

ANDROID SMART SCHOOL SYSTEM

A flutter application having the following features:

1. Attendance(QR scan API)
2. File submission
3. Grading
4. Notifications: Teachers can send announcements etc.
5. Login-Logout
6. Fee payment (implementing some payment gateway API).

Sub-projects:

1. Homework scanner: crop etc functionalities
2. Canvas in android: A multipurpose note-making, photo-editing, paint tool in android.

Project Tech Stack : Flutter , Firebase

Potential Mentors: Adarsh Baghel (cse180001001) => Github-id(Amagnum)
Harshil Bhavsar (cse180001019) => Github-id(bhavsarharshil)

3D VOLUME/AREA CALCULATOR

A flutter application having the following features:

1. Calculate the area and volume of different shapes depending upon the different dimensions provided.
2. Introducing complex shapes and diagrams where a 2d/3d structure may comprise multiple smaller structures.
3. The app could have features such as figure visualization for diagrams.

Project Tech Stack : Flutter , MaterialUI

Potential Mentors: Adarsh Baghel (cse180001001) => Github-id(Amagnum)
Harshil Bhavsar (cse180001019) => Github-id(bhavsarharshil)

RESPONSIVE IMAGE GALLERY WITH RESIZABLE IMAGES

Development of a gallery page using a css grid system with dense packing algorithm so as different sized images can be compiled together with no or least gap in between them. Intermediate knowledge of css is required.

Project Tech Stack : HTML5 ,CSS, JAVASCRIPT, Firebase or MongoDB

Potential Mentors: Anmol Gomra (cse180001007) => Github-id(pineapple45)

CODE EDITOR FOR COMPETITIVE PROGRAMMING

The project aim is to build a code editor which

1. Shows running time, space and time complexities.
2. Users can customise their templates(eg. Code Sandbox.)

A website could be created in which the text editor resides.

Project Tech Stack : React, HTML5, css , JS

Potential Mentors: Adarsh Baghel (cse180001001) => Github-id(Amagnum)
Gaurav Kumar (cse180001015) => Github-id(Gaurav1327)

ATTENDANCE TOOL FOR STUDENTS RESIDING IN HOSTELS

The Project aims to create an online tool which could be used to keep track of all students residing inside the hostels on a day to day basis.

Project Tech Stack : HTML, CSS, JavaScript, flrebase/MongoDB,node js

Potential Mentors: Anmol Gomra (cse180001007) => Github-id(pineapple45)

LA FRESCO IN POCKET

A website that has the following features:

1. Place an order
2. La Fresco staff will receive the order and generate a unique code.
3. A mail will be sent when order is ready to collect the package in a definite time slot.

In this way the number of contacts will be reduced and social distancing will be maintained.

Project Tech Stack : HTML, CSS, JavaScript,Angular, PHP, Laravel, MySQL, Python, Node

Potential Mentors: Akshay Prakash (cse180001004) => Github-id(Aksh7706)

eDOC@IITI

The aim is to build a platform online (web application) which will remove the hassle and help in seamless medical help to all the residents.

Medical history and symptoms are very important for a doctor for diagnosis. The medical file is easily misplaced and hence no proper information is available for the doctors and This web application will help a patient, a doctor and the store to track and ease accessibility. Giving an overview, Patients and Doctors can register themselves on the platform. The Patient can take appointments for specialists. Online consultation sessions with doctors can also be booked according to their schedule. Online community forums will also be built on which the patients can interact with the doctors on common issues. The doctor can also refer a patient to another doctor online. Online counselling service can be another added advantage. This will be an initiative to improve the medical system of the institute.

Project Tech Stack : HTML,CSS,JS,Flask,PHP

Potential Mentors: Sarthak Jain (cse180001047) => Github-id(jains8844)

COVID-19 LIVE TRACKER

Coronavirus live tracking website which will display the number of active cases and all the relevant information regarding it in different regions. The project can also use crowdsourcing so as to receive data from people on the internet.

Project Tech Stack : HTML5 , CSS , JS, REACT

Potential Mentors: Mrigank Krishan(cse170001030) => Github-id(Mrigank11)

LIVE PROGRAMMING CONTEST WEBSITE

The website will tabulate all the ongoing and future programming on certain popular sites like codechef, codeforces, etc providing with the details on the timings and other critical details regarding them.

