



# GUJARAT TECHNICAL UNIVERSITY

**GOVERNMENT ENGINEERING  
COLLEGE MODASA**  
affiliated with GTU



A Project Report On

## “STUDENT HELPER”

Prepared as a part of the requirements for the subject of  
DESIGN ENGINEERING – II A (3150001)

**5th Semester (A3- Batch)**  
(Computer Engineering)

Submitted by  
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# **Government Engineering College, Modasa**

Department of Computer and Engineering and  
Information Technology  
Academic Year 2023-24

## **CERTIFICATE**

This is to certify that the project entitled

### **“STUDENT HELPER”**

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ENGINEERING under my guidance in partial fulfillment  
of the degree of Bachelor of Computer Engineering (5<sup>th</sup>  
Sem) of Gujarat Technological University, Modasa  
during the academic year 2023-24.

Project Guide

Mr. DODIYA ANIRUDDHSINH KARSHANBHAI

Date: 08/11/2023

Place: GEC, Modasa

## **ACKNOWLEDGEMENT**

The satisfaction that accompanies the successful completion of any task would be incomplete without the mention of people whose ceaseless cooperation made it possible, whose constant guidance and encouragement crown all efforts with success.

We are grateful to our project guide Mr. DODIYA ANIRUDDHSINH KARSHANBHAI for the guidance, inspiration and constructive suggestions that helped us in the preparation of this project. We also thank our colleagues who have helped in successful completion of the project.

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## ABSTRACT

### **"Introducing 'Student Helper': Empowering Tomorrow's Leaders**

In today's fast-paced educational landscape, students face a myriad of challenges that often hinder their academic progress and personal growth. 'Student Helper' is a comprehensive online platform designed to provide essential support and resources to students, ensuring they not only overcome these hurdles but thrive in their educational journey.

Our mission is to equip students with the tools they need to excel in their studies, foster self-improvement, and enhance their overall well-being. 'Student Helper' is more than just a website; it's a trusted companion that guides students through their academic life, offering an array of features and services:

- ✓ **Study Materials:** Access a vast library of study materials, including textbooks, notes, and interactive learning resources, tailored to various educational levels and subjects.
- ✓ **Guidance and Motivation:** Find expert guidance and motivational content to boost morale, ignite passion, and maintain a positive mindset throughout the learning process.
- ✓ **Self-Performance Tests:** Evaluate your progress with self-performance tests, quizzes, and mock exams that help identify strengths and areas for improvement.
- ✓ **Doubt Solving:** Seek solutions to your academic doubts with the help of an active online community and experienced educators who are readily available to provide assistance.
- ✓ **Overcoming Distractions:** Discover strategies and resources to overcome distractions and maintain focus during your study sessions.
- ✓ **Effective Time Management:** Learn the art of time management to optimize your productivity and create a healthy work-life balance.
- ✓ **Study Strategies:** Gain access to proven study techniques and strategies that cater to diverse learning styles, ensuring efficient and effective study sessions.
- ✓ **Communication Skills:** Enhance your communication skills, enabling better interactions with peers, teachers, and future employers.

'Student Helper' is more than just an educational resource; it's a platform that cares about the holistic development of students. We understand the challenges you face, from distractions to a lack of motivation, and we are here to support you every step of the way.

Join us on this transformative journey towards becoming a better student, a more effective learner, and a well-rounded individual. With 'Student Helper,' success is not just a destination; it's a way of life. Embrace the future of education and unlock your full potential with 'Student Helper'."

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## **INTRODUCTION**

In the dynamic realm of education, students often grapple with a multitude of challenges, from battling distractions and seeking motivation to coping with communication barriers and time management dilemmas. 'Student Helper' emerges as a beacon of support and empowerment, designed to aid students in their quest for success. This online platform is not just a website; it's a dedicated ally, offering a myriad of resources and services to ensure that students not only conquer these obstacles but also flourish in their academic endeavors. At 'Student Helper,' we are committed to nurturing the well-rounded development of students, providing an extensive array of tools, guidance, and inspiration to foster self-improvement, boost academic achievement, and cultivate resilience. Join us in this transformative educational journey, where 'Student Helper' serves as your steadfast companion on the path to becoming a more confident, motivated, and accomplished student."

