

GyaanFreedom : Student Buddy

AN ANDROID APPLICATION FOR ENHANCED LEARNING EXPERIENCE.

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Vision

- ▶ Revolutionize Learning and Teaching Methods.
- ▶ Providing platform for Professional Networking.
- ▶ Connecting Field Experts with Field Enthusiasts and Beginners.
- ▶ Providing all the learning necessities in one place.

Motivation

- ▶ Indian engineering industry scenario is currently like:
Producing ennumerate Graduates with degrees but lacking practical knowledge of the subjects, lack of awareness of industry mapped skills.
- ▶ The 2 major problems identified are:
 - ▶ Lack of Awareness of various learning opportunities.
 - ▶ Confusion for selection of learning resources that are infinitely available online.

1) Solutions provided by the App

- ▶ Students of a particular College could know various events of their domain taking place, in college or nearby.
- ▶ This way
 - ▶ they get to know the in-demand skills and
 - ▶ be updated with on-goings in their industry

2) Solutions provided by the App

- ▶ Personalized Mentoring could solve the problem of:
 - ▶ selection of resources to learn from
 - ▶ benefit the mentor of having experience
 - ▶ help student clear all his doubts.

Applications of the App & Implementation:

- ▶ Allowing students to :
 - ▶ Collaborate in team
 - ▶ Study/learn together
 - ▶ Share & Gain knowledge
 - ▶ Get Teacher's/ Experienced Mentor's Feedback (on sharing/ submission of assignments)
 - ▶ Co-author Technical Papers /Publishing Articles or Blogs (via sharing)
 - ▶ Solve instant doubts after any session.

Advantages in a Classroom Setup:

- ▶ Allowing Teachers/Mentors to :
 - ▶ Take feedback from students about a particular topic taught everyday after a lecture/ lab session.
 - ▶ Share lab session requirements to all connected nodes in a network of a lab.
 - ▶ Automatic attendance by frequent scheduled quizzes.
 - ▶ Check interests & understanding of a topic of students in a class from the responses of everyday quiz of students by help of neural networks.
 - ▶ Interactive teaching.

Recruiting Organization/College Committees:

- ▶ Allowing Recruiting Organizations :
 - ▶ Hire Interns on basis of checking skill (i/p csv data for quiz)
 - ▶ Conduct remote webinars or interactive sessions with students in a classroom
 - ▶ Organize workshops
- ▶ College Committees Events:
 - ▶ Share leaflets of interdepartmental events

Implementation Details- Processes Involved:

- ▶ User Registration:
 - ▶ Personal Details:
 - ▶ Added data is sent to local server after Encryption through Ciphering Algorithms of Private fields.(Eg: Password)
 - ▶ Verification of Details: Phone Number and mail through Firebase Authentication via OTP.
 - ▶ Selection of Role:
 - ▶ Mentee/Learner : Adds Interests
 - ▶ Mentor On-Boarding : Takes Quiz (Knowledge Check) ,Gets Rated, Granted Privileges.

Classroom Use Case

- ▶ A Teacher/Privileged User creates a group (1 time formality)
- ▶ During every teaching session, notes could be shared on platform, accessible only by group members.
- ▶ After every session, a small assignment/quiz link could be forwarded to the group. Only those members who submitted the quiz get attendance and credit points of term work.
- ▶ All the important announcements could be made by Broadcast Messages.

Lab Use Case

- ▶ Sharing of important files and instructions through a Privileged Account to the students in Group. (*Virtual Star Network Data Transfer*)
- ▶ After Lab short Quiz to grade student submissions and performance sheets.

Secure Exam Environment Case

- ▶ Sharing of **private links** to students (*By firebase authentication techniques*).
- ▶ Automatic Correction & Score Card Generation of Objective type Questions.
- ▶ Future Scope: Evaluating theoretical questions via NLP(Natural Language Processing), Key word matching feature.

Add Events Utility

- ▶ User can create various types of Events:
 - ▶ **Conference (Public- Notifications Broadcasted to invited users/subscribed/recommended)**
 - ▶ Entering Details like Venue, Time, Topic.
 - ▶ **Webinar (Public- Notifications Broadcasted)**
 - ▶ With Joining URLs and Permissions
 - ▶ **1 on 1 video and text chat session (Private)**
 - ▶ Sent joining link to only intended recipient.

Discover Events Utility

A User can receive notifications of events from:

- ▶ Subscribed groups
- ▶ Nearby locations. (*Recommendations on basis of GPS data*)
- ▶ Other Broadcasted Messages.
- ▶ Suggestions.

All these helps to establish transparent , open and wide reach of audience for informing of all inter and intra –college events.

Thank You.