

# Indian Institute of Technology, Palakkad

Subject : ID1110

Project Name : That\_Awesome\_Project

Contributors:

- |                             |           |
|-----------------------------|-----------|
| 1) Zeeshan Mohammed Rangrej | 112301040 |
| 2) Vishesh Srivastava       | 112301037 |
| 3) Aswin Jayaprakash Bhat   | 132301008 |

## Introduction

### a) Background and Context

Our project aims to create a website that caters to a wide range of individuals, providing them with a platform to enjoy various activities. Understanding the diverse needs of our audience, we have incorporated features to ensure everyone finds something of value. For entertainment seekers, we've included a gaming section with a variety of games to choose from and an anime recommendation system. Recognizing the importance of academic support, especially for students, we have integrated a suite of useful tools such as a todo list, translation service, image editor and more.

In today's fast-paced digital world, finding a place that caters to diverse interests and needs can be challenging. Our project seeks to bridge this gap by offering a one-stop platform where people from all walks of life can engage and benefit.

## **b) Problem Statement**

Creating a website that allows access to students and staff of IIT Palakkad and others to simple tools, fun activities and allow communication between each other.

## **c) Objectives**

Develop a multifaceted website that seamlessly integrates entertainment, productivity tools, and community features to provide users with a unified online experience.

1. Tailor the platform to meet the specific needs of students, including those from the IIT Palakkad community, by offering resources and support tailored to their academic and social requirements.
2. Enhance user engagement and satisfaction by providing a user-friendly interface and intuitive navigation across all sections of the website.
3. Foster a sense of belonging and collaboration within the online community by facilitating interaction and knowledge sharing among users.

4. Continuously assess and refine the website's features and functionality based on user feedback and evolving trends in online engagement.
5. Establish strategic partnerships and collaborations to expand the website's reach and enhance its offerings for users.

### **c) Significance and Motivation**

Our project holds significance in several ways. Firstly, it addresses the need for a versatile online platform where users can find entertainment, productivity tools, and a supportive community all in one place. By offering a wide range of features, from games to image editing tools and a student forum, we aim to cater to the diverse needs of our users. Additionally, the inclusion of a dedicated forum for students from the IIT Palakkad community fosters collaboration, knowledge sharing, and a sense of belonging among peers.

Our motivation springs from a vision to craft a comprehensive online destination that enriches lives through diverse offerings like entertainment, productivity tools, and a supportive community. This endeavour is particularly aimed at empowering students, including those from IIT Palakkad, by providing resources and fostering collaboration.

## 2. Project Overview

### a. Project goals and scope

We aim at creating a platform where users can come together and complete various tasks at one site. Our Website allows users to access community forums along with other facilities like games and tools like image editor, language translation site, todo list etc.

### b. Project timeline

February : We learnt the basics required for the project like node.js, mongoDb, flask , socket.io

1st Week March: We started the project by making the server for the project, and added functionalities like todo list, tic tac toe.

2-3rd Week March: We initialised the debugging and started working on mongodb (database for the server), Translator and minesweeper.

4th Week March: We then started making the socket.io for the community forum and tried to implement it in the node.js and started work on sudoku, Anime recommendation system.

2nd - 3rd Week April : We started the CSS for the whole project and then we added games like sudoku and rock paper scissors and utilities like image editor

### **c. Project repository:**

[Iambeastofhell/thatawesomeproject](https://github.com/Iambeastofhell/thatawesomeproject)  
[\(github.com\)](https://github.com/Iambeastofhell/thatawesomeproject)

### **d. Team Members and Contributions:**

i. Zeeshan Mohammed Rangrej :

- Mongodb Database (implemented the whole database in the express.js by self)
- Server : For community forum in node.js
- Rock, Paper, Scissors in python
- Community Forum ( HTML , Basic Client.js )
- Readme.md File

ii. Vishesh Srivastava:

- Translator in python
- Image Editor using pillow
- CSS ,HTML for whole project
- Anime recommendation system in flask
- Todo List in flask

iii. Aswin Jayaprakash Bhat:

- Minesweeper : Python flask backend
- Sudoku : Python flask backend
- Tic Tac Toe: Python flask backend

### **3. Results and Analysis**

#### **a. Achieved results and findings**

- 1) Able to successfully create a community forum that allows communication between all users registered.
- 2) Able to successfully run utilities and intended games.

### **4. Conclusion and Future Work**

#### **a. Assessment of project success**

We envisioned creating a website where users could discover a variety of valuable features and

activities. To achieve this, we developed a range of tools spanning different domains, including games and utilities like Image editing, Google Translate, Anime recommendation system, among others. Additionally, we aimed to create an advanced community forum enabling users to upload photos, GIFs, and facilitating multilingual interactions through a translator.

Reflecting on our progress, we acknowledge that while we've made significant strides, we feel we haven't fully accomplished our vision. We estimate we've achieved about 70 to 80 percent of our intended functionality. Moving forward, we're committed to enhancing our project by adding more features and refining existing ones based on this assessment.

## **b. Future Improvements**

We aim to introduce several advanced functionalities to enhance the user experience on our platform. These include integrating a Translator feature into the community forum, allowing users to upload images and GIFs directly. Additionally, we plan to upgrade our server infrastructure with enhanced scalability and robust security measures to ensure seamless operation.

Furthermore, we're committed to expanding our arsenal of tools for students, building upon

existing features like the image editor. We'll explore additional functionalities that cater to academic needs, providing students with more resources to aid their studies effectively.

Moreover, we aspire to diversify our gaming offerings by delving into the realm of 3D games. We'll strive to incorporate at least one 3D game into our project, offering users an immersive gaming experience alongside our existing selection.

### c. Learning

1. **Frontend Development:** Acquiring skills in frontend technologies such as HTML, CSS, and JavaScript to create visually appealing and interactive web pages.
2. **Backend Development:** Gaining proficiency in backend technologies like Flask or other frameworks to handle server-side logic, database operations, and routing.
3. **Data Management:** Learning about database management systems (DBMS) and techniques for efficiently storing and retrieving data to support website functionality.
4. **Project Management:** Developing organisational and time management skills to effectively plan, execute, and oversee the various stages of website development.



#### d. Team Members' GitHub Accounts:

- i. Zeeshan Mohammed Rangrej: [Zeeshan1903 \(github.com\)](https://github.com/Zeeshan1903)
- ii. Vishesh Srivastava: [Iambeastofhell \(Vishesh Srivastava\) \(github.com\)](https://github.com/Iambeastofhell)
- iii. Aswin Jayaprakash Bhat: [Aswinbhathehe \(Aswin Jayaprakash Bhat\) \(github.com\)](https://github.com/Aswinbhathehe)

## 5. References

- [node.js](#) documentation
- [flask](#) documentation
- [Jinja](#) Templates
- [express.js](#) documentation
- [mongodb](#) documentation
- [Pillow](#) (python Image Editing)
- Youtube (for learning the specifics topics and basic syntax)
- Geeks for Geeks

## 6. Appendices

flask - app hello run : to run the main file

`sudo systemctl start mongod` : To start the mongod command

`sudo systemctl status mongod` : to check whether the mongod is working or not

`mongo` : to start the mongoshell to work on database

`show dbs` : it will show all the databases which u have

`show collections` : it will all the entries that are being

written in the documents (Here 'users' is a collection name for all the users data and '<name>' is the collection where we are specifying the dedicated data of the user

`db.users.find()` : to see the data of the collection with the name users

`db.users.deleteOne({....})` : to delete the entry of the specific users from the database

`db.dropDatabase()` : to remove the whole database from the database this will remove the whole database from the server