### **OBJECTIVES OF THE PROJECT:**

1. To offer comprehensive guidance and support to shape the future of our next generation.
2. To enhance students' presentation skills, enabling them to communicate effectively.
3. To provide essential motivation to students who may be disheartened by their academic journey.
4. To boost users' time management abilities for improved productivity.
5. To enhance academic performance by monitoring progress and conducting tailored assessments to meet individual needs."

## **EVALUATION OF IDEA**

Our project consists of many small components and by merging the all components we are having a big idea in our hands. As per our group discussion we decided first to meet few seniors, some fellow batchmates, pass out graduates and school – High school students. By meeting them we ask them few questions related to their career.

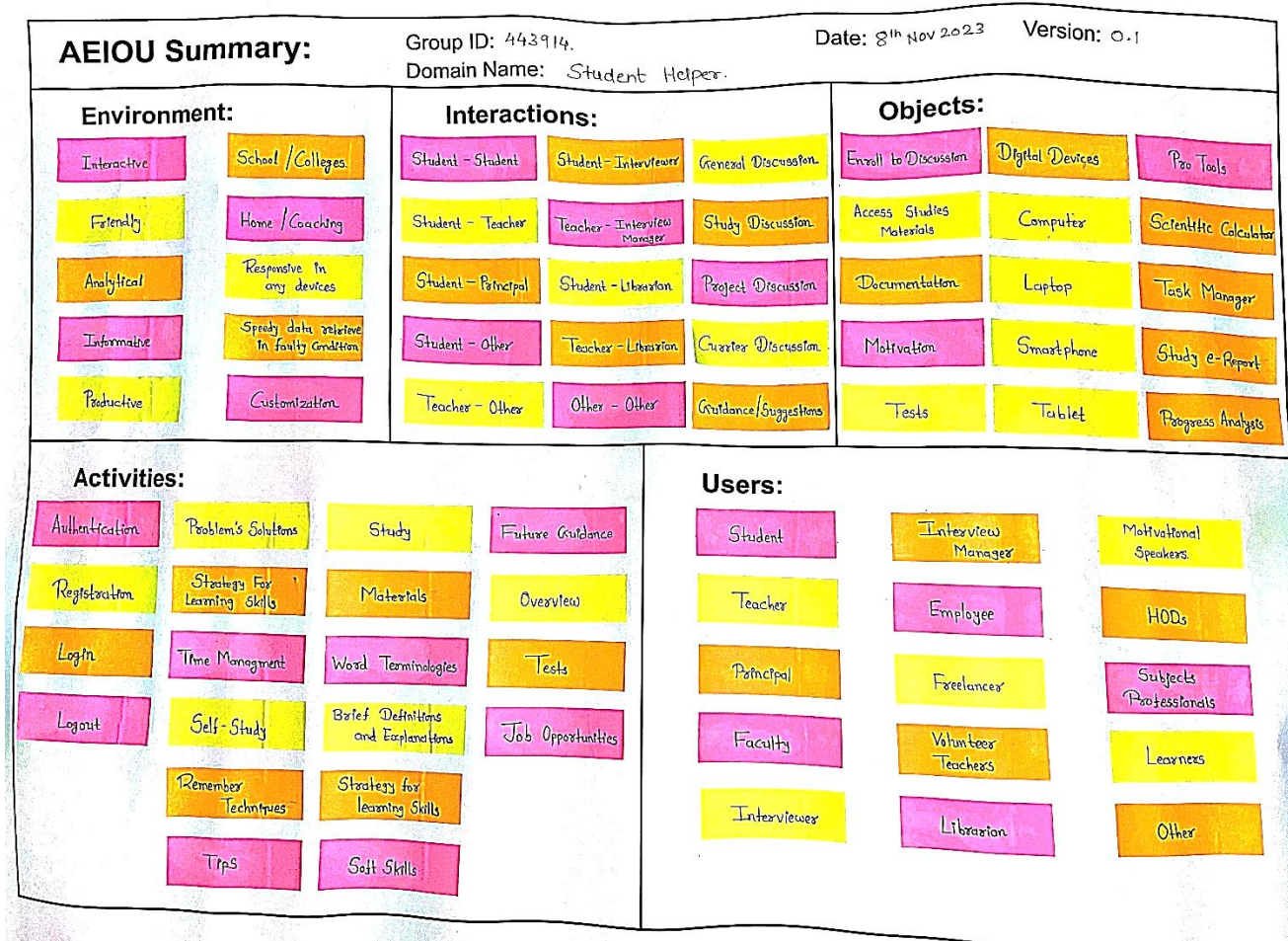
We observed that 75% – 80% of the students are not willingly persuading their streams. Some of them are not even concerned about this topic and some of them are not able to make a right choice.

