CSE/ IT software Projects CSE/ IT software Projects

ABSTRACT Project No.29

Website in Indian Languages- A Java Approach

This is a project for developing a website for any company or an educational institution in about 22 Indian languages using Google APIs. The project has two levels of users, one is the admin user for uploading content into the site and the other is the end user who can view the website in his preferred language. For user readability the project is restricted to three languages viz., English, Hindi and Telugu. The same project can be easily used for other 20 Indian languages. The user will be given an option for typing in his own native language editor among these 22 Indian Languages. A technique called Google Transliteration will be used in the project to type characters in any of the 22 Indian Languages. The website consists of the following modules:

Modules:

- 1. **Telugu Module:** This consists of developing Telugu Menus using JQuery and Transliteration and displaying the content in Telugu completely.
- 2. Hindi Module: This consists of developing Hindi Menus using JQuery and Transliteration And displaying the content in Hindi completely.
- 3. English Module: This consists of developing English Menus using JQuery and displaying the content in English completely.
- 4. Upload Module: This module consists of uploading any latest news in a Flash Message box by the admin user: This will be again in three languages viz., Telugu, Hindi and English.
- 5. Edit Module: This module can be used to edit the messages uploaded in all the three languages if any modifications are there in the flash messages.
- 6. **Multi Language Editor:** The user is allowed to use a multi language editor for typing in 22 Indian Languages apart from English and can paste this content into his own word files or text files etc.
- 7. Admin Login Module: A secure admin login will be provided for the admin user to upload any content or flash messages in all the three languages into the website.
- 8. Video Module: the Admin is also allowed to upload any videos into the website and the users are allowed to view these videos
- 9. Hit Counter Module: This is included to check the no of hits for the Website, which shows its Popularity
- 10. Slideshow Module: Photos of the Institution or organization could be made as a slideshow with text in different languages.

Existing System:

The existing system is not able to display the same website in three different languages and there is no provision for uploading content in any other language, except English.

Disadvantages:

- 1. The target audience may not be able to understand the content in the website if it is only in English.
- 2. Popularity of the website may decrease because of lack of readability by different segments of users nationwide.

Proposed System :

The proposed system is a Website in Multiple Indian languages (for our readability limited to English, Hindi, Telugu. But Editor for all 22 Indian Languages will be provided).

Advantages:

- 1. The proposed system is aimed at multiple segments of audience and hence readability of website by users of different languages increases sharply.
- 2. Popularity of the Website Increases rapidly.

Software Requirements:

Front End:

• Java Server Pages (JSP), HTML 4.0 or above, JQuery

Web server:

• Apache Tomcat Server

Back End:

• MySQL Server (Database)

OS:

• Linux / Windows 7

- Pentium IV or above processors,
- 1 GB RAM
- 80 GB HDD

Online Examination System in Indic Languages with SMS and E-mail facilities

This project is an examination system in three languages viz., English, Hind, Telugu with immediate declaration of the exam result in the web page and the same result will be sent to the candidate's e-mail address and also an SMS will be sent to the candidate after registration and at the end of the exam, regarding the marks obtained in the examination. Here two levels of users viz., the Admin and the examinee are to be created and the exam will be created by the admin. Student has to register for the exam and appear for the same to get the result.

Software Requirements:

Front End:

• ASP.NET 4.0, AJAX 1.0

Web server:

• Internet Information Services

Back End:

• MySQL Server

OS:

• Windows 7

- Pentium IV or above processors,
- 1 GB RAM
- 80 GB HDD

Enhanced Image Steganography

The rapid development of data transfer through Internet made it easier to send the data accurate and faster to the destination. There are many transmission media to transfer the data to destination like e-mails; at the same time it is may be easier to modify and misuse the valuable information through hacking. So, in order to transfer the data securely to the destination without any modifications, there are many approaches like cryptography and steganography. This Project deals with the image steganography as well as with the different security issues, general overview of cryptography, steganography and digital watermarking approaches and about the different steganographic algorithms like Least Significant Bit (LSB) algorithm. This project gives a brief idea about the new image steganographic approach that makes use of Least Significant Bit (LSB) algorithm for embedding the data into the bit map image (.bmp) which is implemented using Java.

The project is based on hiding an equal size image into a cover image by using an algorithm called LSB algorithm.

