

An Android Platform for Acquainting Differently Abled Students with Writer Students

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Abstract All over the state the process of finding writers for the differently abled students during their examination is quite long causing lot of discomfort. It's mentioned in the words "a struggle" by the parents of some differently abled. The differently abled who may sometimes feel an inferiority complex about themselves because of their disability or in some cases because of the treatment given by the society this struggle adds up to the grief. In this android application students may carry out this process in an efficient manner online without having to worry. This will be helpful and also a step towards social development of our society. System reduces the overall manual work and hardship hence saving time. More aspects of our work and life move online and the Web expands beyond a communication medium to become a platform for business and society. Application makes use of dynamic web page technique JSP, web server Tomcat, MySQL database where data is stored and synced in cloud database data across all clients in real time and, remains available when your application goes offline. The overall system is of great use to the society hence making the society a better place to live in.

Key Words: MySQL, JSP, Differently-abled students, writer students

1. INTRODUCTION

As there is a lot of paper work and manual record keeping hardship involved in the process of providing differently abled students with student writer volunteers this application makes use of real time database as this technology has recently emerged as a new paradigm for hosting and delivering serves over the internet. As more aspects of our work and life move online and the Web expands beyond a communication medium to become a platform for business and society, a new paradigm of large-scale distributed computing has emerged in our lives. MySQL, which is used to save database is a freely available open source Relational Database Management System (RDBMS) that uses Structured Query Language (SQL). SQL is

the most popular language for adding, accessing and managing content in a database. It is most noted for its quick processing, proven reliability, ease and flexibility of use. Apache Tomcat, often referred to as Tomcat Server, is an open-source Java Servlet Container developed by the Apache Software Foundation (ASF) used as server in the application. Tomcat implements several Java EE specifications including Java Servlet, Java Server Pages (JSP), Java EL, and Web Socket, and provides a "pure Java" HTTP web server environment in which Java code can run. As it's a MySQL based system it's quite efficient, hence providing hope and huge support for the differently abled. The overall system is of great use to the society. In this way needy students are provided with an efficient way for finding writers as nowadays it's a struggle to get writers. Also volunteers get an opportunity to extend a helping hand in free time. Keeping the courteous aspect of society in mind this is a leading step hence making the society a better place to live in by improving those parts of the society which are often not thought about.

2.1. Existing system

Currently the process of making writers available for the differently abled students is done manually. This involves paper work where the school or college students fill an application and hardcopy is sent to the board and the board allocates a writer respectively.

2.2. Disadvantages of existing system

- Manual process involves lot of paper work.
- Very difficult for the differently abled students of the remote areas to get a writer.

3. PROPOSED SYSTEM

All over the state the process of finding writers is quite long causing lot of discomfort. Using this android application students may carry out this process in an efficient manner

online without having to worry. This will be helpful and also a step towards social development of our society. In this system, in the web part institutes can register with institute name, official email, institute code and few other details, thus institute can login and add details of differently abled students like name and studying standard, from their institute and will receive password for these students via email. In the android application from the home page by entering into the writers tab enthusiastic, willing to help students register with name, date of birth, studying grade, location and few other details. In the differently abled tab, these differently abled students are asked to enter username and password provided and get a list view of available writers in their area, along with writers eligible for their standard only with their details. The proposed system has two parts :a web based and android application with two users 1.Writer student and 2.Differently abled student. The data of the entire system will be handled by MySQL database. PHP Admin of XAMPP Apache which is an open source software written in PHP is used to handle the administration of MySQL over the World Wide Web. It also supports wide range of MySQL Operations. Apache Tomcat server is used in our system. It is a Web server and a Servlet container. It implements the java Servlet and java server pages. It provides a "pure java" HTTP server environment for java code to run. In this way needy students are provided with a efficient way for finding writers as nowadays it's a struggle to get writers. Also volunteers get an opportunity to extend a helping hand hence making this society a better place to live in by improving those areas of the societies which are often not though.

3.1. Advantages of propose system

- Eliminates manual interventions involved.
- Increased speed of overall process .
- Efficient way for acquainting differently abled students with writers.
- Of great use in remote areas.