So, by observing the situation of the surrounded fellows we came out with this idea for make this domain / project. The actual idea is to resolve the problem the students are facing in their career, to motivate them to score good marks, to participate in public speaking events as much as possible.

It addresses day to day problems faced by normal people and address them and helps to fix them. Which is what I believe is the goal of Design Engineering subject in our curriculum.

# OVERVIEW OF THE CANVAS SHEETS

## 1. ACTIVITIES Canvas



The activities canvas consists of the following each element which necessary for the student's regular life. Activities such as interaction, presentation, word terminology, extraordinary skills, strategy making, time management etc. The key elements of the canvas are study materials, word terminology, tests, explanations, study related etc.

This canvas consists of the basic users of the project. The users which are facing issues in interaction, studies, career choosing etc. The elements of this section are students, volunteer teachers, librarian, principal, freelancer, teacher, motivational speakers, interview manager etc. The general observation of the canvas are developers, data administrators, marketing team, chartered accounted, customer care etc.



## **1. Activity:**

### Authentication

- Login
- Logout
- Registration

### Problem's Solutions

- Problems Discussions
- Interaction
- Solution of quarries
- Strategy for learning Skills
- How to Study our-self (self-study)
- Time Management
- Motivation
- Remember Techniques
- Tips

### Study

- Study Materials
- Word Terminologies (Technical / Non-technical Dictionary)
- Brief Definitions and explanations.
- Extraordinary Skills (soft skills etc.)

## **2. Environment:**

- Interactive
- Friendly
- analytical
- Informative
- Productive
- Helpful

- School
- College
- Home
- Coaching
- Library

- Responsive in any devices
- Dark/Light mode

- Customization
- Auto log out when accidentally disconnection
- Private

### **3. Interactions:**

- Student – Student
- Student – Teacher
- Student – Other
- Teacher – Other
- Other – Other
- Student – Principal
- Teacher – Principal
- Principal – Interviewer
- Principal - Librarian
- Student – Interviewer
- Interviewer – Teacher
- Teacher –Interview manager
- Student – Interviewer manager
- Student – Librarian
- Teacher – Librarian

### **4. Object:**

Enroll in Discussion (Interactive cheats)

- Access Studies materials
- Documentation
- Test
- Access of Motivation.

Pro Tools

- Scientific Calc
- Task manager
- Reminder
- Make Study E-Report
- Progress analysis (by test or...)

Any digital devices

- Computer
- laptop
- Tablet
- Smartphone

**5. User:**

- Student
- Teacher
- Principal
- Faculty
- Interviewer
- Interviewer manager
- Employee
- Freelancer
- Volunteer Teachers
- Librarian
- Other

