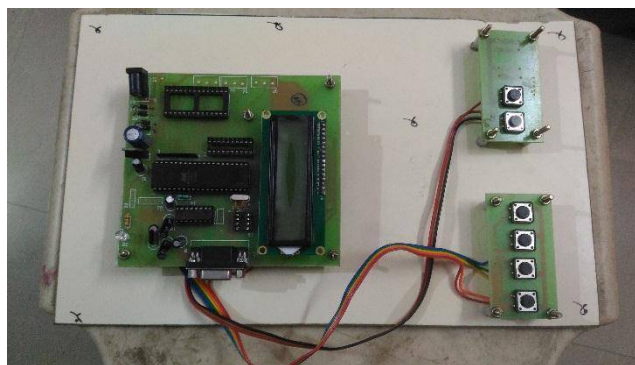


Figure3: Hardware implementation

VI. CONCLUSION

This study shows the importance of providing management information system for colleges operating within a university so that college administrators can have more informed and timely decisions and plans. As CMIS was customizable and was rated very satisfactory in terms of functionality, user-friendliness, usability, and performance, it is implied that other colleges may adopt this system for more efficient information management and more effective management decisions. As CMIS was rated very satisfactory in terms of security, it is implied that relevant data stored in the cloud is deemed secured and this environment is considered acceptable.

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