



V-Connect (DCS BGSBU)

(Major Project)

Under the guidance of:

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15-MCA-2018

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10-MCA-2018

MCA, VI – Semester

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OVERVIEW

- V-Connect (DCS BGSBU) is an Android Operating System based native Web Application
- Android is a mobile operating system based on a modified version of the Linux kernel and other open source software, designed primarily for touchscreen mobile devices such as smartphones and tablets.
- This Web Application connects users virtually with the department
- One click feature



EXISTING SYSTEM AND IT'S LIMITATIONS

- In the current scenario, we have a website that is serving the whole university
- We need to browse the website manually and have to find the particular section for any updates
- We don't have a notification system associated with the website



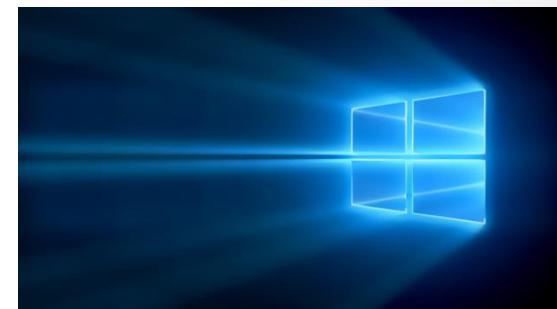
OBJECTIVE OF THE NEW SYSTEM

- Connecting users with the department virtually in case of remote location
- Get the updates via cloud notification
- All information at one place
- Reduce the manual browsing
- Provide E-learning resources



HARDWARE REQUIREMENTS

- **Windows:**
- 64-bit Microsoft® Windows® 8/10
- x86_64 CPU architecture; 2nd generation Intel Core or newer, or AMD CPU with support for a Windows Hypervisor
- 8 GB RAM or more
- 8 GB of available disk space minimum (IDE + Android SDK + Android Emulator)
- 1280 x 800 minimum screen resolution



HARDWARE REQUIREMENTS

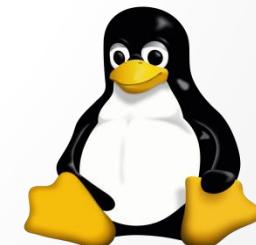
- Mac:
- MacOS® 10.14 (Mojave) or higher
- ARM-based chips, or 2nd generation Intel Core or newer with support for Hypervisor.Framework
- 8 GB RAM or more
- 8 GB of available disk space minimum (IDE + Android SDK + Android Emulator)
- 1280 x 800 minimum screen resolution



MacTMOS

HARDWARE REQUIREMENTS

- **Linux:**
- Any 64-bit Linux distribution that supports Gnome, KDE, or Unity DE; GNU C Library (glibc) 2.31 or later.
- x86_64 CPU architecture; 2nd generation Intel Core or newer, or AMD processor with support for AMD Virtualization (AMD-V) and SSSE3
- 8 GB RAM or more
- 8 GB of available disk space minimum (IDE + Android SDK + Android Emulator)
- 1280 x 800 minimum screen resolution
- *Chrome book can also be used*



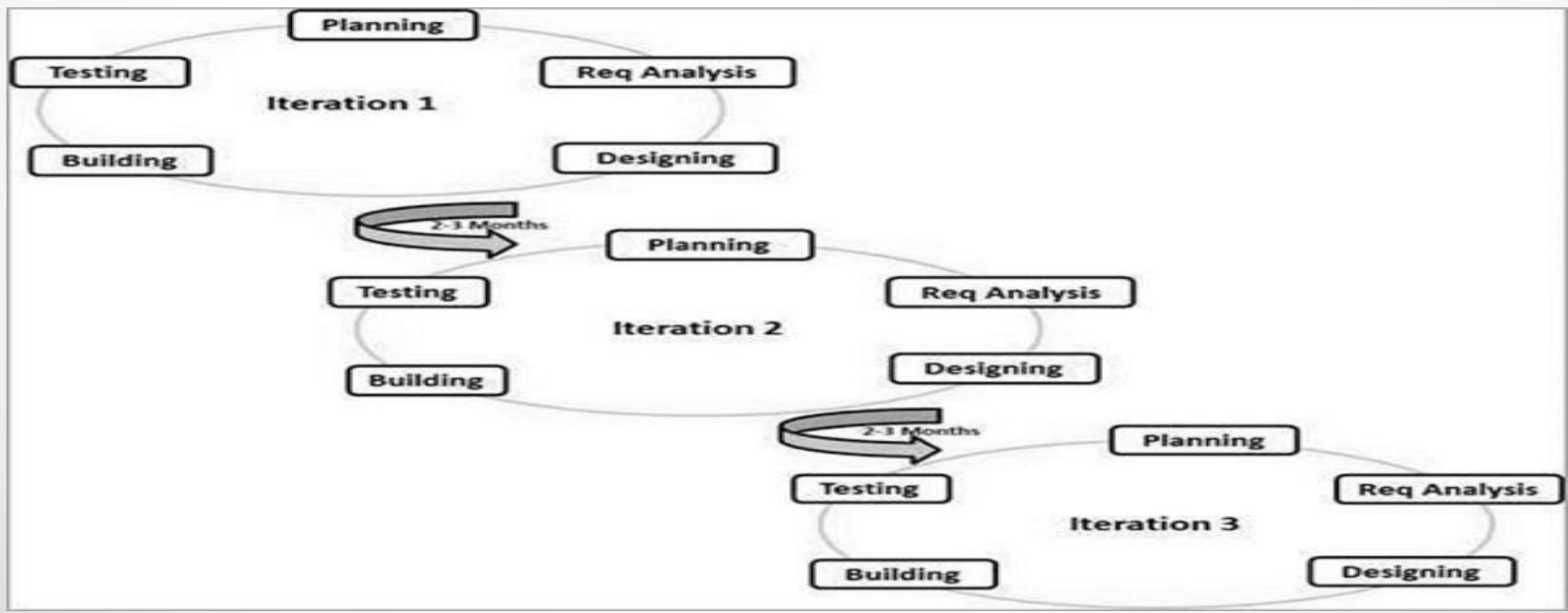
SOFTWARE REQUIREMENTS

- Android studio, integrated development environment (IDE)
- Android software development kit (SDK)
- Java development kit (JDK)