## 2. EMPATHY CANVAS

<b>Design For</b> Student		<b>Design By</b> Mohit Mahajan (210160107050)	
<b>Date</b> 8 <sup>th</sup> Nov 2023		<b>Version</b> 0.1	
<b>USER</b> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin-top: 10px;"> <div style="background-color: #FFD700; padding: 5px; margin: 5px;">Student</div> <div style="background-color: #FFFF00; padding: 5px; margin: 5px;">Teacher</div> <div style="background-color: #FFD700; padding: 5px; margin: 5px;">Developer</div> <div style="background-color: #FF69B4; padding: 5px; margin: 5px;">Data Administration</div> <div style="background-color: #FF69B4; padding: 5px; margin: 5px;">Faculty</div> <div style="background-color: #FFD700; padding: 5px; margin: 5px;">Interviewer</div> <div style="background-color: #FFD700; padding: 5px; margin: 5px;">Checking Team</div> <div style="background-color: #FFFF00; padding: 5px; margin: 5px;">Customer Care Supporter</div> </div>	<b>STAKE HOLDERS</b> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin-top: 10px;"> <div style="background-color: #FFD700; padding: 5px; margin: 5px;">Developer</div> <div style="background-color: #FF69B4; padding: 5px; margin: 5px;">Data Administration</div> <div style="background-color: #FFD700; padding: 5px; margin: 5px;">Checking Team</div> <div style="background-color: #FFFF00; padding: 5px; margin: 5px;">Customer Care Supporter</div> </div>		
<b>ACTIVITIES</b> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; margin-top: 10px;"> <div style="background-color: #FFD700; padding: 5px; margin: 5px;">Problem Discussions</div> <div style="background-color: #FFFF00; padding: 5px; margin: 5px;">Interactive Checks</div> <div style="background-color: #FF69B4; padding: 5px; margin: 5px;">Solution of Queries</div> <div style="background-color: #FFD700; padding: 5px; margin: 5px;">Strategy Management</div> <div style="background-color: #FFFF00; padding: 5px; margin: 5px;">Time Management</div> <div style="background-color: #FFD700; padding: 5px; margin: 5px;">Preference Rehearsal</div> <div style="background-color: #FFD700; padding: 5px; margin: 5px;">Tips Sharing</div> <div style="background-color: #FF69B4; padding: 5px; margin: 5px;">Motivation</div> </div>			
<b>STORY BOARDING</b> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 30%; padding: 5px; margin: 5px;"> <b>HAPPY</b>  <div style="background-color: #FF69B4; padding: 5px; margin: 5px;">Helpful to new people</div> </div> <div style="width: 70%; padding: 5px; margin: 5px;"> <p>When new student came to college at first time, he don't know that what is going on, so he asked me about college. I helped him and inform about college department, library, gymkhana, laboratory etc. I help and informed about how to issue library card from student section and procedure also. He also wanted to know about more information regarding activities happen in college campus and hostel. I felt happy to help him.</p> </div> </div>			
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 30%; padding: 5px; margin: 5px;"> <b>HAPPY</b>  <div style="background-color: #FF69B4; padding: 5px; margin: 5px;">Finding Best Career Option</div> </div> <div style="width: 70%; padding: 5px; margin: 5px;"> <p>My friends want to know about career option available after completing 12<sup>th</sup> science with maths subject. He don't know what often fields are available for future studies. He wanted to know about good colleges, fees and hostel information also what are the procedure to take admission in any college, which document will be needed etc. It will be good for him to get guidance from expert.</p> </div> </div>			
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 30%; padding: 5px; margin: 5px;"> <b>SAD</b>  <div style="background-color: #FFD700; padding: 5px; margin: 5px;">Lack of Guidance</div> </div> <div style="width: 70%; padding: 5px; margin: 5px;"> <p>My friend didn't get proper guidance for what after 12<sup>th</sup> and he took engineering in electrical branch. Although he interest was not in that field after sometime in engineering studies he felt uncomfortable with his studies. This is not happen if he knew about any of his career path that he is suitable for.</p> </div> </div>			
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 30%; padding: 5px; margin: 5px;"> <b>SAD</b>  <div style="background-color: #FFD700; padding: 5px; margin: 5px;">Self Study Problem</div> </div> <div style="width: 70%; padding: 5px; margin: 5px;"> <p>During self study, sometimes student feel problem to understanding in any topic. Student use so much reference for that topic, but commonly cannot satisfy. Problems occur in all topics which depended on this topic. Sometimes we have to such friends or people that we have not discuss with them for any topic. For examples in physics, topic is "Dual Nature of light" so there are may difficult to discuss and solve double during self study.</p> </div> </div>			

It consists of the information about the stack holders of the project. Which consists of the developer, data administrator, checking team, customer care supporter etc. This canvas consists of the user's column also. In this column the users are students, faculty, teacher, interviewer etc. There is also another section which has stories related to the experience of the project. It is helpful to find new people to interact with new people, also help to find the best career for the user.