Project Tech Stack : HTML5, CSS3, js, and other related languages and frameworks

Potential Mentors: Saloni Sawarkar (cse180001048) => Github-id(Saloni02)

Anmol Gomra (cse180001007) => Github-id(pineapple45)

GREASY SPOON

As most of the eateries in our campus (except mess) are overcrowded during peak time of the day which results in a lot of time waste of students and staff . This web application features pre booking your meal and taking away your meal when it is ready. There will also be an option for getting it delivered to your place. This will save a lot of time and helps in maintaining social distancing, This will be a web based application accessible from all devices. Technologies like BLE(Bluetooth Low Energy) can be used to monitor crowds efficiently.

Project Tech Stack : HTML, CSS , JavaScript, BootStrap , Angular, PHP, MySQL, Node

Potential Mentors: Anmol Gomra (cse180001007) => Github-id(pineapple45)

Gaurav Kumar (cse180001015) => Github-id(Gaurav1327)

SECURITY CAMERA FACE RECOGNITION

The project aims to build a software where we can recognize the face through security cameras, the process should be like as the security cameras run if there are unpleasant things happening and then it should give you an alert and the same time it should recognize the face and then try to match from the person details from the database we have and gives you message about the person.

Project Tech Stack : Image processing, python

Potential Mentors: Ashutosh Anshul (cse170001011)=> Github-id(AshutoshAnshul)

LOCATING BLOOD DONATION CENTER

The project aims to build an application which will tell the location of blood banks for blood donation, at what distance it is available additionally it will ensure how much blood of different groups are available at those blood banks. We can also add features like if someone wants blood of a particular group which is not available then people who have registered and are at nearest location will get a notification. It can be used in hospitals, blood banks and by people personally too.

Project Tech Stack : JAVA , firebase as a backend

Potential Mentors: Abhishek Kumar (ee170002001) => Github-id(abhishek-kr-01)

FACE DETECTION

Real time Face detection application using Siamese network.

Project Tech Stack : Python, Flask web app for deployment.

Potential Mentors: Pranshu Maheshwari (cse170001035)

=>Github-id(pranshumaheshwari)

Aditi Chauhan (cse180001003) => Github-id(aditi1709)

MEDIUM LIKE BLOG WEBSITE FOR IITI

A blog website for IIT Indore where new posts/articles could be added by the IIT community. Proper Authentication is to be provided. A Discussion form could be added along with this project to extend its functionality.

Project Tech Stack : HTML5 , CSS3, TYPESCRIPT , REACT , NODE JS, GOLANG

Potential Mentors: Adarsh Baghel (cse180001001) => Github-id(Amagnum)

Dev Kalra (cse170001018) => Github-id(kalradev)

ORBIT SIMULATOR

Orbit-simulator is two-dimensional simulation of our Solar system , written in python.

Project Tech Stack : Python , pygame etc

Potential Mentors: Anmol Gomra (cse180001007) => Github-id(pineapple45)

STUDENT PLACEMENT PORTAL

Student Placement Portal will be a portal which helps students register for different Companies that come to the campus. It will have multiple types of user such as Students, Managers, Assistant Placement Officer etc where different types of users will

be able to execute different types of tasks. The project contains both frontend and backend to be developed.

Project Tech Stack : HTML5 , CSS3, Backend can use Python, Firebase

Potential Mentors: Aditi Chauhan (cse180001003) => Github-id(aditi1709)

ALUMNI PORTAL

A website for storing alumni details, their social media account links , current Locations, career details etc.

Project Tech Stack : HTML5 , CSS3, other backend technologies

Potential Mentors: Miten Shah (cse180001049) => Github-id(mtnssh)

Sarthak Jain (cse180001047) => Github-id(jains8844)

Kanishkar J (cse160001028)

OPEN SOURCE CONTRIBUTION TO GITHUB REPOSITORIES

Contribution can be made to any one of the following repositories:

mps-youtube/mpsytt,

mps-youtube/pafy,

ritiek/spotify-downloader

vn-ki/anime-downloader

sunpy/sunpy

Potential Mentors: Mrigank Krishan(cse170001030) => Github-id(Mrigank11)
Vishnunarayan K I (cse170001056) => Github-id(vn-ki)

Important Note

** The technologies given out in the project tech stack may vary depending on how the project progresses.