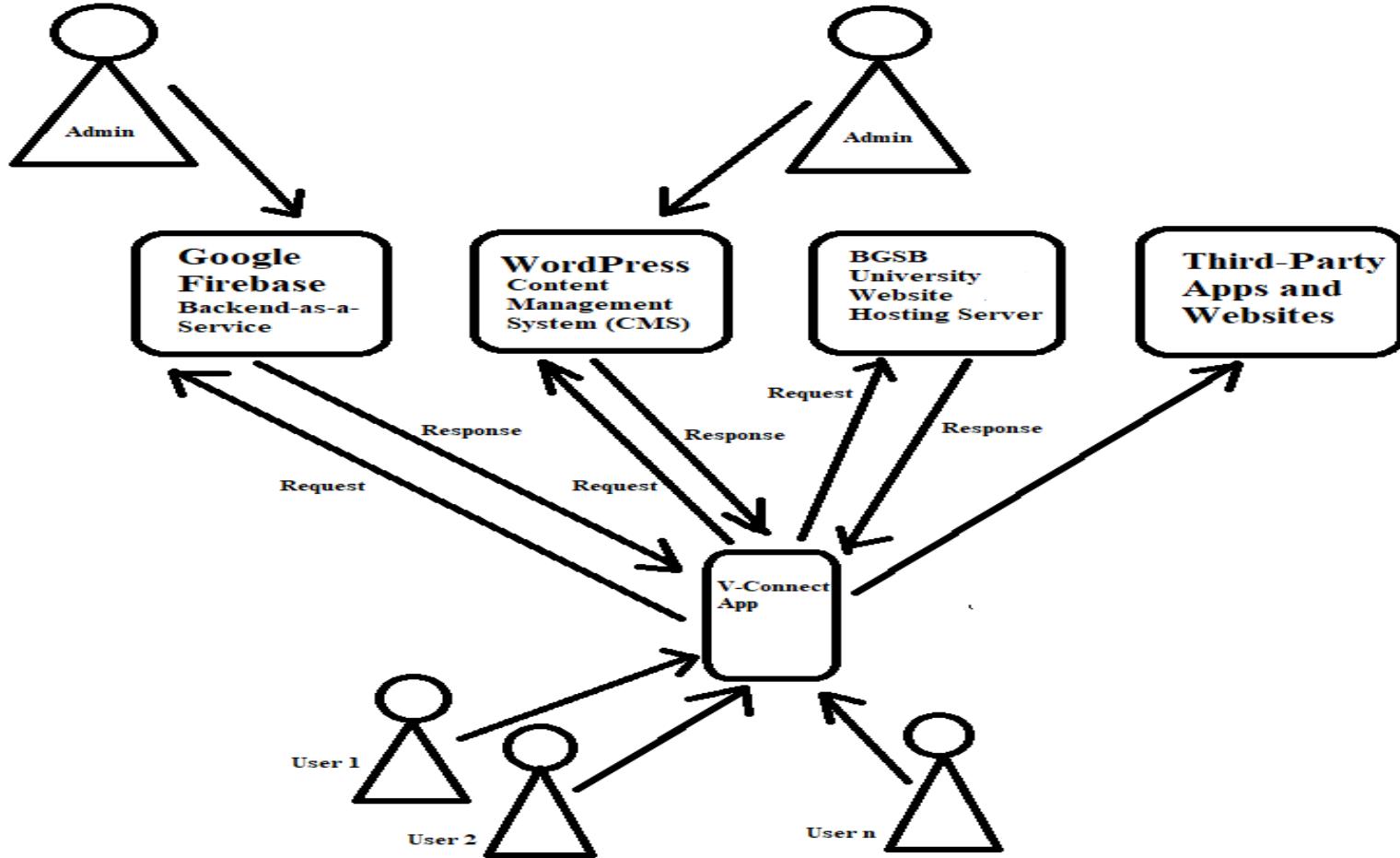


METHODOLOGY

- Agile Model:
- Iterative
- Small incremental builds
- Ideal for mobile application development