**User:**

- Student
- Teacher
- Faculty
- Interviewer

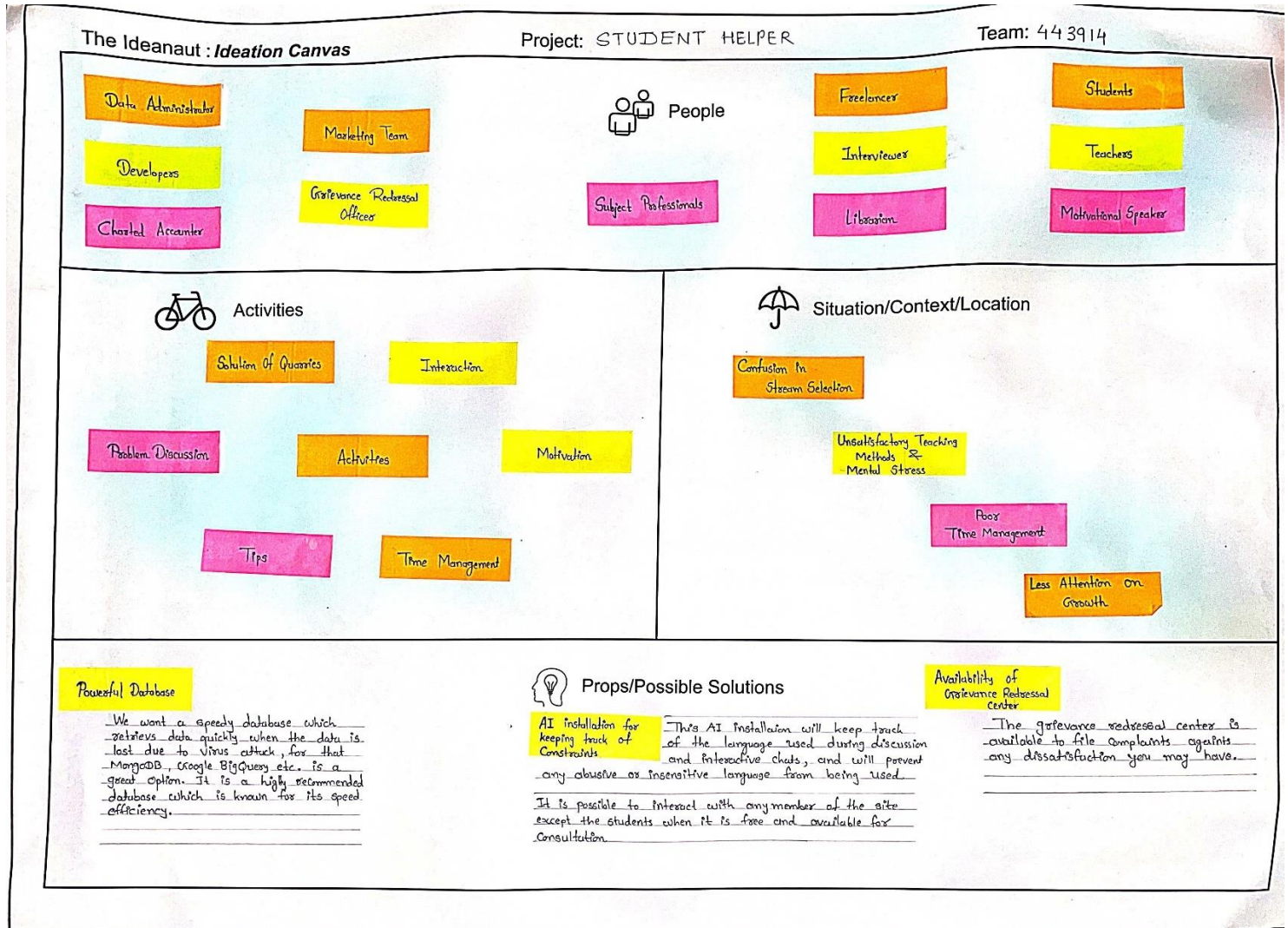
**Stake Holders:**

- Developers
- Data Administration
- Checking/Tester team
- Customer Care Supporter

**Activity**

- Problems Discussions
- Interactive Cheats
- Solution of quarries
- Strategy for learning Skills
- Time Management
- Motivation
- Tips Sharing

### 3. IDEATION CANVAS



This canvas has the data in which the surroundings are considered for the situation which are created unconditionally by the people surrounding us. These all situations are solved by the project. The situation consists of the confusion in choosing the stream for career, mental stress, poor time management, less attention on growth etc. And the possible outcomes of the situations are powerful database, AI installation for keeping track of constraints etc. It also has people section in which marketing team, developers, chartered accountant, subject professionals, librarian, motivational speakers etc.

