

E-BRIDGE

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Abstract - E-Bridge is an Android application which chiefly enhances correspondence amongst Teacher and Student. The application really comprise 2 modules (Teacher and Student) where they can get to and work the application from their individual ends. In general, the Admin will keep up the whole organization like Authorization, Authentication, consents, History following and investigating etc. Teacher will get to all the four year understudy data and experience her/his Time table as their every day exercises as planned. She/he can send or get any sort of data by utilizing Notification tab. The Student will get to all data (Subjects, Faculty, and Schedule) and keep up a decent connection with personnel and his/her cohorts too. He/she can send or get any sort of data (Clarification, Queries, Notice) by utilizing Notification tab.

Keywords - Android.

I. INTRODUCTION

e-Bridge is an Android application which chiefly enhances correspondence amongst Teacher and Student. The application really comprise 2 modules (Teacher and Student) where they can get to and work the application from their separate ends. In general, the Admin will keep up the whole organization like Authorization, Authentication, consents, History following and investigating etc. Teacher will get to all the four year understudy data and experience her/his Time table as their day by day exercises as booked. She/he can send or get any sort of data by utilizing Notification tab. The understudy will get to all data and keep up a decent connection with workforce and his/her schoolmates. In this e connect android venture we are proposing another type of innovation to get correspondence amongst instructor and understudy. Here the understudy get notice if there is any vital data accessible. Our framework essentially centers around building an effective and easy to use Android portable application. The application will be introduced on the Mentor telephone which runs android OS. It plans to give an interface to the teacher who will require a client id and secret word to complete the errand. Aside from that, the application would bolster solid client verification and brisk transmission of information.

II. METHODOLOGY

2.1 Problem Definition

The prototype was designed based on the Pomodoro technique. Pomodoro is a period administration system which

encourages clients to deal with the time in a proficient way. The principle objective of this proposition is to outline and build up the model with a specific end goal to quantify the item quality as per quality properties picked in light of ISO/IEC 9126 quality standard. The accompanying assignments were at first defined for this proposal venture: Literature ponder in the space of advanced mobile phone innovation and programming item quality Designing and actualizing of a model bolstered by Android stage. _Defining a quality model for the model. Outlining a trial to assess convenience of the model

2.2 Existing System

The present framework has no application to give the correspondence amongst Teacher and Student by the portable. In the past tasks this procedure will take in online sites. In any case, there is no application produced for correspondence by giving applications predefined strategies

2.3 Proposed System

Proposed System In this E Bridge Android venture we are proposing another type of innovation to get correspondence amongst Teacher and Student. Here the understudies get warnings if there is any essential data accessible for them.

2.4 Requirements analysis and specifying

The Application created takes after the accompanying strides of SDLC. Under which the SRS demonstrate produced for the framework is as recorded underneath.

The SRS model Contains

1. Functional Requirements.
2. Non-Functional requirements.

2.4.1 Functional Requirements of the System

The utilitarian prerequisites part talks about the useful conduct that ought to be controlled by the framework. Every necessity maps to an abnormal state work (fi) that changes the given arrangement of info information (ii) into yield information (oi). Distinctive practical prerequisites controlled by the framework are:- Login Description: The staff will login into the application with the given client ID and watchword.

On the off chance that the client ID and secret key is right, client will be incite to continue alternative else blunder message will be shown. Information: User ID and Password Output: Prompt to "alright" choice View Course Taken Description: After login, the staff can see the rundown of courses taken by him/her amid the

semester and afterward he can get the rundown of understudy selected in that course. Information: Select the show alternative Output: List of courses taken View Details of Enrolled Students Description: The workforce can see the rundown of understudy enlisted. _ Input: Select a course and select alternative to show understudy list Output: Enrolled understudy list Synchronize Database Description: At the finish of every semester workforce wishes, he can transfer the points of interest of a specific understudy in the Online Server Input: Select Sync catch

2.4.2 Non-functional requirements:

Performance Requirements: The software will support when multiple concurrent access user terminals. The software will handle the textual and fingerprint information. With the client (users) and servers running on the same machine, then the response time will be maximum of 2 sec. But mostly 95% transactions are proceed within the less than 5 seconds

Deployment. On Android operating Ssystem, the system or project should be deployable.

Security: No one should be allowed to tamper with data from others; Enhanced Security Sensitive data.

Backup: There should avoid damaging the record. A simple backup function for the whole student attendance.

Data migration: There must be a simple way to student data from one system to migrate to a new system.