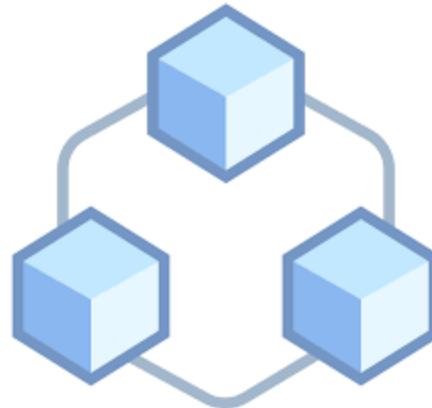


SYSTEM ARCHITECTURE



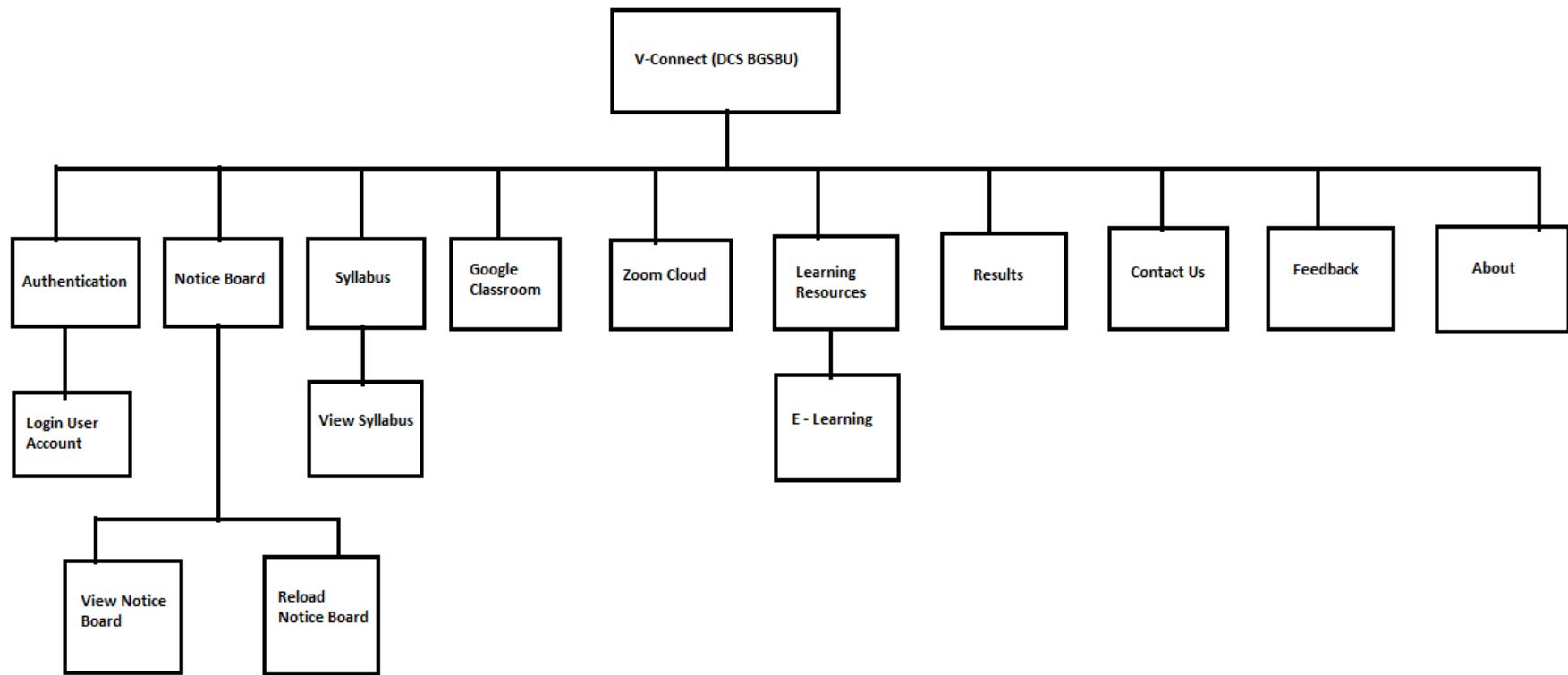
MODULES

1. Authentication
2. Notice Board
3. Syllabus
4. Google Classroom
5. Zoom Cloud
6. Learning Resources
7. Results
8. Contact Us
9. Feedback
10. About



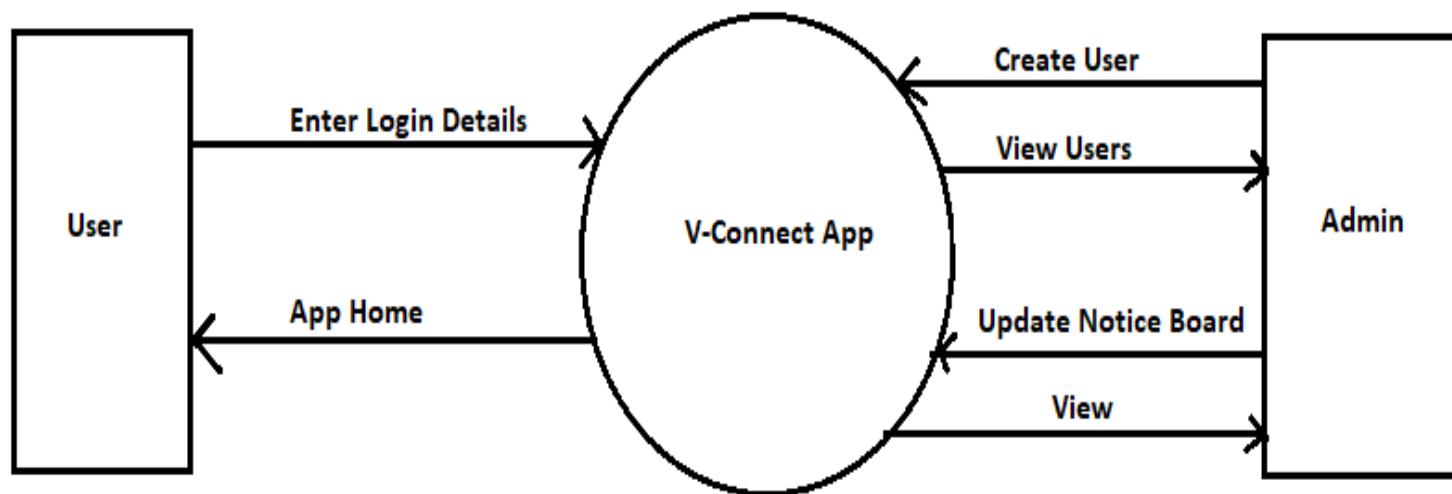
MODULES

- Hierarchical Input Process Output (HIPO) Diagram:



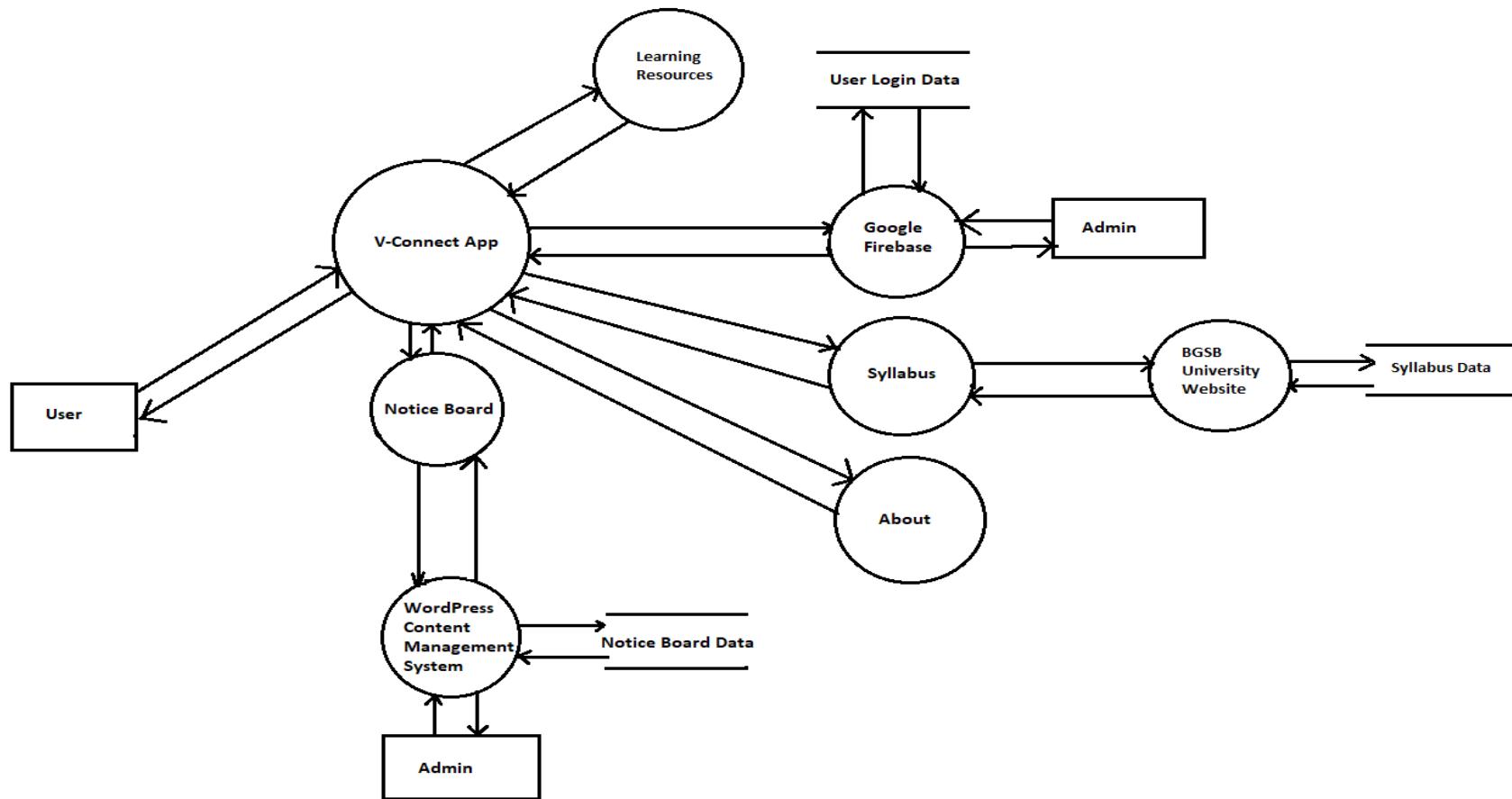
DATA FLOW DIAGRAMS (DFD)