**People:**

- Data Administrator
- Developers
- Chartered Accountant
- Marketing Team
- Grievance Redressal Officer
- Subject Professionals
- Freelancer
- Interviewer
- Librarian

**Activities:**

- Solution of questions
- Problem discussion
- Interactions
- Motivation
- Time management
- Tips

**Situation/Context/Location**

Student can find solution of:

- Customer in stream Selection
- Unsatisfactory Teaching Method & Mental Stress
- Poor Time Management
- Less attentions on Growth



## 4. PRODUCT DEVELOPMENT CANVAS

Team/Date/Version:

443914 / 18<sup>th</sup> Nov 2022 / 0.1

### Product Development Canvas

<p><b>? Purpose</b></p> <p>What is the purpose of this concept you're developing? Does it solve a problem, or it enhances a certain experience?</p> <p>Is it serving a need or it is trying to create a new need or tap an untapped need?</p> <p>To assist the academic advising department in day-to-day activities.</p> <p>Generally, Students specific site it helps to learn new topic and syllabus related topics.</p> <p>It connect higher faculty to student.</p> <p>To improve communication skill.</p> <p>It is increase interest in student's study.</p>	<p><b>Product Experience</b></p> <p>Define what your customer should feel like when he uses your product/services? What emotions, feelings would define his experience? Feeling of comfort, convenience, or feeling of having more with less (not conscious) or feeling of greater security, safety etc.</p> <p>Graphic Enhancement    Modern UI    Feature Rich    Flexible Use</p> <p><b>Product Functions</b></p> <p>Functions are a products answer to use problems/need. They do something that user wants. They are often verbs in nature. Every function is powered by many features. Multitasking is a function. Browser tabs is a features that powers themultitasking feature. A function can have one or more features powering it. Functions are very generic in nature, features are often more specific. Functions can be similar to product experience. Safety (product function) provides a feeling of safety (product experience)</p> <p>Solving Doubt    Interacton    Providing Best Routine Time Table</p> <p><b>Product Features</b></p> <p>Product features are specific. One or more features will power function. Antilock Brakes, Airbags are features that power the safety function. Browser tabs, Apple's home button to multitask between apps are features powering the multitasking function. Each feature will have many components/sub components powering it. Sometimes a very popular component becomes a feature in itself. Like car stereo is a major components and a feature at th same time powering the In car entertainment function powering entertainment as a product experience.</p> <p>Affordable Price    Best Designing    User Faterndly</p> <p>IQ/EQ Analysis    Data Storing / Sorting    Customisability</p>	<p><b>Customer Revalidation</b></p> <p>Once you're finished with your feature set, test with the customer / user if the features, functions are useful. Speak to the customer / user if</p> <p>It needs to improve in user interface in main site</p> <p>Logging problem when multiple users attached with site concurrently.</p> <p>Authentication problem in site.</p> <p>When we are logged in site sometime some information is lost by external factors.</p>
<p><b>People</b></p> <p>Who is the key customer segment who will use this product /service or the end product of the concept you're pursuing?</p> <p>Write here about them, describe them a little.</p> <p>Student</p> <p>Teacher</p> <p>Subject Professionals</p> <p>Interviewer</p> <p>Multitasked Speaker</p>	<p><b>Components</b></p> <p>Components build up the features. For a airbag it will comprise a list of component like bags, triggers etc. that go into making it. For a tabbed browser it will comprise of various chunks of code that will make the tabs work. In cases where the feature is a major component, you could list here the auxiliary components that are required to make the major component work. You can also list new adjustments and innovations you're planning here at the component level</p> <p>Database Server    Mobile    Computer</p> <p>Postgre SQL    CSS</p> <p>Python    HTML    JavaScript</p>	<p><b>Reject, Redesign Retain</b></p> <p>Post customer validation, reject, those functions or features that the customers didn't find useful. Redesign those that were partially useful and retain those met the bar, iterate with this until all functions/features are accepted.</p> <p>To improve in optimization for mobile device.</p> <p>To improve comment section for review.</p> <p>To improve optimization in search for better result.</p>

It's the closure of the phase-two, where our objectives are clear and ready to approach. What solution as over product should give, what features we need, how to function them properly in order to fulfill the requirements, surveying on our domain of buyers to reject/redesign/retain components of our product. Based on the customer reviews and validation, we add the notes accordingly and make changes in the application as needed.



