

# Project Management Using Data Mining

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## ABSTRACT

Today managers in the corporate world face many problems related to decision making based on the huge pool of data generated from various offices or branches located at different localities. The decision-making process is very important as decisions taken by management could make a company either overtake or stay within reach of its competitors. This problems arise as there is lack of mobility and no proper method to represent the data in an efficient manner. The solution to this is an Android application which will be easily available to the managers to enable them to take instant decisions as they are available on smart phones. The objective of this paper is to propose a system which retrieves summarized data from a central database then processes and displays that information on an android device so as to aid managers in their decision making process.

**Keywords:** Android, Eclipse, Java, PHP, MySql, Xampp

## I. INTRODUCTION

Decision making is very trivial and time consuming task for the managers of any organization as it requires too much efforts to be taken by the managers in going through huge pool of data which is collected from many offices from different localities. In today's world the popularity of smartphone with android Operating System (OS) is increasing and is gaining more and more importance among user. The objective of the project is to take advantage of fast growing popularity of the Android Devices and to develop an Android Application that will enable the managers to take instant decisions that could make the company function along with the competitive world.

The purpose of this project is to extract important data from central database and display then on the Web based application and Android application. When it comes to extracting useful data from the database data mining comes into picture. There are different data mining algorithms used in the project to extract data from the central database. As the amount of data in corporate world keeps on increasing every single minute there is huge amount of data that is collected. This data can be processed using Big Data technology like Hadoop. The next important part in the project is displaying the extracted data in such a way that can

enable any person to make instant decision. It is scientifically proved that a person can understand pictorial data better than textual data, so it is important that in the application extracted data must be displayed in graphical and pictorial form, this can be achieved by using dashboard technology.

## II. METHODS AND MATERIAL

### A. Existing System

Balance book is an application which helps users easily manage small business sales and expenses. It tracks a user's sales, expenses, balance sheets profit charts on a daily weekly, monthly or yearly. Development is simple and a person with generic Skills can create these system.

The Security in the existing system was provided by using the following things:-

- Access Control
- Authentication
- Views
- Application Security

### B. Proposed System

**Figure 1.** System Architecture

The proposed system is Android Application for faculty or for project leaders. Using this application a project leader can have a look of a project, he is undertaking, as well as the information about any student. It will show following fields if searched for a project:

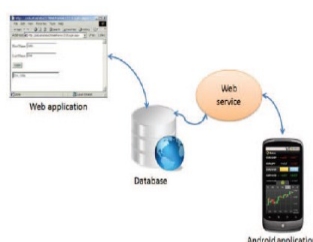
1. Project's Name
2. Description
3. Duration
4. Number of students assigned
5. Number of resources allotted
6. Department

And Employee information as follows:

1. Employee Name.
  2. A project he is working upon.
  3. Grade.
  4. Achievements.
  5. E-mail Id.
  6. Contact No.
  7. Designation.
  8. Status of the project
- The project leader can add a project, make updates to any project, assign any student to any particular project and can remove any student according to his performance. He can analyze a project and take crucial decisions.
  - He will also come to know about project relevant news and notices and can try to upgrade its status.
  - It also provides facilities like messaging and quick notes.
  - After certain period of time, an alert message will be sent to project members to make aware about deadline.
  - A project leader can verify how much work is done by using remote desktop technique, in case any member fakes.

### III. DESIGN AND IMPLEMENTATION

#### a. System Architecture



#### b. System Components

##### Web Application

This would be created using asp.net. It would be an interface via which students would enter information captured at local offices. The information captured would be stored on a central database.

##### Database Server

This component would host the database which would store information that would be captured at local offices. The data would be hosted in a Microsoft SQL databases and accessed by android application.

##### Web Service

This would enable information to be exchanged between the database and android application cannot communicate directly with database.

##### Android Application

This would enable application that would access the database over the internet, retrieve and display a summarized version of the data captured in the standard APIs to ensure that all components across the system are database.

##### Android

Android is an operating system for mobile devices such as SMART phones and tablet computers. It is developed by the Open Handset Alliance led by Google. Android consists of a kernel based on the Linux kernel, with middleware, libraries and APIs written in C and application software running on an application framework which includes Java-compatible libraries based on Apache Harmony. Android uses the Dalvik virtual machine with just-in-time compilation to run compiled Java code. Android has a large community of developers writing applications ("apps") that extend the functionality of the devices.

##### Applications

Android will ship with a set of core applications including an email client, SMS program, calendar, maps, browser, contacts, and others. All applications are written using the Java programming language.

##### PHP

PHP is a general-purpose server-side scripting language originally designed for web development to produce dynamic web pages. For this purpose, PHP code is embedded into the HTML source document and interpreted by a web server with a PHP processor module, which generates the web page document. It also has evolved to include a command-line interface capability and can be used in standalone graphical applications. PHP can be deployed on most web servers and as a standalone interpreter, on almost every operating system and platform free of charge.

## **MYSQL**

MySQL is a relational database management system (RDBMS) that runs as a server providing multi-user access to a number of databases. It is named after developer Michael Widenius daughter, My. The SQL phrase stands for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. Free-software open source projects that require a full-featured database management system often use MySQL.

## **XAMPP SERVER (Cross-Platform Apache MariaDB PHP Perl)**

XAMPP is an acronym formed from the initials of the operating system Microsoft Windows and the package: Apache, MySQL and PHP, Perl or Python. Apache is a web server. MySQL is an open-source database. PHP is a scripting language that can manipulate information held in a database and generate web pages dynamically each time content is requested by a browser. Other programs may also be included in a package, such as phpMyAdmin which provides a graphical user interface for the MySQL database manager, or the alternative scripting languages Python or Perl. Equivalent packages are MAMP (for the Apple Mac) and LAMP (for the Linux operating system).

## **ECLIPSE (Helius)**

Eclipse is a multi-language software development environment comprising an integrated development environment (IDE) and an extensible plug-in system. It

is written mostly in Java and can be used to develop applications in Java. It can also be used to develop packages for the software Mathematica. The IDE is often called Eclipse ADT (Ada Development Toolkit) for Ada, Eclipse CDT for C/C++, Eclipse JDT for Java, and Eclipse PDT for PHP.

## **IV. CONCLUSION**

This project when implemented would help senior management in running the affairs of the college as it would reduce the amount of information senior management would have to analyse before plotting strategies and predicting trends based on the summarized data. It would also enable senior management to have up-to-date information on their Android device whenever they may find themselves with an active data connection. In this project exiting business analytics were used, however incorporation of data mining and artificial intelligence techniques into this application would be worked upon.

## **V. FUTURE SCOPE**

The scope of this project is to show the potential use of the Android applications within educational institutions in the decision-making process. In large institutions where faculty have to make quick decisions to enable their institutions remain competitive and be profitable decision-making is very key in such institutions since any wrong decision made could have serious repercussions on the institutions. Top-level managers make such decisions within these organizations and before making any decision they go through college records. Decision-making is based on information garnered. At times information on which to base their decision on are so voluminous that the decision-making process takes longer than required.

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