- Level 0 DFD/Context Diagram:



DATA FLOW DIAGRAMS (DFD)

- Level 1 DFD:

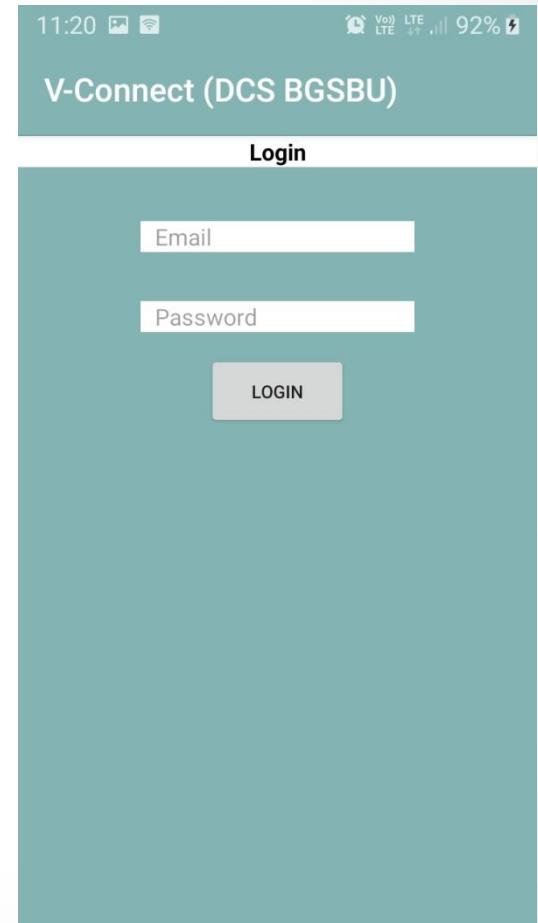
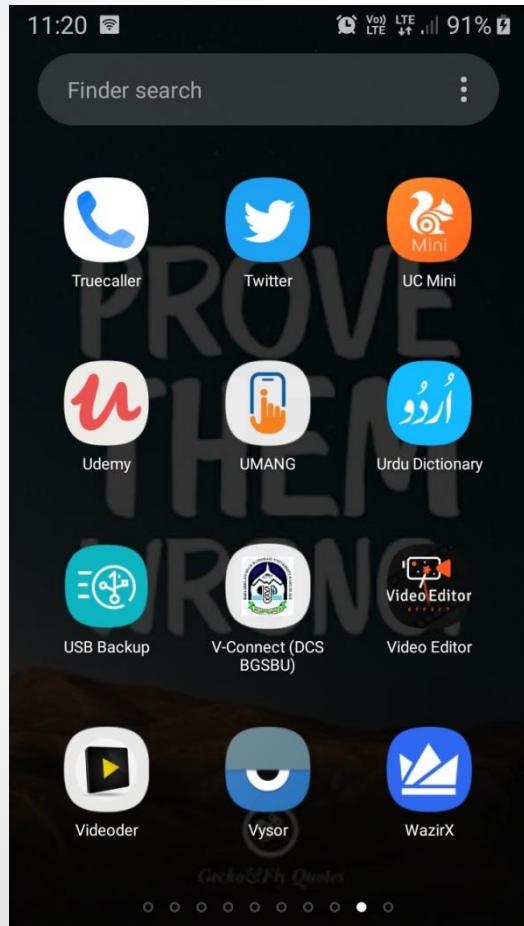


LANGUAGES USED

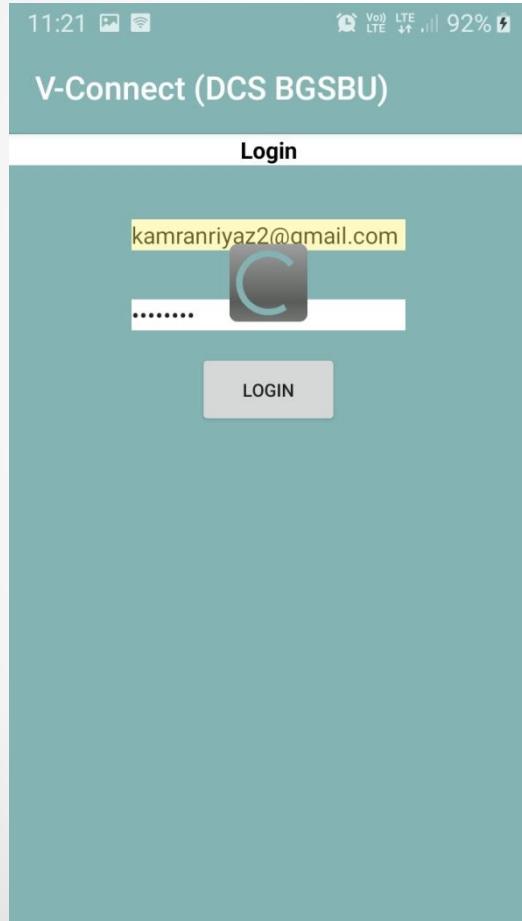
- **Java**:- Java is an object-oriented programming language and computing platform.
- **XML**:- Extensible Markup Language (**XML**) is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.
- **Development**:- Java
- **Graphical User Interface**:- XML



