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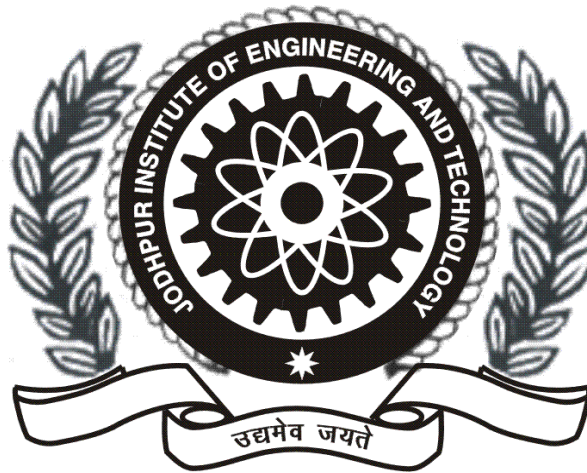
PRACTICAL TRAINING SEMINAR REPORT

ON

StudyHub Application

In partial fulfillment of

B.E IV yr (Information Technology)



Work Carried Out At “HCL CDC”

Submitted To:

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Submitted by:

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IT Branch, IV year

Acknowledgment

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CERTIFICATE FROM THE COMPANY

CAREER DEVELOPMENT CENTRE

HCL

S. No: LH-16007

Student Code: 701RG1406005

HCL Learning Ltd.

Certificate of Participation

This is to certify Mr. /Ms. Divyavrat Jugtawat

has completed the course in Project Training in Android-80 Hrs.

for a duration of 80Hrs

Venue of training HCL CDC Jaipur

Handwritten Signature

Authorised Signatory
Career Development Centre

Issued on: 22-Sep-2014

Kindly visit us at www.hclcdc.in/checkcert for verification of this certificate.

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2. Introduction

Studyhub Application was made to create an alternate method of use to simplify notes sharing and group studying. It can take pictures of notes and store it on its server. You can also store raw text and other files like pdf and doc on the server.

Notes Application also has a port of a website that can be run in any browser and device. Thus all notes added to it can be viewed anywhere with the same reliability and functions.

It has a dynamic view customized for the user. And has common features like searching and downloading useful notes directly to the device.

We try to explain its features in this document.

3. Company/Organization Overview

3.1 Company/Organization Technology area

HCL Career Development Centre with association to WsCubeTech.

WsCube Tech was established in the year 2010 with an aim to become the fastest emerging Offshore Outsourcing Company which will aid its clientele to grow high with rapid pace. At WsCube Tech, They offer a business solution emphasizing on the client stipulation all on an affordable range. Online trade solutions are offered to business enterprises all around the globe.

This is highly specialized Website Development Company offering cutting edge Web Development Services. This company offer superior customer service to the wide base of our clients. Their business-driven approach separates from typical Web Design Companies. For the past Five years, this company has built a reputation for creating a positive return on investment for their clients.

Services offered by them are:

- Website Development
- Website Designing
- Iphone Application
- Android Application
- SearchEngine Optimization

3.2 Details about the training guide/mentor at the company Organization

WsCube Tech is one of the leading Web Design and Development Company in Jodhpur, India. It's a group of young and enthusiasts people that provide innovative ideas for businesses to grow it faster on Web World, learning cost effective strategies for development solutions.

Mentor: Mr. Ashutosh Dixit
Designation: Chief Technical Officer

Mobile: +917737871097
HCL - 02912613698

3.3 Address/Contact Information of company/organization and guide.

Address: First Floor, Lakshmi Tower, Bhasker Circle, Ratanada ,Jodhpur(RAJ.)
Phone: 0281-2648122
Mobile: +91-92696-98122, 85610-85610-89567
E-mail: info@wscubetech.com

4. Technology used in Project

Android, Java, SQL, Android Development IDE (adt), PHP, xml, JSON, JavaScript, HTML, JSON, XAMPP.