4. Applications

- Useful for students appearing for various exams.
- It's of great help to those who are staying in the remote areas and need writers.
- Different abled students who need writers gets a writer immediately at an instance by using our application from their homes itself rather actually going out and finding writers from place to place

5. SYSTEM REQUIREMENTS

5.1. SOFTWARE REQUIREMENTS

- Android Studio
- Java Language
- Eclipse
- Tomcat Server

5.2. HARDWARE REQUIREMENTS

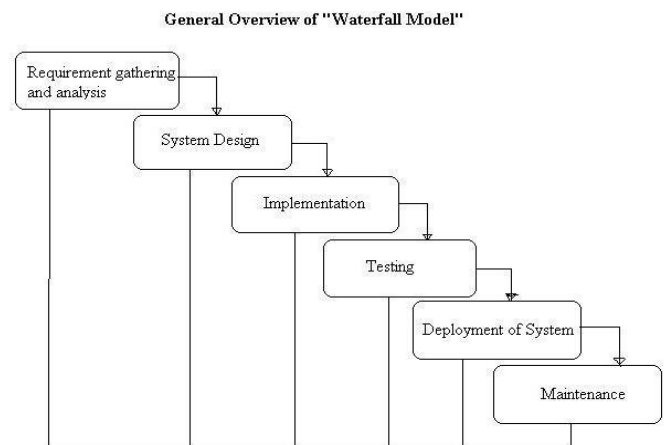
Processor: Intel i3 core
 Speed: 1.1GHz
 RAM: 2GB
 Hard disk: 50GB
 Floppy drive: 1.44MB
 Keyboard: Standard windows keyboard
 Mouse: Two or three button mouse
 Monitor: SVGA
 Operating System : Windows 10
 Coding language: JDK 1.7

6. MODULES

PROJECT PLAN

PROJECT ESTIMATES

We are using waterfall model for our project estimation.



6.1. Requirement gathering and analysis:

In this step of waterfall we identify what are various requirements are need for our project like the software and hardware required, database, and interfaces.

6.2. System Design:

In this system design phase we have designed the system including the System Architecture, Use-Case Diagram which can be easily understood by the end user to make our system user friendly.

6.3. Implementation:

In implementation phase of our project we have implemented various module required for successfully getting expected outcome at the different module levels. With inputs from system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality which is referred to as Unit Testing.

6.4. Testing:

The different test cases are performed to test whether the project module are giving expected outcome in assumed time.

All the units developed in the implementation phase are integrated into a system after testing of each unit. Then in the Post integration the entire system is tested for any faults and failures.

6.5. Deployment of System:

Once the functional and nonfunctional testing is done, the product is deployed in the customer environment or released into the market.

6.6. Maintenance:

There are some issues which come up in the client environment. To fix those issues patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

All these phases are cascaded to each other in which progress is seen as flowing steadily downwards like a waterfall through the phases. The next phase is started only after the defined set of goals are achieved for previous phase and it is signed off, so the name "Waterfall Model". In this model phases do not overlap.

7. Data Description:

Describing and documenting data is essential in ensuring that the researcher, and others who may need to use the data, can make sense of the data and understand the processes that have been followed in the collection, processing, and analysis of the data. Research data are any

physical and/or digital materials that are collected, observed, or created in research activity for purposes of analysis to produce original research results or creative works.

8. Functional model and Description:

8.1. Performance Requirement

Performance of the functions and every module must be well.

The overall performance of the software will enable the users to work efficiently.

8.2. Safety Requirement

The application is designed in modules where errors can be detected and fixed easily.

This makes it easier to install and update new functionality if required.

8.3. Security Requirement

User's all details are confidentiality. Data is modified by authorized person in authorized manner. User need to go through authentication process. Permissions to be assigned to All Authenticated entities

9. METHODOLOGY

9.1 MySQL Features

- **Relational Database System:** Like almost all other database systems on the market, MySQL is a relational database system.
- **Client/Server Architecture:** MySQL is a client/server system. There is a database server (MySQL) and arbitrarily many clients (application programs), which communicate with the server; that is, they query data, save changes, etc. The clients can run on the same computer as the server or on another computer (communication via a local network or the Internet). Almost all of the familiar large database systems (Oracle, Microsoft SQL Server, etc.) are client/server systems.
- **SQL compatibility:** MySQL supports as its database language -- as its name suggests -- SQL (Structured Query Language). SQL is a standardized language for querying and updating data and for the administration of a database. There are several SQL dialects.