III. DESIGN AND IMPLEMENTATION

3.1 Architecture diagram

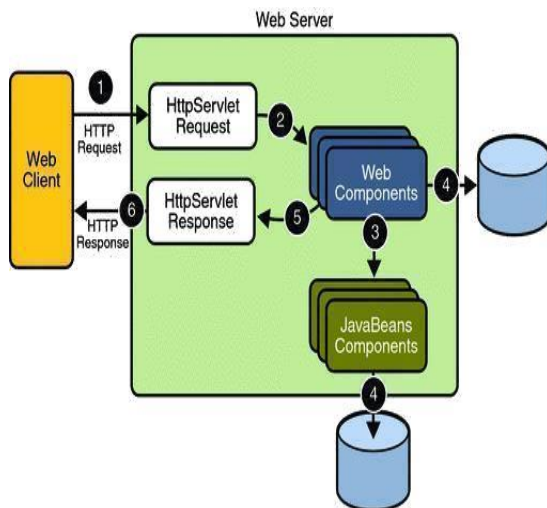


FIG: 1: 3.1.1 Architecture Diagram

3.2 Architecture diagram for android application development and features

Android working framework is a pile of programming parts which is generally partitioned into five areas and four principle layers as appeared beneath in the engineering graph

Linux kernel

At the base of the layers is Linux - Linux 3.6 with roughly 115 patches. This gives a level of deliberation between the gadget equipment and it contains all the fundamental equipment drivers like camera, keypad, show and so forth. Likewise, the portion handles every one of the things that Linux is decent at, for example, organizing and a huge range of gadget drivers, which remove the agony from interfacing to fringe equipment.

Libraries

Over Linux part there is an arrangement of libraries including open-source Web program motor Web Kit, understood library libc, SQLite database which is a valuable vault for capacity and sharing of utilization information, libraries to play and record sound and video, SSL libraries in charge of Internet security and so forth.

Android Libraries

This classification incorporates those Javabased libraries that are particular to Android advancement. Cases of libraries in this classification incorporate the application system libraries notwithstanding those that encourage UI building, designs drawing and database get to. A synopsis of some key center Android libraries accessible to the Android designer is as per the following - android.app - Provides access to the application demonstrate and is the foundation of all Android applications. android.Content - Facilitates content access, distributing and informing amongst applications and application segments. android.

Database - Used to get to information distributed by content suppliers and incorporates SQLite database administration classes. android.opengl - A Java interface to the OpenGL ES 3D illustrations rendering API. android.os - Provides applications with access to standard working framework administrations including messages, framework benefits and between process correspondence. _ Android.

Content - Used to render and control message on a gadget show. Android. View - the principal building pieces of use UIs. • Widget - Android. accumulation of pre-assembled UI parts, for example, catches, names, list sees, format chiefs, radio catches and so forth android.webkit - An arrangement of classes planned to permit web-perusing capacities to be incorporated with applications. Having secured the Java-based center libraries in the Android runtime, it is presently time to turn our regard for the C/C++ based libraries contained in this layer of the Android programming stack. Android Runtime: This is the third area of the engineering and accessible on the second layer from the base. This area gives a key part called

Dalvik Virtual Machine which is a sort of Java Virtual Machine extraordinarily planned and improved for Android. The Dalvik VM influences utilization of Linux to center highlights like memory administration and multi-threading, which is characteristic in the Java dialect. The Dalvik VM empowers each Android application to keep running in its own procedure, with its own case of the Dalvik virtual machine. The Android runtime likewise gives an arrangement of A rich center libraries which empower Android application engineers to compose Android applications utilizing standard Java programming dialect

Application Framework

The Application Framework layer gives numerous more elevated amount administrations to applications as Java classes. Application designers are permitted to make utilization of these administrations in their applications. The Android structure incorporates the accompanying key administrations - Activity Manager - Controls all parts of the application lifecycle and movement stack. • Content Providers - Allows applications to distribute and share information with different applications.

_Resource Manager - Provides access to non-code implanted assets, for example, strings, shading settings and UI designs. Notices Manager - Allows applications to show alarms and notices to the client. View System - An extensible arrangement of perspectives used to make application UIs. Applications-You will discover all the Android application at the best layer.