Hardware Platforms -

1. Android
2. PC (website)

Android is a mobile operating system (OS) based on the Linux kernel and currently developed by Google. With a user interface based on direct manipulation, Android is designed primarily for touch-screen mobile devices such as smart-phones and tablet computers, with specialized user interfaces for televisions (Android TV), cars (Android Auto), and wrist watches (Android Wear). The OS uses touch inputs that loosely correspond to real-world actions, like swiping, tapping, pinching, and reverse pinching to manipulate on-screen objects, and a virtual keyboard. Despite being primarily designed for touch-screen input, it also has been used in game consoles, digital cameras, regular PCs (e.g. the HP Slate 21) and other electronics.

Application Development languages -

1. Java
2. XML
3. PHP

Development Softwares –

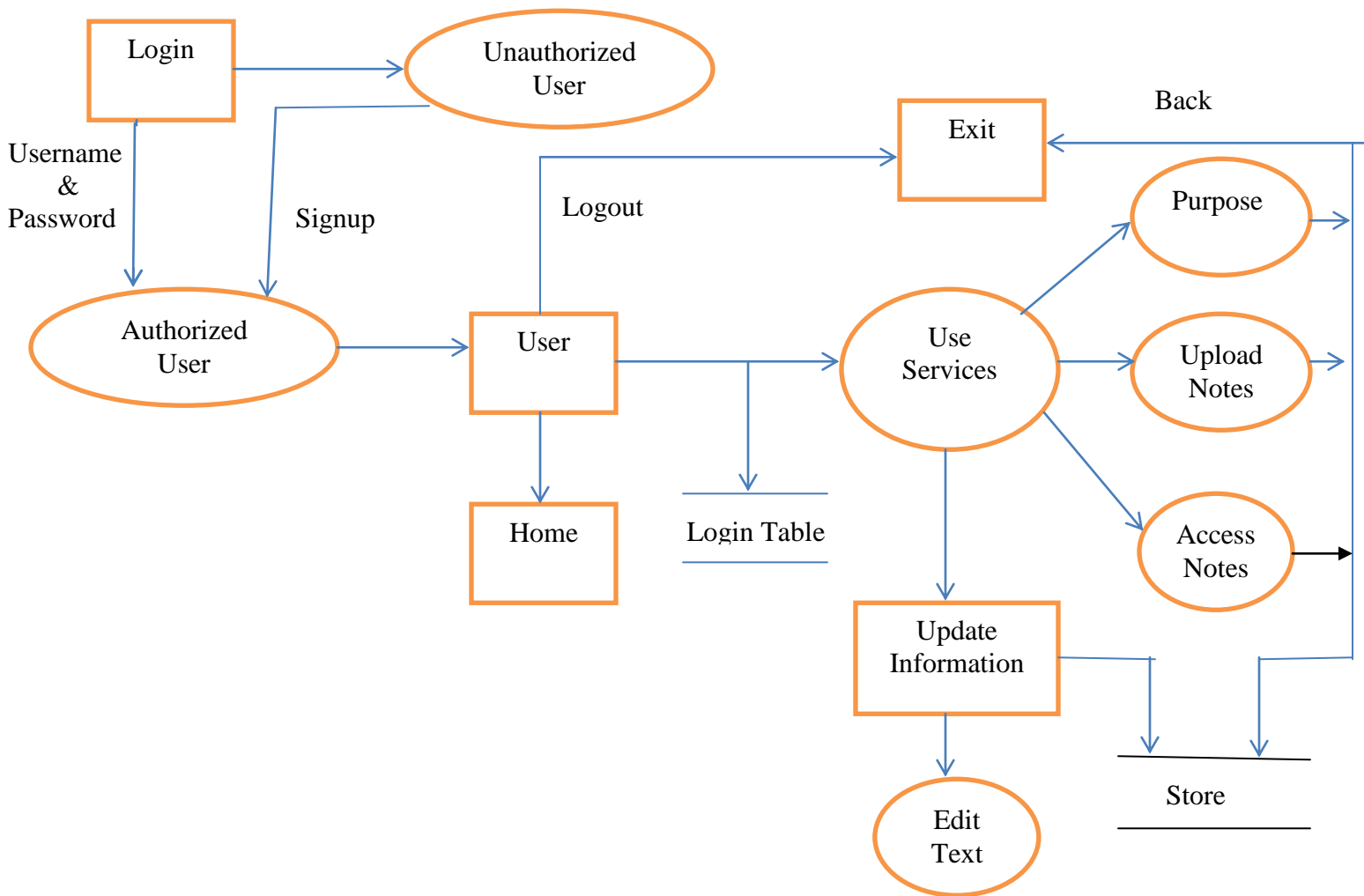
1. Android Development Toolkit (Adt)
2. git (for source code management)
3. WinMerge (code comparision)
4. Eclipse (IDE)