- Triggers:** Triggers are SQL commands that are automatically executed by the server in certain database operations (INSERT, UPDATE, and DELETE). MySQL has supported triggers in a limited form from version 5.0, and additional functionality is promised for version 5.1.
- User interface:** There are a number of convenient user interfaces for administering a MySQL server.
- Full-text search:** Full-text search simplifies and accelerates the search for words that are located within a text field. If you employ MySQL for storing text you can use full-text search to implement simply an efficient search function.
- Replication:** Replication allows the contents of a database to be copied (replicated) onto a number of computers. In practice, this is done for two reasons: to increase protection against system failure (so that if one computer goes down, another can be put into service) and to improve the speed of database queries.
- Programming languages:** There are quite a number of APIs (application programming interfaces) and libraries for the development of MySQL applications. For client programming you can use, among others, the languages C, C++, Java, Perl, PHP, Python, and Tcl.
- ODBC:** MySQL supports the ODBC interface Connector/ODBC. This allows MySQL to be addressed by all the usual programming languages that run under Microsoft Windows (Delphi, Visual Basic, etc.). The ODBC interface can also be implemented under Unix, though that is seldom necessary.
- Platform independence:** It is not only client applications that run under a variety of operating systems; MySQL itself (that is, the server) can be executed under a number of operating systems. The most important are Apple Macintosh OS X, Linux, Microsoft Windows, and the countless Unix variants, such as AIX, BSDI, FreeBSD, HP-UX, OpenBSD, Net BSD, SGI Iris, and Sun Solaris.
- Speed:** MySQL is considered a very fast database program. This speed has been backed up by a large number of benchmark tests (though such tests -- regardless of the source -- should be considered with a good dose of skepticism).

9.2 Apache Tomcat server

Apache Tomcat, is an open source web server and servlet container developed by the Apache Software Foundation. Basically, it implements the Java Servlet and the JavaServer Pages (JSP) specifications from Sun Microsystems, and provides a "pure Java" HTTP web server environment for Java code to run in. In the simplest configuration Tomcat runs in a single operating system process. The process runs a Java virtual machine (JVM) and every single HTTP request from a browser to Tomcat is processed in the Tomcat process in a separate thread. Apache Tomcat includes tools for configuration and management, but can also be configured by editing XML configuration files. In simple words, Tomcat acts or behaves as a *development* server on your desktop to use for testing when building applications that use JSF 2, servlets/JSP, or other Java-based dynamic Web technologies. Regardless of what deployment server you use, you'll want a standalone server on your desktop to use for development. By far the best way to use Tomcat for development purposes is from inside Eclipse or another IDE