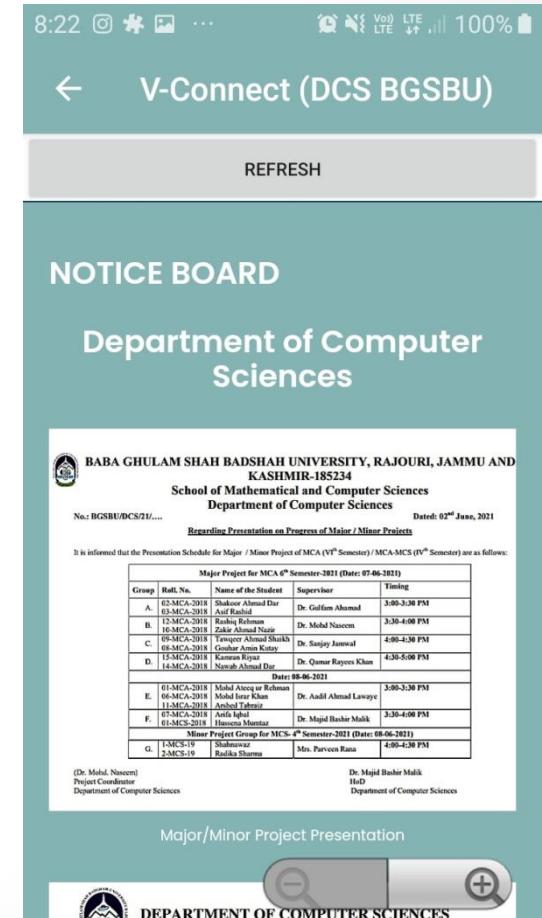
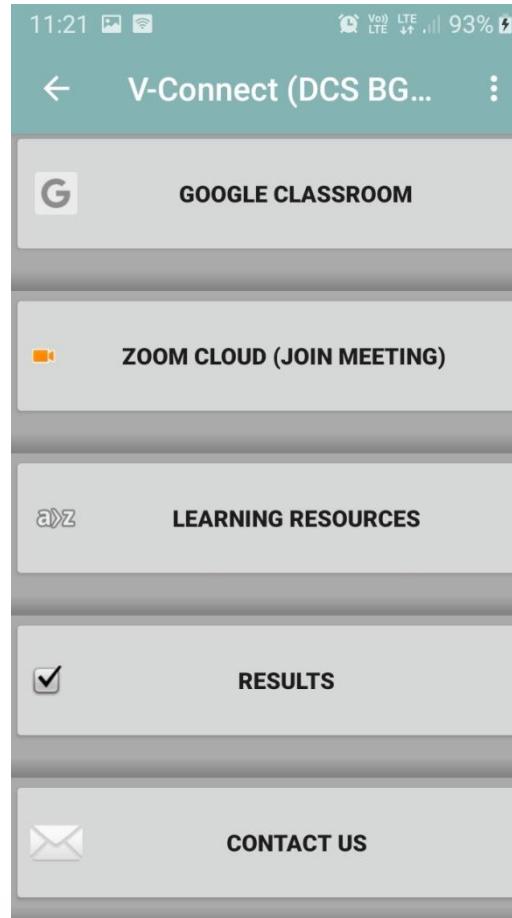
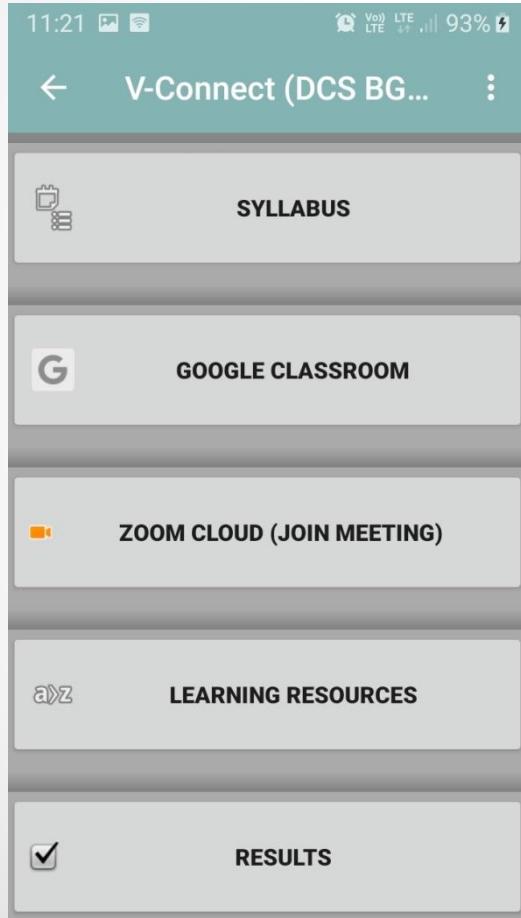
SCREEN CAPTURES



SCREEN CAPTURES



SCREEN CAPTURES



SCREEN CAPTURES

8:22 100% ← V-Connect (DCS BGSBU)

Tuesday, 22 nd June 2021	Data & File Structure Using C++ (Backlog)
Thursday, 24 th June 2021	MC-446 Wireless & Mobile Communication

Mode of Examination : Online (Due to Covid-19 Pandemic)
Time of Exam : 11:00 AM
Pattern of Exam : MCQ (Multiple Choice Questions) based


Head
Department of Computer Sciences

Copy to:
1. Controller of Examination, BGSB University, Rajouri
2. Deputy Controller of Examination, BGSB University, Rajouri
3. University website

Date Sheet

[Notice for Presentation](#) [Download](#)



Video Demo

11:23 95% ← V-Connect (DCS BGSBU)

What are you looking for? 

es of India:India Today Survey

Department of Computer Science

Syllabus

Masters in Computer Application (MCA)

- MCA 1st Semester
- MCA 2nd Semester
- MCA 3rd Semester
- MCA 4th Semester
- MCA 5th Semester
- MCA 6th Semester