### **Product Experience**

- Graphic Enhancement
- Modern User Interface
- Features Reach
- Flexible Use

### **Product Functions:**

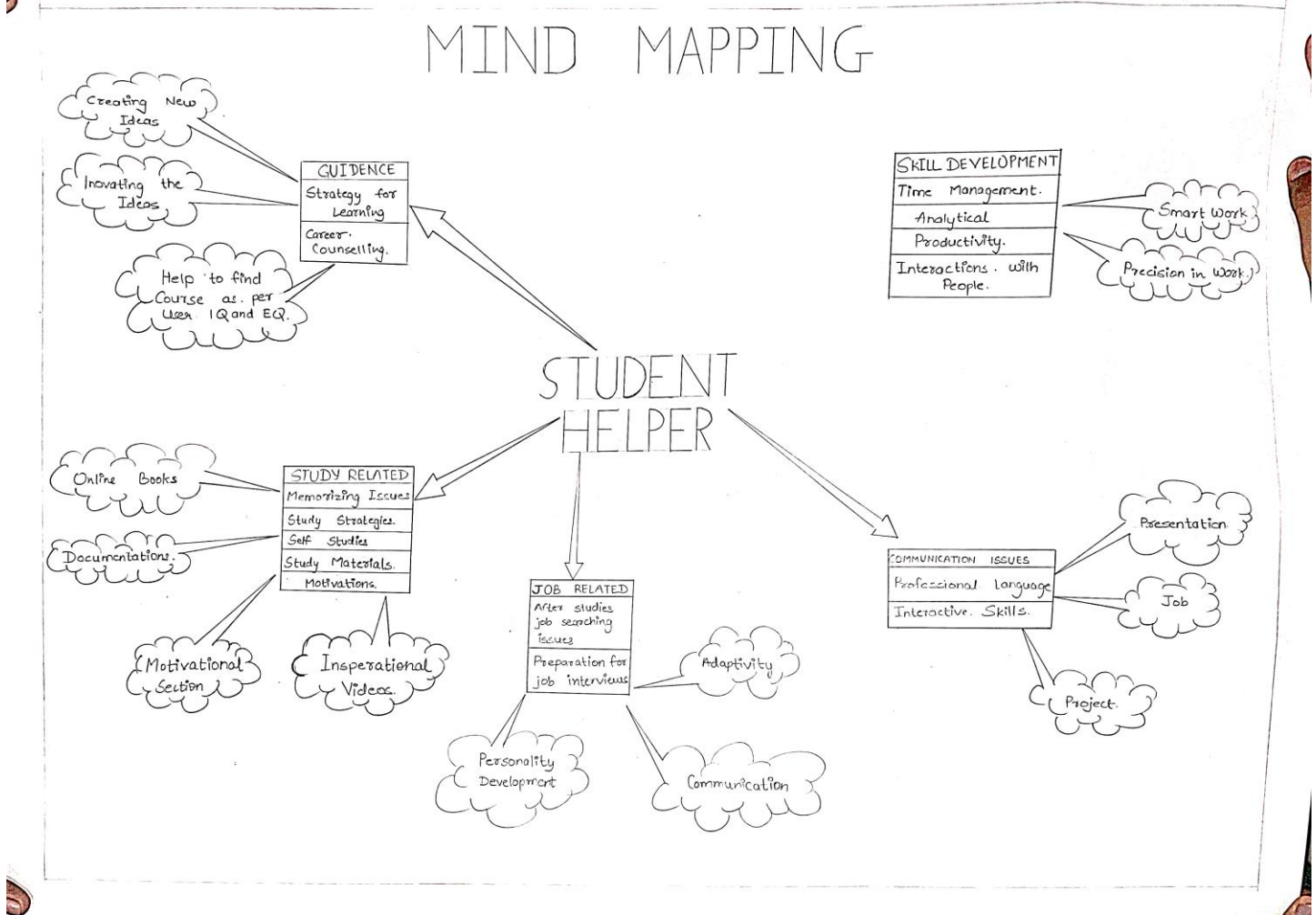
- Solving Doubt
- Interaction
- Providing Tips to make time management etc.