You will compose your application to be introduced on this layer as it were. Cases of such applications are Contacts Books, Browser, and Games and so on

1. Preparatory or abnormal state plan

IV. DESIGN OF DATA FLOW DIAGRAMS

The outline stage accentuates on the change of client necessities as characterized in the SRS archive, into a shape that is reasonable for coding. The plan stage can be comprehensively characterized in two levels. ^ 2. Nitty gritty plan _The preparatory outline can be additionally partitioned into two sub classifications Function Oriented Software Design ^ Object Oriented Software Design

4.1 Function Oriented Software Design

This outline model can be spoken to by drawing the DFDs (Data Flow Diagrams) for the given SRS record. An information stream chart is a graphical portrayal of the information move through a data framework which is utilized to display the procedure parts of the framework. DFD is the preparatory advance used to make an outline of the framework. DFD is utilized for organized outline. Setting

chart A setting outline is an organized graphical device utilized for recognizing the useful regions and the procedures which are performed inside and between the framework and outside the framework. Setting graph underpins an information arranged approach for outlining framework.

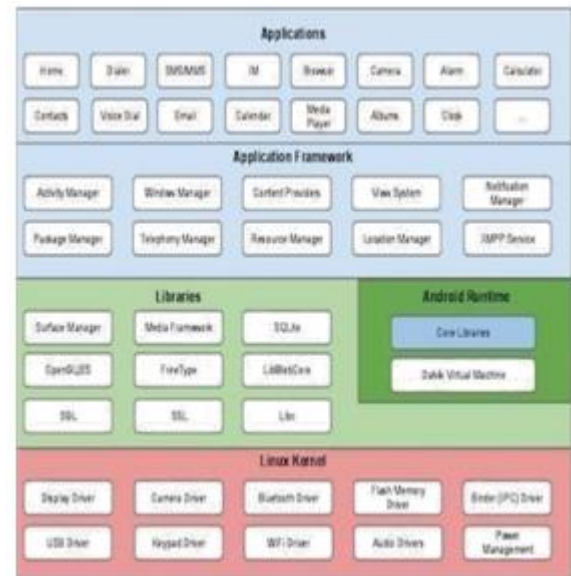
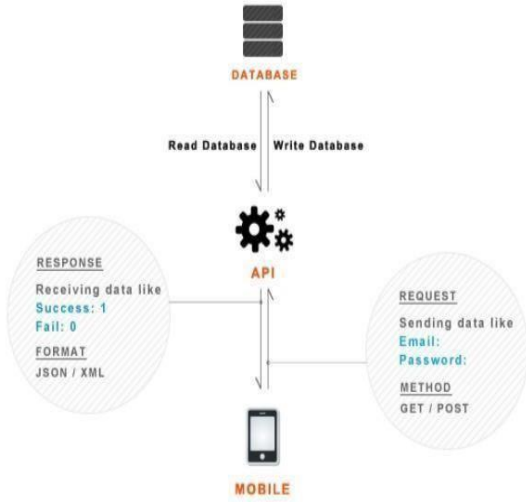


FIG:2 3.2.1 Architecture Design for Android application development

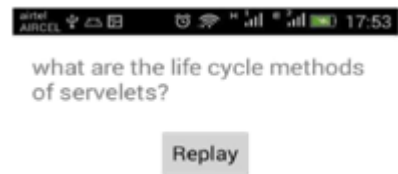
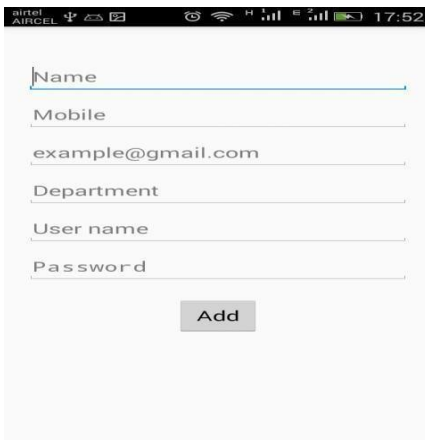
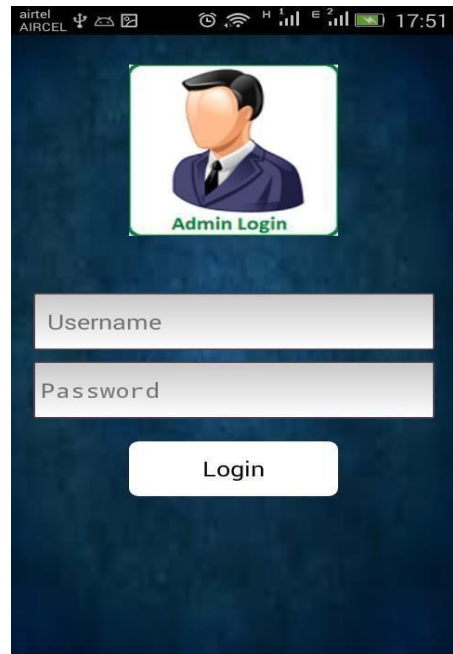
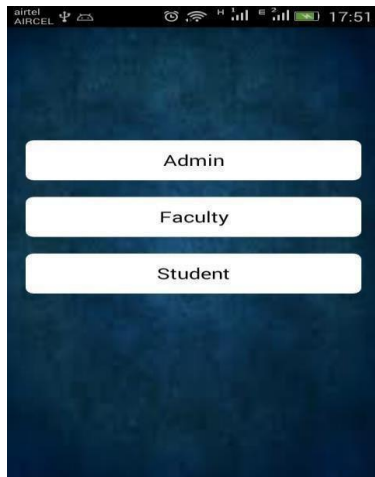
It helps in researching the yield and the procedure prerequisite of the framework. It helps in characterizing the limits of the proposed framework. The images utilized as a part of the setting graphs are for outside elements, information stockpiling and information streams and process. Here in the accompanying setting outline 4.1, we speak to our participation framework which has one outer element i.e. Client of the framework to be specific Faculty and the information streaming all through the framework is the participation points of interest. _The setting level DFD is then detonated to deliver a Level 1 DFD which models the points of interest of the framework. The Level 1 DFD indicates how the framework is isolated into subsystems (procedures), and how every procedure manages at least one of the information streams to or from an outer substance, and how the procedures together give the majority of the usefulness of the framework.