Masters in Computer Science

- MCS 1st Semester
- MCS 2nd Semester
- MCS 3rd Semester
- MCS 4th Semester

Value Added Courses of MCA-M.Sc. Computer Sciences

- Syllabus for Value Added Courses

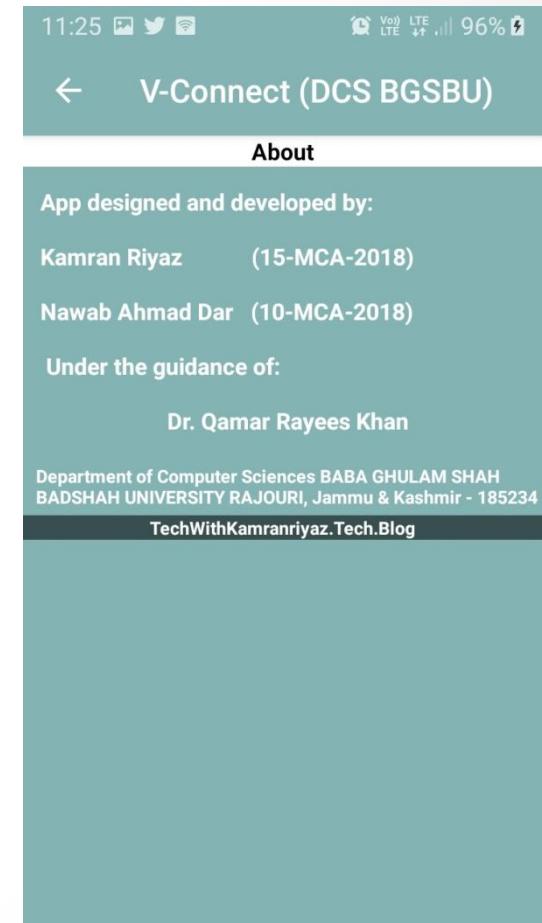
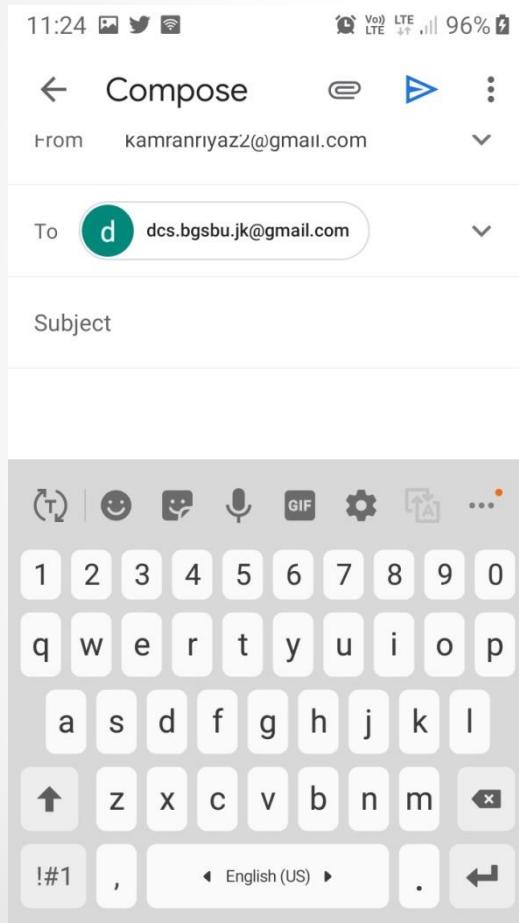
11:24 96% ← V-Connect (DCS BGSBU)

Learning Resources

Top Computer Science Learning Resources

1. COMPUTER SCIENCE FUNDAMENTALS
2. SOLO LEARN | LEARN PROGRAMMING
3. TUTORIALS POINT | COMPUTER SCIENCE LEARNING MATERIAL
4. GEEKS FOR GEEKS | GET SOME DEEP UNDERSTANDING ABOUT COMPUTER SCIENCE
5. JAVA T POINT | COMPUTER SCIENCE LEARNING MATERIAL
6. SWAYAM | FREE E-LEARNING PLATFORM
7. NPTEL | LEARN FROM IIT'S
8. LEETCODE | PREPARE FOR TECHNICAL INTERVIEWS
8. INTERNSHALA | INDIA'S NO.1 INTERNSHIP AND TRAINING PLATFORM

SCREEN CAPTURES



SCREEN CAPTURES

The screenshot shows the Firebase console homepage. At the top, there are two tabs labeled "Firebase console". The main content area is titled "Your Firebase projects". It features a large illustration of a person in a yellow shirt interacting with a computer screen. Below this, there are two project cards. The first card is white with a blue plus sign and the text "Add project". The second card is for the project "DCS BGSBU Rajouri JK" with the identifier "dcs-bgsbu-rajouri-jk". The background of the page has a blue gradient with abstract shapes.

SCREEN CAPTURES

The screenshot shows the Firebase console interface for the project "DCS BGSBU Rajouri JK".

Project Overview: The main area displays a summary of the project's status, including a "Spark plan" badge, a "Cloud Messaging" section with a test notification sent on June 3, 2021, and a notification test sent on June 2, 2021.

Build: A sidebar on the left lists various services: Authentication, Firestore Database, Realtime Database, Storage, Hosting, Functions, Machine Learning, and Extensions. The "Extensions" service is currently selected.

Engage: This section shows engagement metrics for Cloud Messaging notifications. Both the test notification and the notification test show 0% opened rate.

Header: The top navigation bar includes tabs for "Project Overview" and "Overview", along with links for "Go to docs", "Sign up", and a user profile icon.

Address Bar: The URL is "console.firebaseio.google.com/u/2/project/dcs-bgsbu-rajouri-jk/overview".

SCREEN CAPTURES

The screenshot shows the Firebase Authentication console for the project "DCS BGSBU Rajouri JK". The left sidebar lists various services: Project Overview, Authentication (selected), Firestore Database, Realtime Database, Storage, Hosting, Functions, Machine Learning, and Extensions. The main area displays the "Authentication" screen with tabs for Users, Sign-in method, Templates, and Usage. The "Users" tab is active, showing a table with two rows of user data. A context menu is open over the second user row (abc@hotmail.com). The table columns are Identifier, Providers, Created, Signed In, and User UID. The data is as follows:

Identifier	Providers	Created	Signed In	User UID
kamranriyaz2@gmail.c...	✉	May 5, 20...	Jun 4, 20...	cQoGQn4zReQRrrXvwqgA
abc@hotmail.com	✉	Jun 4, 20...	Jun 4, 20...	otQal1RpVkdIPdrIIKTR9R

The context menu for the second user includes options: Reset password, Disable account, and Delete account.

SCREEN CAPTURES

The screenshot shows the Firebase Authentication console for the project "DCS BGSBU Rajouri JK". The left sidebar lists various services: Build, Authentication, Firestore Database, Realtime Database, Storage, Hosting, Functions, Machine Learning, and Extensions. The Authentication service is selected. The main page displays the "Authentication" section with tabs for Users, Sign-in method, Templates, and Usage. A promotional message about the Local Emulator Suite is visible. Below the tabs is a search bar and a table header with columns for Identifier, Providers, Created, Signed In, and User UID. A modal dialog is open at the bottom, titled "Add an Email/Password user". It contains fields for "Email" (with a red border and error message) and "Password". Buttons for "Cancel" and "Add user" are at the bottom right of the modal.

Firebase console

DCS BGSBU Rajouri JK – Authenti

console.firebaseio.google.com/u/2/project/dcs-bgsbu-rajouri-jk/authentication/users

Projects Apps Meta Tag Generator How to find someone... How to find an IP a... modern one page r... Responsive Page | Z... Become a HTML an... Reading list

Firebase

Project Overview

Build

- Authentication
- Firebase Database
- Realtime Database
- Storage
- Hosting
- Functions
- Machine Learning
- Extensions

Spark Free \$0/month Upgrade

DCS BGSBU Rajouri JK

Authentication

Users Sign-in method Templates Usage

Prototype and test end-to-end with the Local Emulator Suite, now with Firebase Authentication [Get started](#)

Search by email address, phone number, or user UID

Add user

Identifier Providers Created Signed In User UID

Add an Email/Password user

Email A valid email is required

Password

Cancel Add user

SCREEN CAPTURES

The screenshot shows the Firebase Cloud Messaging (Cloud Messaging) notifications dashboard. The left sidebar has sections for Analytics, Engage (Predictions, A/B Testing, Cloud Messaging, In-App Messaging, Remote Config, Dynamic Links, AdMob), Extensions, and Spark (Free \$0/month). The main area is titled "Cloud Messaging" and shows a table of notifications. The table columns are: Notification, Status (with a help icon), Platform (Android), Start / Send, End, Sends, and Opens. There are two buttons at the top right: "Create experiment" and "New notification".

