



METIS SUMMER PROJECTS

2024



Table of Content

1

GUIDELINES

Team Formation

How to Submit?

Coding Guidelines

2

MENTORS

3

PROJECTS REPOSITORY

App Development

Web Development

4

TECHNOLOGIES

Web Dev

App Dev

Databases



Guidelines

Teams of maximum 3 members can be formed. It is advised that you take one project, however a maximum of two projects can be taken by a team. In order to ensure completion of projects, the following steps will be taken:

- Weekly updates by the team members.
- Presentation of the project, after the end of summer break.

The projects will be judged on the following criteria:

- Satisfying the problem statement
- Innovativeness inculcated in the solution
- Presentation
- Well commented code

In case of any doubt feel free to contact the coordinator/Mentor.

You are welcome to do any other project of your choice (which is not in the project's doc). In such a case, you will need to submit a brief SOP to the coordinator/mentor.

[Registration Link](#)

Mentors

The Project mentors will guide you throughout your projects. In case you have any doubts and issues, you can connect with them or have an online meeting to resolve your issues.

You will have to report bi-weekly progress to your mentor

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Naman Dharmani	dharmaninaman@iitgn.ac.in
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Project Repository

App Development

To-Do App

Project Description

You have to make a simple to-do app that helps you to save, edit and delete tasks. The data should be persistent ie. it should not be deleted if the app is closed or killed by task managers.

The App should have the option to mark specific tasks to be completed.

Additional Features:

- Send Notification 10 minutes before.
- Add Sync Functionality with Google Calender.

Level – **Easy**

Notes App

Project Description

You have to create a Note-taking App similar to Google Keep. The user should be able to create, read, edit, and delete any specific tasks. The data should be persistent and should not be deleted if the app is closed or reloaded.

Additional Features:

- Implement a smart tagging system.
- Add Text Formatting options.

Level – **Easy**

Outlets Module for InsiIT

Project Description

Currently, The InsiIT App has a basic feature to showcase the outlets' menu. Your task is to develop a complete solution for food ordering and tracking.

Users should be able to add food items to the cart and place their orders. There should be a shopkeeper app where they can accept/decline orders. Your app should display the current status of the order, i.e. preparing, ready, and delivered.

There should be a verification system for any transaction. For example, the User should show a Unique QR code to the shopkeeper to verify the transaction.

InsiIT UI

<https://github.com/Metis-IITGandhinagar/insiit-ui>

InsiIT API

<https://github.com/Metis-IITGandhinagar/insiit-backend-node>

TechStack – Flutter/Dart + NodeJS

Level – **Intermediate**



Pro Challenge

Secure Quizzing App

Project Description

Develop a secure quizzing app. It should have all basic quiz app features. The data of the quiz should be saved to the servers.

It should provide essential features to prevent any malpractices during the quizzes. For example, It should detect minimising of apps, switching between apps, prevent screenshots and not allow copying text.

Users can create a quiz as well as participate in the quizzes.

Additional Features:

- Implement Multiple Correct Questions
- Give analysis to those who attempt quizzes

Level – **Intermediate**

Expense Tracker app

Project Description

You have to make an app that can help users to track their expenses. Many users rely on UPI payments and use different UPI apps like Google Pay, Phonepe, etc.

Due to use of multiple payment apps and services the tracking of expense becomes a tedious task. However you can parse transaction SMS and find the amount and add to total expense.

Additional Features:

- Create a Weekly/Bi-weekly report of the expenses and notify user.
- Create a graph of the expenses with various filter options.

Level – **Medium**



Pro Challenge

Project Repository

Web Development

Personal Portfolio Website

Project Description

Build a personal portfolio website to showcase your skills, projects, and resume. Include sections such as About Me, Projects, Skills, and Contact. Use HTML, CSS, and a bit of JavaScript for interactivity.

Resources

[W3Schools HTML Tutorial](#)

[MDN Web Docs – CSS](#)

[JavaScript.info](#)

Level – **Easy**

Issue Tracker

Project Description

Make an Issue tracker. It should have a page where users can raise concerns and an admin panel where admins can read and take action on the queries.

You can use any backend and database of your choice.

Resources

[W3Schools HTML Tutorial](#)

[MDN Web Docs - CSS](#)

[JavaScript.info](#)

Level - **Easy**

Collaborative Code Editor

Project Description

The objective of this project is to develop a real-time collaboration platform for developers. The platform should allow developers to collaborate seamlessly on the same codebase in real time, enabling them to see each other's changes and work together efficiently. The platform should support any programming language of your choice and provide essential features to enhance the collaboration experience.

Additional Features:

Code Highlighting – Highlight the Section Being Edited

Level – **Intermediate**



Pro Challenge

VisualMailer : Stripo Alternative

Project Description

Create a WYSIWYG Email Application.

Drawbacks of Stripo:

1. It is a paid service
2. When the email is imported, the responsiveness of the mail is lost. Therefore, It does not look good on mobile devices.

The user should create and send emails through your editor. Allow basic features such as formatting, buttons, images, paragraphs, headings, etc.

Additional Features:

Allow multiple themes to select from.

Github:

<https://github.com/Metis-IITGandhinagar/VisualMailer>

Level – **Intermediate**



Pro Challenge

Custom PDF Chatbot using OpenAI API

Project Description

The objective of this project is to develop a chat application using OpenAI APIs. The chatbot can only give answers to the given PDF file.

Your application should be optimised to use fewer OpenAI Tokens.

Additional Features:

Implement Memory to the chatbot

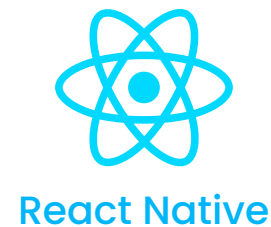
Level – **Intermediate**

Technologies / Resources

Web Dev



App Dev



Databases