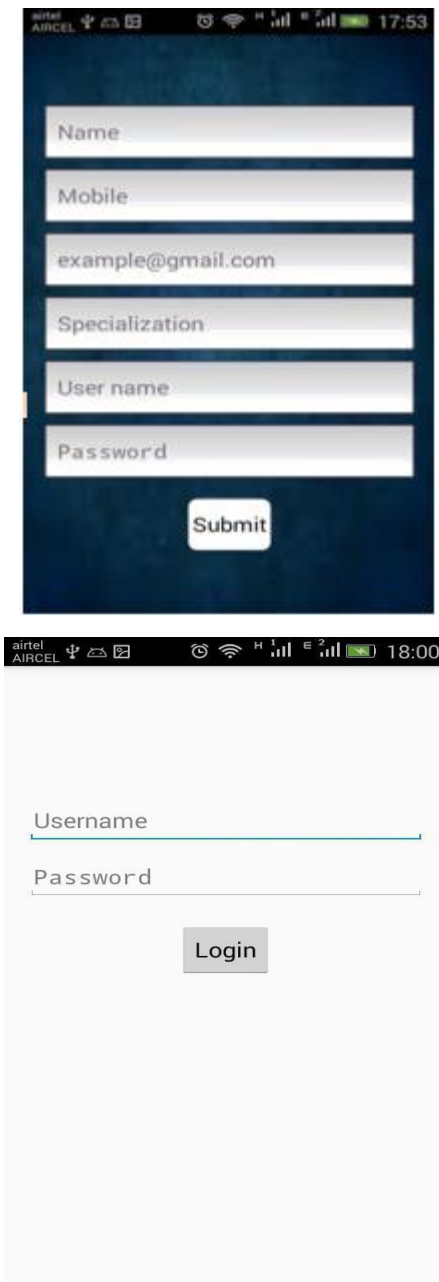
The level 1 DFD likewise recognizes the inward information stores which must be there for the framework to carry out its activity, and demonstrates the information stream between the different parts of the framework. In the underneath Level 1 DFD burrow, the participation framework has been deteriorated assist into 5 forms which are specifically Login, View courses taken, View enlisted understudy list, View participation, Upload participation. Each procedure is gotten to by the Faculty and there is information stockpiling specifically Server database, Enrolled understudy list, Course rundown and User points of interest which are utilized as a

part of the framework



4.2 SCREEN SHOTS





FUTURE WORK

It is only restricted to a class but can be enhanced to a whole branch. The system can be further enhanced and several other functionalities can be added. The system can be made login independent. The present system logs in using Internet all the time. We can enhance the system by implementing offline mode login feature. The feature to update the time table at a later stage can also be implemented. The system can also be enhanced by using voice recognition feature of the Android.

VI. REFERENCES

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V. CONCLUSION

Bridge will be a future rich integrated communication package, designed for the mobile users. The application e Bridge in Android includes all the features carried out by manual system and also add certain additional features so that the package will form a definite improvement. It is proposed to make the application extremely user-friendly with well-designed screens and limited inputs.