5. Technical Details of Project/Study

5.1 Architectural Overview -

This application is based upon Android OS. All the coding done in this Platform is on Java and thus is machine-independent. Since Android Devices exist in all sizes and Shapes thus this application uses XML layouts to create dynamic application pages.

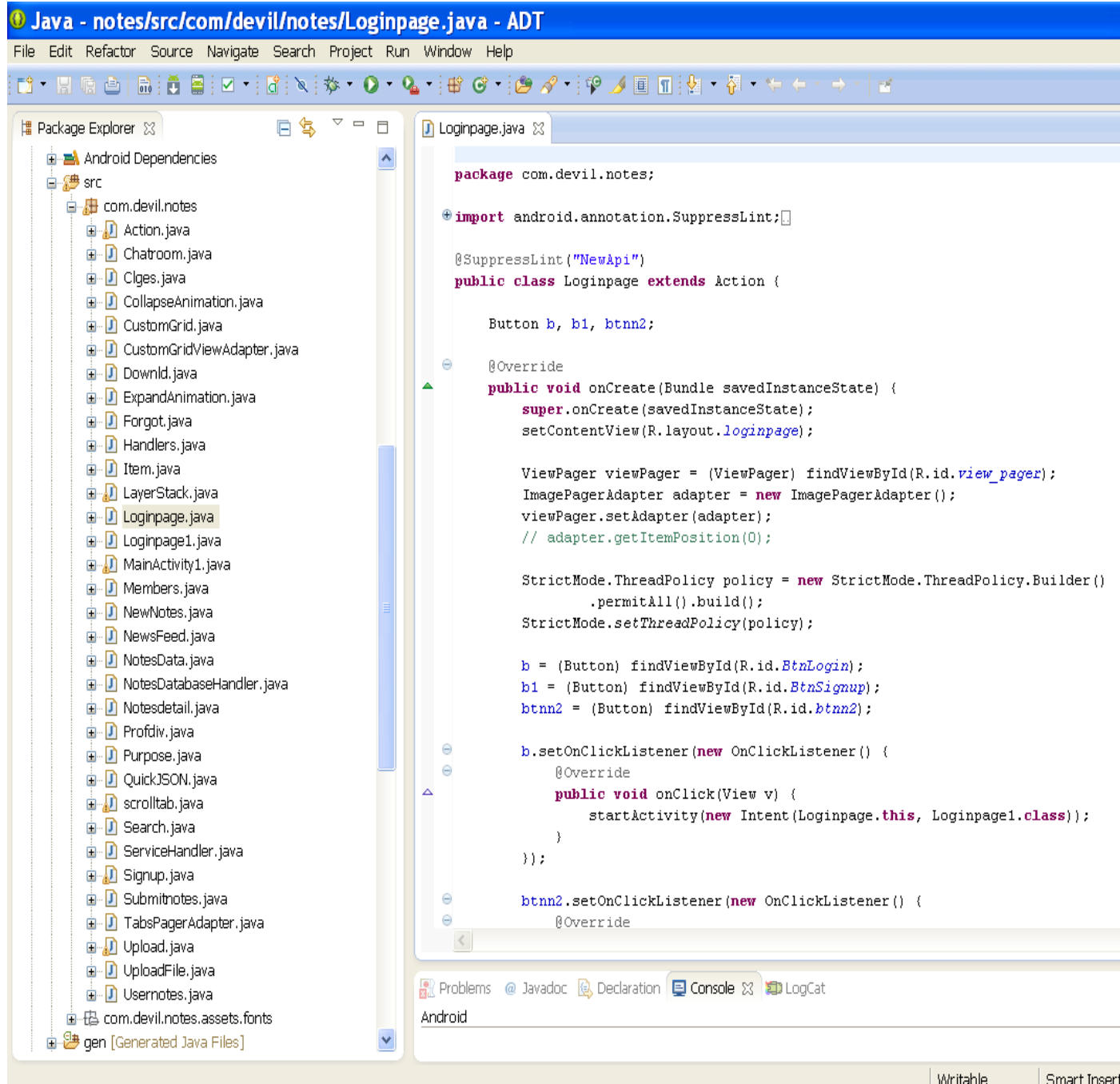
5.2 Functional Block Diagram –



5.3 Functions/Modules Details -

1. Main Menu - The initial view shown to user containing all links and notifications to other pages and features. A scrolltab feature is used to implement the basic view design.
2. Notes List - All saved notes (images, text, files) are shown in a customized list to quickly check the needed files. It contains link to download and add more notes.
3. Search - A button is added in each view to quickly search notes according to user, college, topic or date.

Basic Classes used in Application:-



5.4 Pseudo Code/ Algorithm -

Algorithm -

- I. Download Notes List from server as JSON text
- II. If raw text then show the note text directly
- III. If the note is an image then check
 - a. If its thumbnail already exists in local folder.
 - b. Else download thumbnail.
- IV. If note is a file then show it in default view
- V. If other feature links are used than move view to its main page.
- VI. Save user details and preferences to server.
- VII. Quit Application

Pseudo Code -

- I. GET notes data
- II. CHECK each note
- III. PRINT text
- IV. SHOW images
- V. SHOW files
- VI. GET user_input
- VII. PROCESS request according to the input
- VIII. LOOP back to main menu

6. Applications

- **NOTES** - It can be used to create and save notes on its server. It can be used to store notes as text or as images. Other files can be opened too using this application.
- **QUIZ** - A general method of digital exams and automated checking can fasten the preparation and examination process.