Notification	Status ⓘ	Platform	Start / Send	End	Sends	Opens
Test notification Notification demo	✓ Completed	_ANDROID_	Jun 3, 2021 8:48 PM	—	<1000	0%
Notification Test It's the notification demo...	✓ Completed	_ANDROID_	Jun 2, 2021 12:13 AM	—	<1000	0%
Test Notification Hello World...	✓ Completed	_ANDROID_	May 22, 2021 2:54 PM	—	<1000	0%
test testing...	✓ Completed	_ANDROID_	Mar 16, 2021 10:49 PM	—	<1000	0%
This is a Demo notification	✓ Completed	_ANDROID_	Jul 23, 2020 10:27 PM	—	<1000	0%
Computer science is the study of...	✓ Completed	_ANDROID_	Apr 5, 2020 8:51 PM	—	<1000	0%
Computer science is the study of...	✓ Completed	_ANDROID_	Apr 5, 2020	—	<1000	0%

SCREEN CAPTURES

Firebase console DCS BGSBU Rajouri JK – Compose

console.firebaseio.google.com/u/2/project/dcs-bgsbu-rajouri-jk/notification/compose

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Firebase Crashlytics Performance Test Lab App Distribution

Analytics Dashboard, Realtime, Events, Conv...

Engage Predictions A/B Testing Cloud Messaging In-App Messaging Remote Config Dynamic Links Extensions

Spark Free \$0/month Upgrade

Cloud Messaging > Compose notification

1 Notification

Notification title

Notification text

Notification image (optional)

Notification name (optional)

Device preview

This preview provides a general idea of how your message will appear on a mobile device. Actual message rendering will vary depending on the device. Test with a real device for actual results.

Send test message

Initial state Expanded view

Android

SCREEN CAPTURES

The screenshot shows the Firebase Cloud Messaging 'Compose notification' interface. The left sidebar contains navigation links for Crashlytics, Performance, Test Lab, App Distribution, Analytics, Engage (with Predictions, A/B Testing, Cloud Messaging, In-App Messaging, Remote Config, Dynamic Links), and Extensions. The main area displays a step-by-step process for creating a notification:

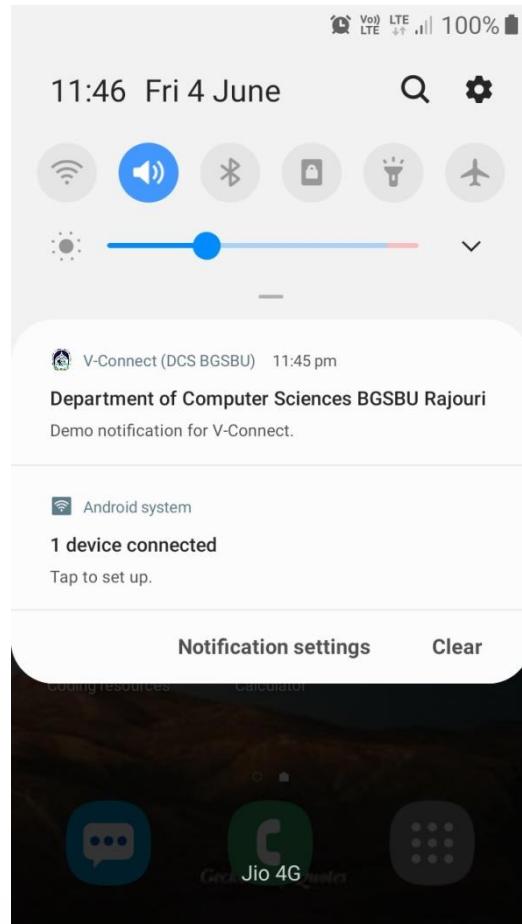
- 1 Notification:** Demo notification for V-Connect.
- 2 Target:** User segment (selected) and Topic. A dropdown menu for targeting an app is open, showing 'Select an app' and 'and'. Other options include 'Target another app' and 'Next'.
- 3 Scheduling:** Send now.
- 4 Conversion events (optional):**
- 5 Additional options (optional):**

The browser address bar shows the URL: `console.firebaseio.google.com/u/2/project/dcs-bgsbu-rajouri-jk/notification/compose`.

SCREEN CAPTURES

The screenshot shows the Firebase Cloud Messaging 'Compose notification' interface. On the left, there's a dark sidebar with navigation links like 'Analytics', 'Engage', 'Spark', and 'Extensions'. The main area has tabs for 'User segment' and 'Topic', with 'User segment' selected. A modal window titled 'Review message' is open, containing fields for 'Notification content' (with a note about a demo notification for V-Connect), 'Target' (set to 'User segment matching one targeting criterion'), and 'Scheduling' (set to 'Send now'). At the bottom of the modal are 'Cancel' and 'Publish' buttons. Below the modal, there are 'Save as draft' and 'Review' buttons. The URL in the browser bar is <https://console.firebaseio.google.com/u/2/project/dcs-bgsbu-rajouri-jk/notification/compose>.

SCREEN CAPTURES



SCREEN CAPTURES

A screenshot of a web browser window displaying the WordPress.com login page. The browser has three tabs open: "Firebase console", "DCS BGSBU Rajouri JK – Cloud M", and "Log In — WordPress.com". The main content area shows the "Log in to your account" form. It includes an input field for "Email Address or Username", a "Continue" button, and links for "Continue with Google" and "Continue with Apple". A note at the bottom states that continuing with Google or Apple creates a WordPress.com account if the user doesn't already have one.

Firebase console

DCS BGSBU Rajouri JK – Cloud M

Log In — WordPress.com

wordpress.com/log-in?redirect_to=https%3A%2F%2Fwordpress.com%2F

Update

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WordPress.com Sign Up

Log in to your account

Email Address or Username

By continuing, you agree to our [Terms of Service](#).

Continue

OR

Continue with Google

Continue with Apple

If you continue with Google or Apple and don't already have a WordPress.com account, you are creating an account and you agree to our [Terms of Service](#).

SCREEN CAPTURES

The screenshot shows a web browser window with three tabs open:

- Firebase console
- DCS BGSBU Rajouri JK – Cloud M
- My Home < dcsbgsbjk.wordpress.com

The main content area displays the WordPress.com dashboard for the site "My Home". The left sidebar contains the following menu items:

- My Home (selected)
- Statistics
- Upgrades (Free)
- Posts
- Media
- Pages
- Comments
- Feedback
- Jetpack
- Appearance
- Plugins
- Users
- Tools
- Settings

The central area features a message: "No traffic this week, but don't give up!" with a bar chart icon. Below it, a section about stats includes the text: "Stats can help you optimize for the right keywords, and feature content your readers are interested in. [Read more](#)".