Modules:

- 1. Login Module: This module is for logging in into the application. User authentication is provided for giving security to the application.
- 2. Visible Water Marking Module: This module is to develop a text and image visible water marking technique
- 3. **Text Hiding Module:** This module is one of the main modules for implementing our text hiding LSB Algorithm
- 4. Image Hiding Module: This module is the main module for implementing our image hiding LSB Algorithm
- 5. Change Password Module: The user can change his password also, as soon as he enters into the application or any time if he wishes to change his password.

Existing System:

The existing system uses cryptographic techniques to mix images inside the cover images where both the cover and hidden images will be visible.

Proposed System:

Here the cover image contains the hidden image but the hidden image is not at all visible to anybody.

Steganographic Encoding and Decoding is required to get the Hidden Image

Software Requirements:

• Java, JDK 1.7 and O.S: Windows XP Professional/vista/7

Hardware Requirements:

• Pentium IV 2.4GHz PC with 40GB HDD (Min), 512-MB RAM (Min)

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Educational Multimedia Server – A Java Approach

This project is aimed at developing an Online MultiMedia server that is of importance to either an educational institution or a college. The system (EMS) is an Intranet based application that can be accessed throughout the institution or a specified department. The system consists of an admin level user, Faculty User and a student user. The students can register for any course and view Videos or Photo Albums and PPTs, PDFs of the Course materials in the website. The admin user can upload Videos, Photo Albums. These Videos could be played in the browser without downloading, anywhere in the LAN.

Modules:

- 1. Admin Login Module: It is authenticated from database. He can create or delete Faculty users and courses
- 2. Faculty User Login Module: authenticated from database
- 3. **Student Registration Module:** This Module helps in users to get registered for particular courses for getting syllabus and course material.
- 4. Video Upload/View Module: This module helps in uploading /deleting Video Lectures of New courses by Faculty users
- 5. **Photo Album Module:** This module helps in uploading/deleting of New Photo albums of the institution by faculty or admin.
- 6. Database Module: MySQL database for storage.
- 7. Search Engine Module: The users can search a photo /video/PPT from a list.

Existing System:

- 1. The existing system is an FTP server where proper organization and security of data is not possible.
- 2. Downloading the content is required in FTP Server and hence Redundancy of data everywhere.
- 3. Anyone may delete or modify the content and files in FTP Server.
- 4. No search engines available for FTP

Proposed System:

- 1. Data is well organized user wise
- 2. Downloading not required
- 3. Only the authenticated Faculty user can delete his own content or the admin can delete, but not anyone.
- 4. Search Engine is Possible with auto completion feature like google.

Software Requirements:

Front End:	Java Server Pages (JSP), JQuery
Web server:	Apache Tomcat Server
Back End:	MySQL 5.1 Server database, MySQL ODBC Driver 3.51/5.1
OS:	Windows XP/Vista/7

Hardware Requirements:

• PC HDD of 160GB or above and RAM of 1GB or above

E-Recruitment System

This project is a complete recruitment process done through web server. This project has three levels of users viz., Admin, Company and Job seeker. The Admin will create an interface for the companies and jobseekers. The Companies will register for recruiting job seekers. The job seekers also will get registered in the website. The companies can conduct their online examinations through this website, similarly the jobseekers can write examinations in the same website. The companies shortlist the candidates and send appointment letter to the respective candidates through this website and the same is sent via email and SMS alert could also be sent.

Software Requirements:

Front End:

• Java Server Pages (JSP) or ASP.NET 4.0

Web server:

• Apache Tomcat Server

Back End:

MySQL Server

Hardware Requirements:

• PC with Linux/ Windows 7

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# ABSTRACT Project No.34

#### **<u>Telephone Connection Management System</u>**

This project is a connection provisioning, modification and customer application form feeding system on a webserver designed specifically to suit the requirements of a typical telecom company for carrying out the commercial and technical activities related to telephone connection to subscribers. This project has four level users namely commercial officer, accounts officer, external officer, Indoor Officer. The customer requirements for provisioning or modification will be routed to these four levels.

The customer approaches the commercial officer for a new connection or a modification to the existing connection (usually a facility like STD/ISD/CLIP etc.). After that a demand note will be raised for the particular activity (i.e., new connection or modification). It is then routed to Accounts Officer for payment of this demand note. The AO approves it after payment and then it is routed to External officer for feasibility check and cable laying. Once the external Officer approves this, it is routed to MDF (Main Distribution Frame) which comes under Indoor Officer. Here jumpering of the connection takes place and the connection is then routed to Test Desk, where the connection is physically approved by the Test Desk executive and the connection is completed or closed.