- **ASSIGNMENT** - All classroom work given to students can be digitized to automate submission of answer sheets, checking and question doubts to the teacher.
- **COLLEGES** - Many features of the app are classified according to each college. All notes can be searched for each college. Also easing the submission and handling of each college's app data, a student coordinator can be appointed.
- **NEWS FEED** - New notes, quizzes and assignments are notified on the news feed.
- **CHATROOM** - This feature is provided to allow students and teachers to collaborate in clarifying doubts.

7. Future Work

- It can be extended to allow dynamic content according to the user's location, bandwidth and institution.
- This application is open source and thus can be extended to other apps that can use these modules.
- It can be made more user-friendly by adding voice and gesture controls.
- More links to pre-established institutions can be added.

8. Conclusion

- Notes application is open source and can be edited and reviewed at any point of time. It is created actively by many developers of our team and will be modified and updated over long period of time.
- It has setup its data over a server which is shared by its website. Notes Application uses a vast range of technologies and languages to optimize the services provided to the user.
- Notes app can be used as a replacement for the common practices of education to allow newer, quicker and neater forms of knowledge transfers.
- Any suggestions and reports are always welcomed and can be notified to its website.

9. References

- [android.developer](https://developer.android.com/) website for architecture overview
- StackOverflow forum site for design examples and algorithms
- [github](https://github.com/) pages for basic git tutorial
- google.code.com for early source code management
- [android](https://developer.android.com/) documentation
- [w3schools](https://www.w3schools.com/) for JSON and URL problems
- Extra android videos at [youtube.com](https://www.youtube.com/) and newboston.org