10. ARCHITECTURAL DESIGN:

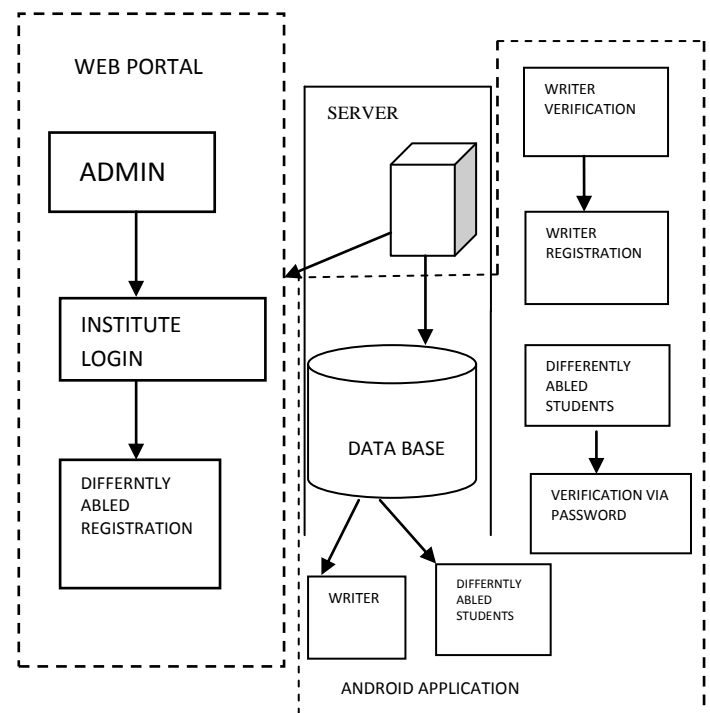


Fig1: System Architecture

10.1 USE-CASE DIAGRAM

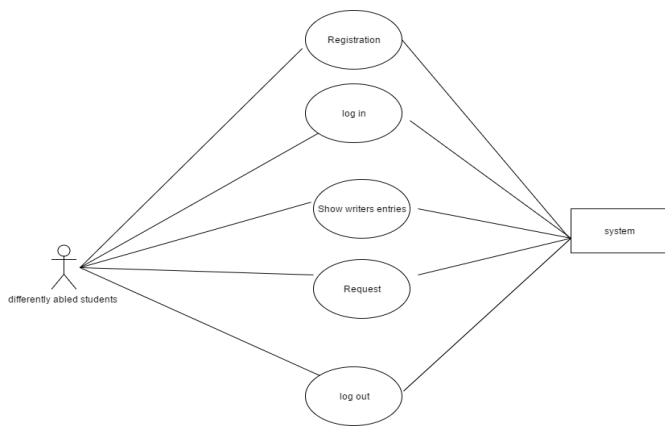


Fig2: Use-Case diagram1

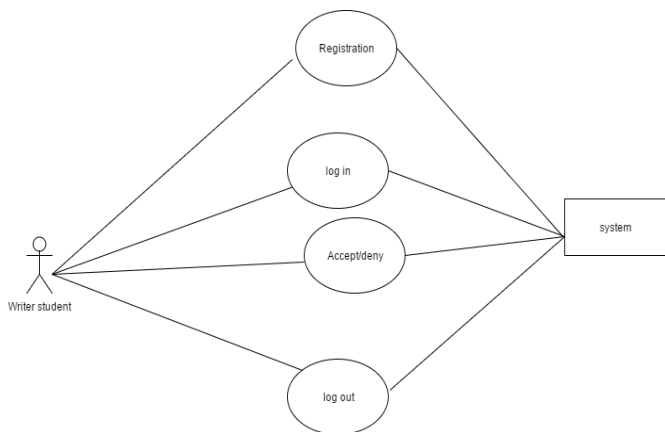


Fig3: Use-Case diagram2

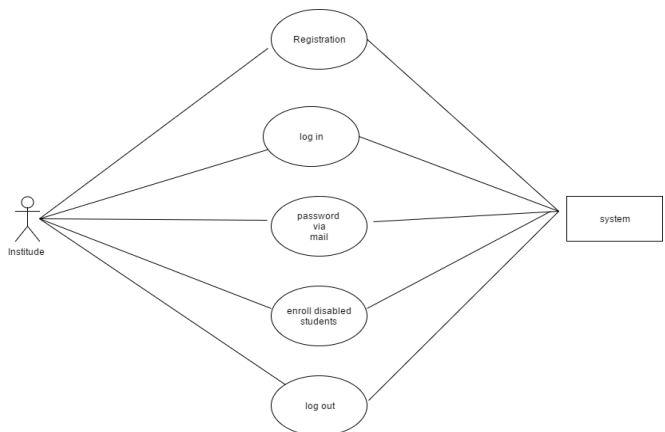


Fig4:Use-Case diagram3

11. Problem statement:

Application for acquainting differently abled students with exam writer students.

12. CONCLUSION

Learning and helping others to learn was the main theme of this project. So as it is said we rise by lifting others, our project provides a platform which allows differently abled students and students willing to help to get acquainted. This project was a great opportunity for us too to learn .We have studied about MySQL cloud features and its various unique features. By utilizing this feature, there is no necessity to make your own database or own API, handles all the components that usually come along with creating a backend for this application.

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