In case of modification, the connection is routed from commercial to Accounts officer and then to Indoor and test desk. No Outdoor activity is involved here.

In case of deletion of a connection, the routing is from commercial to Indoor, then from Indoor to MDF and then to Outdoor and finally to test Desk.

#### Existing System:

The existing system is a desktop based Client-server system and therefore software needs to be installed both in Server and Client Systems for Operation.

#### Proposed System:

The proposed system is a centralized system which is web based. Hence no separate software is required in the client machines.

#### Modules:

- 1. **Commercial Module:** Covers all the commercial activities like provisioning, Customer Application entry, demand notes etc.
- 2. Accounts Module: Deals with payments and customer payment history, outstanding payment etc.
- 3. **Outdoor Module:** Deals with outdoor activities like cable laying, feasibility issues, Instrument details etc.

- 4. **MDF Module:** Deals with connection between Outdoor and Indoor equipments (Jumpering).
- 5. Indoor Module: Deals with giving connection and facilities like STD/ISD/CLIP etc.
- 6. **Test Desk Module:** Deals with physical testing of the telephone connection and closing the work order for connection (Connection Completion).

#### Software Requirements:

Front End:

Java Server Pages (JSP) or JDK 1.7

Coding Language:

JAVA

Back End:

MySQL Server 5.1

OS:

Windows XP Professional/vista/7/Linux

#### Hardware Requirements:

System:

• Pentium IV 2.4 GHz

Hard Disk:

• 40 GB (Minimum)

RAM:

• 512 MB (Minimum)

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ABSTRACT Project No.35 Migration of Databases – An XML Approach

XML Database Migration is a project of migrating the existing databases into XML format. Conversion of databases to XML file format, the databases like Ms-Access, Oracle and MS-SQL, MySQL connects in the network or the oracle in the personal computer can be connected for the generation of XML code. Let us consider, user runs a firm with three companies with different database's respectively. User planned to mingle the entire database's of the firm in to a single database.

The user wants to migrate the entire database in to a single database. Migration of a database to another database is a huge process and a complex one. In such case our project can be used as we are converting the entire database into a XML file and then it is to a single database. By doing so, the conversion is been made easier and the native database also will remain unchanged. Only the authorized person is allowed to access the databases. The user is been prompted for username and password and then the user can be allowed to select the type of database. After selection, the user is been prompted for database name and then corresponding tables present in that database is been displayed from which the user can select the table which the user wants to convert.

Before conversion, the user can view the table from that the user can check whether the correct table is been selected. The table is been converted and a message will be displayed to the user about the conversion. The converted file will be in the XML format and it is been previewed to the user in the database format after conversion. Here, the user can check whether all the fields in the table are converted. While converting the data's in the tables, the tables present in the database remains unchanged and the fields from the tables retrieved are subjected for XML conversion.

<u>EXISTING SYSTE</u>M

The Existing system provides access for single database conversions. Databases are widely used at present in all sorts of resources, these Databases occupy part of memory in the server and amount should be paid to maintain these Databases. In web, database is widely used at present. The database occupies some part of memory in the server and amount should be paid to maintain the database. The amount will depend upon the database size, and also Access and Oracle database are platform dependent.

XML is platform independent. While using database, lot of problems will be arise like data corruption, huge memory spaces, and unnecessary expenses for database security. Now a days most of the websites stores data in backend storage device. The data are stored in Oracle database or some other backend devices. These databases occupy some part of memory in the server. The site owner should be paid some amount of money to maintain that database. The amount should be vary depending upon the database size and also have a lot of problem to maintain the database. This is unnecessary expenses and waste of memory spaces. To retrieve the data from the database is very slow when we are browsing the site. These are the difficult arising to retrieve the database.

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Drawbacks

There are lots of problems in the existing system. They are,

- Data corruption will occur.
- Requires huge memory space.
- Unnecessary expenses for database security.

These databases occupy some part of memory in the server. The site owner should be paid some amount of money to maintain that database. The amount should be vary depending upon the database size and also have a lot of problem to maintain the database. Replication of database and backup of database has to perform on a time to time basis as it consumes large amount of memory.

