

# THAPARPEDIA



# PROBLEMS

## Problem Statement: Addressing the Challenges Faced by College Students

College life is a transformative period where students strive to excel academically while preparing for their future careers. However, many students encounter significant challenges and struggle to effectively manage their academic workload and navigate their career paths. We aim to address the following problems faced by college students:

### **1. Lack of Centralized Resources:**

College students often spend a significant amount of time searching for study materials, lecture notes, and practice exams across various sources. The lack of a centralized platform makes it difficult for them to access the resources they need to enhance their learning experience and academic performance.

### **2. Limited Career Guidance:**

College students face uncertainty when it comes to career choices and lack access to proper guidance and mentorship. They often struggle to navigate internship and job opportunities, build strong resumes, and prepare for interviews. This lack of career guidance hinders their ability to make informed decisions and maximize their potential in the professional world.

### **3. Insufficient Skill Development Opportunities:**

While academic knowledge is important, students also need to develop relevant skills to succeed in their future careers. However, they often face limited opportunities to acquire and enhance these skills beyond the traditional classroom setting, hindering their overall career readiness.

### **4. Poor Time and Task Management:**

Balancing multiple classes, assignments, extracurricular activities, and personal commitments can be overwhelming for students. Many struggle with time and task management, leading to missed deadlines, increased stress levels, and a negative impact on their academic progress.

# IDEA

Our idea for this hackathon project is to create a comprehensive platform that addresses the needs of college students by providing them with resources to organize and grow both academically and career-wise. We recognize the challenges that students face in managing their academic workload while preparing for their future careers, and our solution aims to bridge this gap.

By bringing resources together in a user-friendly platform, we aim to empower college students to thrive academically and prepare for their future careers effectively. Our idea focuses on fostering a supportive environment where students can access the tools they need to succeed and connect with a broader network of peers and professionals.

Through this hackathon project, we are committed to creating a solution that enhances the college experience and equips students with the skills and resources necessary for their personal and professional growth.

Our platform will serve as a one-stop hub, offering a variety of features and tools to support college students at every step of their journey. It will include the following:

**1. Academic Resources:** We will provide a centralized repository of study materials, lecture notes, and practice exams, sourced from various universities and subject experts. Students can easily access these resources to enhance their learning experience and improve their academic performance.

**2. Career Guidance and Mentorship:** Recognizing the importance of career development, we will provide access to industry professionals and alumni mentors who can offer guidance and support. Students can seek advice on resume building, interview preparation, and explore internship or job opportunities through our network.

# INTRODUCTION

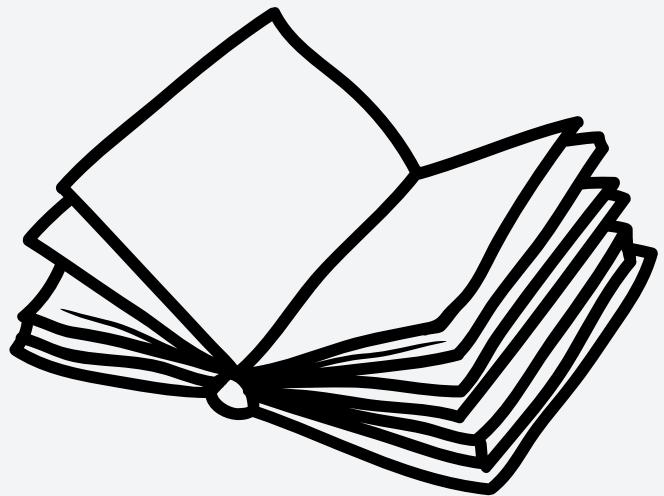
## Empowering Students with Unparalleled Academic and Career Support

Welcome to THAPARPEDIA, a cutting-edge platform dedicated to providing students with an unparalleled academic and career support system. In today's fast-paced world, where information overload can be overwhelming, we have developed THAPARPEDIA as a centralized hub that streamlines the process of accessing essential educational resources and guidance. Our mission is to empower students and equip them with the tools they need to excel academically and make informed decisions about their future.