The right sidebar, titled "Quick links", lists the following options:

- Edit homepage
- Add a page
- Write blog post
- Edit menus
- Customise Theme
- Change theme
- Add a domain
- Create a logo
- Create a podcast with Anchor

SCREEN CAPTURES

You are screen sharing Stop Share

wordpress.com/page/dcsbgsbjk.wordpress.com/17

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Switch to draft Preview Update

notice board

NOTICE BOARD

Department of Computer Sciences

Type / to choose a block

BABA GHULAM SHAH BADSHAH UNIVERSITY, RAJOURI, JAMMU AND KASHMIR-185234

School of Mathematical and Computer Sciences

Department of Computer Sciences

No.: BGSBU/DCS/21/.... Dated: 02nd June, 2021

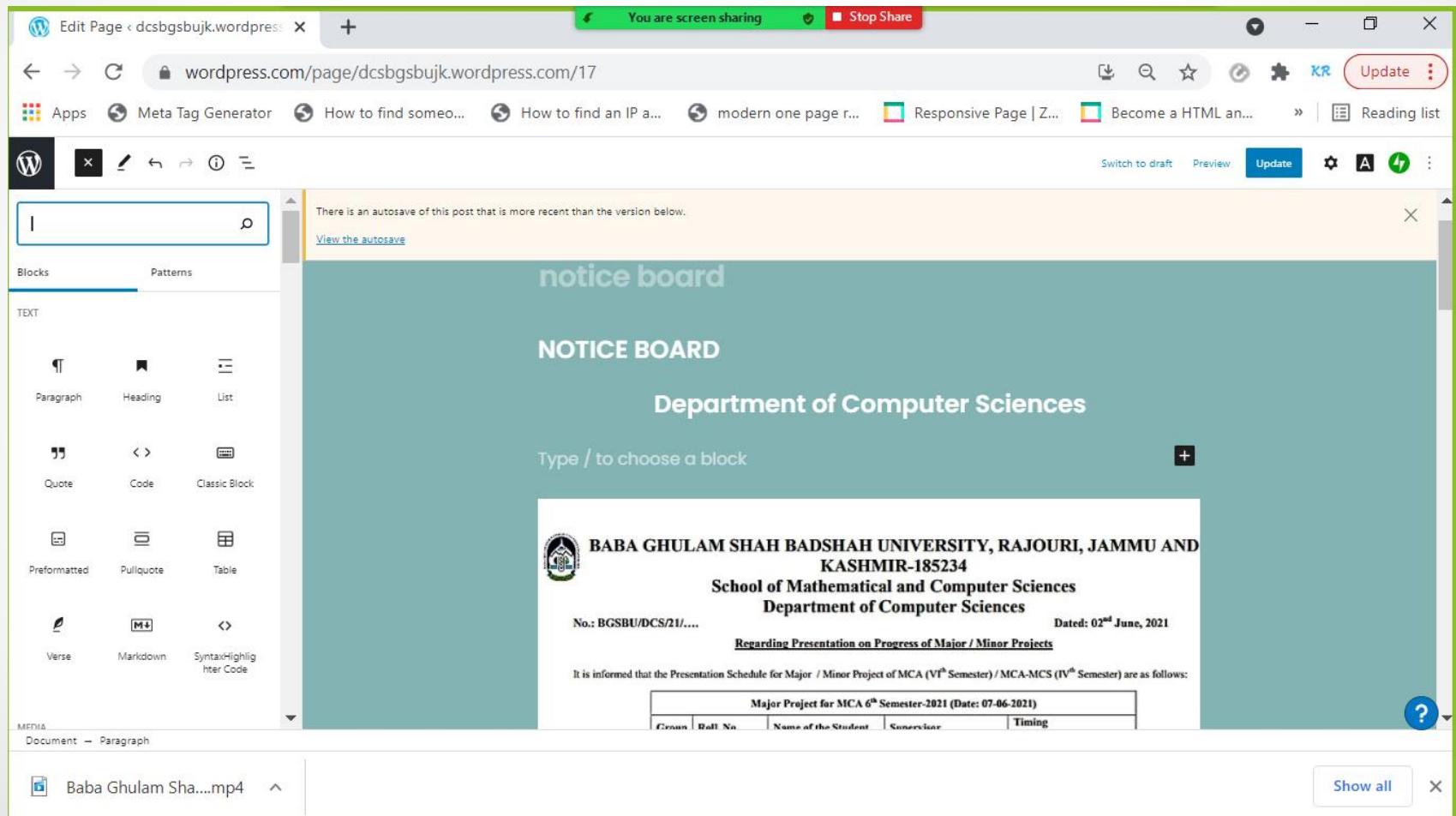
Regarding Presentation on Progress of Major / Minor Projects

It is informed that the Presentation Schedule for Major / Minor Project of MCA (VIth Semester) / MCA-MCS (IVth Semester) are as follows:

Major Project for MCA 6 th Semester-2021 (Date: 07-06-2021)				
Grass	Roll No.	Name of the Student	Supervisor	Timing

Baba Ghulam Sha...mp4

Show all



CONCLUSION

- V-Connect (DCS BGSBU) is an Android Operating System based one click feature, native Web Application
- Virtual Connect
- Time management
- Goal was to provide our whole experience of, what challenges we faced during the course like not having information at one place
- We believe that this project is really useful for the new students as they are not much aware of the course scenario.
- All necessary things at one place will reduce the stress, results in good performance

FUTURE SCOPE

- This project was initiated to support studies
- Data repository
- Online examination
- It can also be converted into hybrid app to support Apple IOS based devices

REFERENCES

- https://www.tutorialspoint.com/sdlc/sdlc_agile_model.htm#:~:text=Agile%20SDLC%20model%20is%20a,builds%20are%20provided%20in%20iterations.
- <https://developer.android.com/studio>
- https://www.tutorialspoint.com/software_engineering/software_analysis_design_tools.htm
- https://www.lucidchart.com/pages/data-flow-diagram#section_8
- <https://developer.android.com/guide/webapps/webview>
- [https://en.wikipedia.org/wiki/XML#:~:text=Extensible%20Markup%20Language%20\(XML\)%20is,free%20open%20standards%E2%80%94define%20XML](https://en.wikipedia.org/wiki/XML#:~:text=Extensible%20Markup%20Language%20(XML)%20is,free%20open%20standards%E2%80%94define%20XML).
- https://java.com/en/download/help/whatis_java.html

Any query? please ask!



Thank You So Much!