PROPOSED SYSTEM

XML Migration is project to convert the existing Database like Oracle and MS-Access into the XML database. The XML is a text formatted flat file, so this project has an ability to store any kind of data from the application system. On using the xml as a backend we reduce the memory occupied in net and there is no need to pay amount separately for XML database as it is file and consumes less memory. XML has more advantages over other databases.

The XML has the ability to process on any platform, since it is platform independent we can use it in any operating system. Apart from this no proxy server or firewall can restrict xml formatted data's. Here maintenance is very easy as it is a file and consumes very less memory.

Previously in database maintenance is a major task and cost paid separately. Many databases are not supported in different platforms but XML file format supports different platforms like Linux, Windows etc., As .NET transfers data in the form of XML formatted data only. As this is a major advantage to us in converting to XML. XML flat file format is used as an intermediate for the Database conversions.

Software Requirements:

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Front End:

.NET 2008 with ASP, C#.0 or above

Back End:

• MySQL Server 2000, Oracle 8i, MySQL, MS-Access

- PC Processor above 500 MHz with Windows 2000/XP/Vista/7
- RAM 128 MB and above
- HDD 10 GB and above

IDS in Wired and Wireless Networks with port database

This project is a network layer intrusion detection system with port identification by detection systems (sensors) for detecting a false intruder by comparing the existing port numbers in the database with the intruder port number. The intrusion detection system is for both homogeneous and heterogeneous wireless networks as well as for a wired network scenario.

Intrusion detection in Wireless Sensor Network (WSN) is of practical interest in many applications such as detecting an intruder in a battlefield. The intrusion detection is defined as a mechanism for a WSN to detect the existence of inappropriate, incorrect, or anomalous moving attackers. In this project, we consider this issue according to heterogeneous WSN models. Furthermore, we consider two sensing detection models: single-sensing detection and multiple-sensing detection... Our simulation results show the advantage of multiple sensor heterogeneous WSNs.

We analyze the intrusion detection problem under two application scenarios: singlesensing detection and multiple-sensing detection. According to the capability of sensors, we consider two network types: homogeneous and heterogeneous WSNs We define the sensor capability in terms of the sensing range and the transmission range. In a heterogeneous WSN some sensors have a larger sensing range and more power to achieve a longer transmission range. Furthermore, in a heterogeneous WSN, high capability sensors usually undertake more important tasks (i.e., broadcasting power management information or synchronization information to all the sensors in the network, it is also desirable to define examine the broadcast reachability from high-capability sensors. network and The connectivity and broadcast reachability are important conditions to ensure the detection probability in WSNs. They are formally defined and analyzed in this project.

Existing System:

- 1. Single-sensing detection, the intruder can be successfully detected by a single sensor.
- 2. Previous work was according to homogeneous single sensor in wireless sensor network
- 3. It is because individual sensors can only sense a portion of the intruder.

Proposed System:

- 1. Intrusion detection in heterogeneous WSNs by characterizing intrusion detection with respect to the network parameters.
- 2. Two detection models are:
 - i. Single-sensing detection.
 - ii. Multiple-sensing detection models.

These are two detection models

- We are detecting the intruder both in single sensor and multiple sensor heterogeneous wireless sensor network and in wired network also.
- > The Ports are stored in a Database and compared with the requesting ports to detect whether it is an intruder or not.

Modules:

- 1. Constructing Sensor Network.
- 2. Packet Creation
- 3. Find authorized and un authorized port
- 4. Constructing Inter-Domain Packet Filters
- 5. Receiving the valid packet

Software Requirements:

Front End:

Java

Back End:

MySQL Server

Tool Used:

• Editplus / Netbeans 7.1

Operating System:

• Windows Xp/Vista/7

- PC with PENTIUM IV 2.6 GHz
- Ram -512 MB DD RAM
- HDD 20 GB (Minimum)

Account Tracking System on Andriod

Android is an software platform and operating system for mobile devices. Being an open-source, it is based on the Linux kernel. It was developed by Google and later the Open Handset Alliance (OHA). It allows writing managed code in the Java language. Due to Android here is the possibility to write applications in other languages and compiling it to ARM native code.

This Android application allows user to keep track of current balance in different bank accounts held by the user and the transactions of those accounts

The following are the major operations in this application.

- 1. List of bank accounts.
- 2. Adding new bank account
- 3. Updating an existing bank account
- 4. Deleting a bank account
- 5. List of transactions related to a bank accounts
- 6. List of recent 10 transactions from all accounts
- 7. Search Transactions by date and amount
- 8. Showing all details of a single transaction
- 9. Deleting a transaction

EXISTING SYSTEM:

The existing system doesn't provide the above mentioned features in the Andriod Mobile.