## Your Comprehensive Educational Companion

THAPARPEDIA is designed to be your reliable companion throughout your educational journey, from early academic pursuits to career development. Our comprehensive platform offers a wide range of features and resources, all conveniently accessible in one place. Whether you need study notes, textbooks, career guidance, or a GPA calculator, THAPARPEDIA has got you covered. With THAPARPEDIA, you can save valuable time and energy by eliminating the need to search multiple platforms for different academic and career-related needs.



# ACADEMIC SECTION

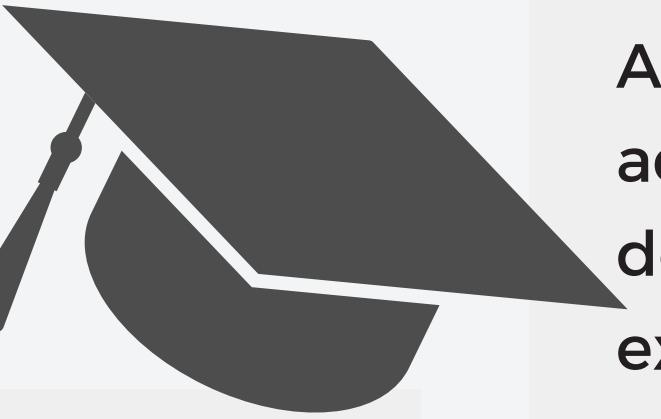


## **1.Comprehensive Study Notes:**

Access well-structured study materials created by experienced students and educators.

**2.GPA Calculator:** Calculate your Grade Point Average (GPA) easily and accurately with our user-friendly tool. Keep track of your academic progress and set goals to achieve the results you desire.

**3.Exam Preparation:** Prepare for your exams effectively with our curated resources, including practice tests, past papers, and revision guides. Boost your confidence and perform at your best.



# CAREER SECTION

- 1. Comprehensive Career Guidance:** Access a wealth of resources and expert advice to help you make informed decisions about your career path. From exploring various professions to understanding industry trends, we've got you covered.
- 2. Resume Building and Interview Preparation:** Learn how to craft a standout resume and develop essential interview skills through our step-by-step guides and interactive modules.
- 3. Networking and Mentorship:** Connect with industry professionals, mentors, and alumni who can provide invaluable insights and guidance. Build a strong network that will support your career growth and open doors to new opportunities.

# GPA CALCULATOR



We have made the GPA calculator in such a way, unlike myherupa it does not ask for grades. Rather it will ask for your marks and then on comparing from previous year subject cutoffs. It will evaluate the grades and then with the help of credits whose info. is mentioned in the subjects json file coming from backend, we calculated GPA + Unlike myherupa we need not to add subject, it will add the subjects automatically as per the user's branch and year. Hence it is way efficient.

# BACKEND

- Instead of using firebase, we have created our own backend in node and express js.
- It is very efficient in case of authentication as we have used JWT as a method of authentication
- We linked our whole backend to MongoDB and made User info. taking methods very efficient . For example :-
  1. It will show error if the user email is not valid (email-validator) or already existed.
  2. It does not pass confirm password to the mongoDB as we have undefined it in prehook
  3. Min. password length muss be 8 characters etc.

- To access anything, User needed to login or signup. Every message to user is passed through prompts and alerts.
- We have also created helpers for storing data so that to save time instead of adding it manually on mongodb
- We have divided whole backend into three routes (+ A helping route) namely auth (/auth), home(/), user(/user)
- There is also one more router named protect which we used to authenticate the user trying to login
- In App.js We have done mounting and and made a different directory for router functions as controllers
- We have created two cookies
  1. For passing JWT tokens ("isLoggedIn")
  2. For storing user ID ("Id")

# FRONTEND

- We have used React JS for creating the frontend and linked it with the backend
- It is basically two IP address system ::
  1. IP address of Server (127.0.0.1:7000)
  2. IP address of React (localhost:3000)
- Whole website will run on react IP address and the data will be transferred from server to this IP address.
- Also we have done routing to route and render different components
- We also created cookies as the cookies of server were limited to that IP address so we needed to create react cookies in that IP address
- All the data of authentication is handled by react cookies.
- The courses in academic section are coming from the backend server acc. to the info. of pool and year he/she entered. And the data of Subject is coming similarly as per the subject clicked by user.
- We have created an authenticate component which will render the component passed in its props only when user is authenticated.