PROPOSED SYSTEM:

The proposed system will achieve the above features on the Andriod Mobile.

Software Requirements:

Front End:

• Java, JDK, MyEcllipse, Android SDK

Web Browser:

• Mozilla Firefox or any browser

Operating System:

Windows Xp or any latest version of windows

Hardware Requirements:

PC

- PC with PENTIUM 4
- RAM -512 MB (Minimum)
- HDD 40 GB (Minimum)

Mobile

Android Mobile

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Andriod Based Examination System

Android is a software platform and operating system for mobile devices. Being an open-source, it is based on the Linux kernel. It was developed by Google and later the Open Handset Alliance (OHA). It allows writing managed code in the Java language. Due to Android here is the possibility to write applications in other languages and compiling it to ARM native code.

This Android application uses Database Sqlite to store questions and answers. Module for adding questions for exam and answer will be designed. A dynamically Generated Question paper would appear with Random Questions in the paper. It's a mobile application for students to take exam.

The project includes.

- 1. Questions Addition Module
- 2. Exam Module
- 3. Result Module
- 4. Random Question Generation Module.

EXISTING SYSTEM :

The existing system doesn't provide the above mentioned features in the Andriod Mobile.

PROPOSED SYSTEM:

The proposed system will achieve the above features on the Andriod Mobile i.e., students can take an exam on Andriod Mobile.

Software Requirements:

Front End:

• Java, JDK, MyEcllipse, Android SDK

Back End:

SQLite

Web Browser:

• Mozilla Firefox or any browser

Operating System:

• Windows Xp or any latest version of windows

Hardware Requirements:

PC

- PC with PENTIUM 4
- RAM -512 MB (Minimum)
- HDD 40 GB (Minimum)

Mobile

Android Mobile

SMS Protection Application

Android is an software platform and operating system for mobile devices. Being an open-source, it is based on the Linux kernel. It was developed by Google and later the Open Handset Alliance (OHA). It allows writing managed code in the Java language. Due to Android here is the possibility to write applications in other languages and compiling it to ARM native code.

This project is for hiding sms in a mobile. This application will be developed to first time install in mobile and then set password as default password. No database is being used in this application. User can protect his sms with password. This application is useful for the user to protect his messages from being viewed by others in android phone.

The project includes.

- 1. Password Module
- 2. SMS Message Hiding Module
- 3. SMS Message Authentication Module
- 4. Password Decode Module

EXISTING SYSTEM :

The existing system doesn't provide the above mentioned features in the Andriod Mobile.

PROPOSED SYSTEM:

The proposed system will achieve the above features on the Andriod Mobile ie., the user can protect his SMS Messages on Andriod Mobile.

Software Requirements:

Front End:Java, JDK, MyEcllipse, Android SDK

Back End:

SQLite

Web Browser:

• Mozilla Firefox or any browser

Operating System:

Windows Xp or any latest version of windows

Hardware Requirements:

PC

- PC with PENTIUM 4
- RAM -512 MB (Minimum)
- HDD 40 GB (Minimum)

Mobile

Android Mobile

Google Map Application using Andriod SDK

Android is an software platform and operating system for mobile devices. Being an open-source, it is based on the Linux kernel. It was developed by Google and later the Open Handset Alliance (OHA). It allows writing managed code in the Java language. Due to Android here is the possibility to write applications in other languages and compiling it to ARM native code.

This project involves a Google Maps application development using andriod sdk. These google maps are helpful for knowing the location and layout of a particular area that is being asked for in the Map search.

The project includes.

- 1. Map Search Module
- 2. Simple Google Maps Module
- 3. Test Map Module
- 4. Location display Module

EXISTING SYSTEM :

The existing system doesn't provide the above mentioned features in the Andriod Mobile.

PROPOSED SYSTEM:

The proposed system will achieve the above features on the Andriod.

Software Requirements:

Front End:Java, JDK, MyEcllipse, Android SDK

Back End:

SQLite

Web Browser:

• Mozilla Firefox or any browser

Operating System:

• Windows Xp or any latest version of windows

Hardware Requirements:

PC

- PC with PENTIUM 4
- RAM -512 MB (Minimum)
- HDD 40 GB (Minimum)

Mobile

Android Mobile