# MONGO DB

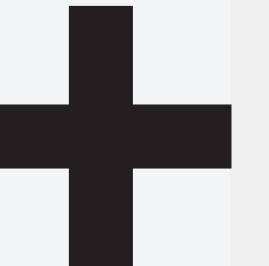
- We have designed and structured mongoDB database very efficiently so that it do not occupies much space. In a well organized manner , we have managed everything in just one database named test.
- There are three collections namely ::
  1. **Collection1** :: It contained data of all users.
  2. **Subjects** :: It contained the subjects of all the four years with their info.
  3. **Pool** :: It contained the data of pool and branch which we will match with the user's one plus there is one more complex thing tht it contained an array of subject id's of collection subjects which contained in that particular pool.

# FILE SERVER

- We have made a file server which serves pdfs. In most of file server, the pdf got downloaded, but as per user convenience we have made such a system which will display the pdf on other tab without need of downloading.
- The file server is kind of a local system. Plus the pdf link is clicked from react IP address but displayed on server's IP address because whole data is uploaded on server because some files maybe confidential. SO we can't upload data on UI (React)

# HOW IT IS BETTER THAN THE EXISTING PROJECT?

- First of all it not only provides notes, Tutes etc. It provides a lot of other info too like cutoffs, credits etc.
- In this we do not need to choose branch or pool, we will just login and list of subject will be in front of us.
- Very advanced and efficient process of GPA calculation.
- Not only provides resources but also provide guidance how to deal with the academics, how to handle and score good in exams , important topics etc.



**WHOLE CAREER SECTION**

# NEXT STEPS

**WE HAVE A CLEAR ROADMAP AHEAD TO FURTHER ENHANCE AND EXPAND OUR SOLUTION TO BENEFIT A WIDER STUDENT COMMUNITY.**

**HERE ARE OUR NEXT STEPS ----->**

These next steps reflect our commitment to evolving and refining our platform to ensure it remains relevant and valuable to college students. We are dedicated to creating a supportive and empowering environment that equips students with the resources they need to excel academically and thrive in their careers.

By accomplishing these milestones, we aim to make a lasting impact on the lives of college students, helping them unlock their full potential and build a brighter future

**1. Creation of Time and Task Management:**  
Our platform will aim to offer a customizable task management system, helping students to schedule their classes, assignments, and extracurricular activities efficiently. There will also be integration of popular calendar apps, ensuring students stay organized and never miss their important deadlines.

**2. User Feedback and Iteration:**  
We will actively seek feedback from our adopters and users to understand their experience, identify areas and scope for improvement, and gather feature requests. Incorporating user feedback will be pivotal in refining our platform and making it more user-friendly and effective.

### **3. Expansion of Resource Library:**

Our next priority is to expand the resources available on our platform. We will , network with Students across campus from all years , professors and alumni to provide a reliable source for a broader range of study materials, career guidance content, and skill development resources. This expansion will ensure that our platform remains comprehensive and up-to-date.

### **4. Mobile Application Development:**

Recognizing the importance of mobile accessibility, we intend to develop a dedicated mobile application for our platform. This will allow students to access resources, manage tasks, and receive notifications on the go, providing them with greater flexibility and convenience.

### **5. Connecting LMS Notifications to our website:**

The notification that we receive on Lms , will be received on our application to help students organise their time table better .

### **6. Continuous Learning and Improvement:**

We will continue to stay updated with the latest advancements in education technology and career development trends. This will enable us to incorporate emerging technologies, such as artificial intelligence and machine learning, into our platform to further personalize the learning experience and provide tailored recommendations to students.

### **7. Placement stats :**

A curated data of previous year placements(no of companies , highest package , e.tc) will be provided for students to have a clear view of the future and be motivated to achieve heights.

# THANK YOU!