### **Product Features:**

- Responsible
- User Friendly
- Customizability
- Data Storing/Exporting

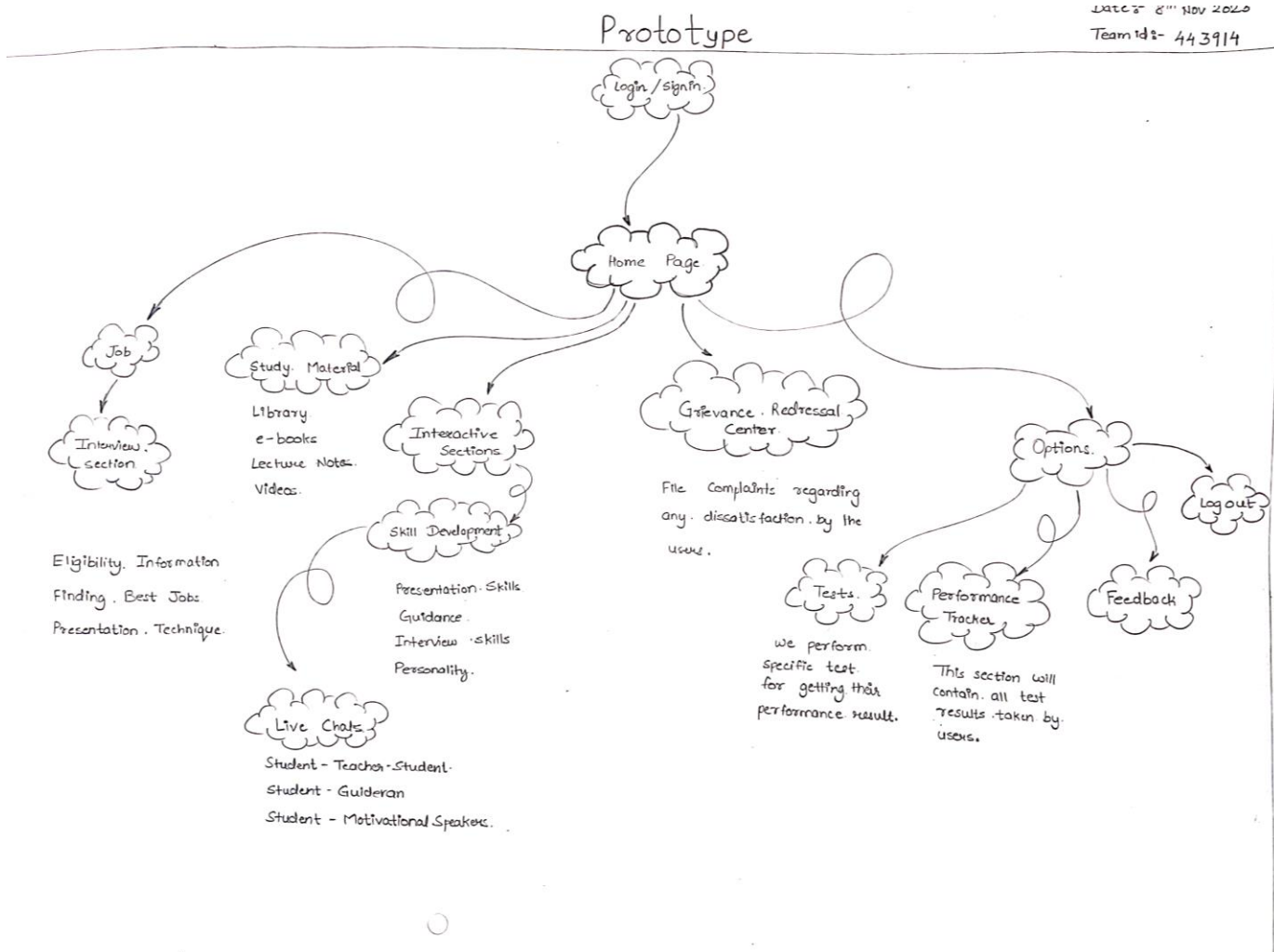
## 5. MIND MAPING CANVAS

Date: 8th Nov 2021  
Team Id: 443914



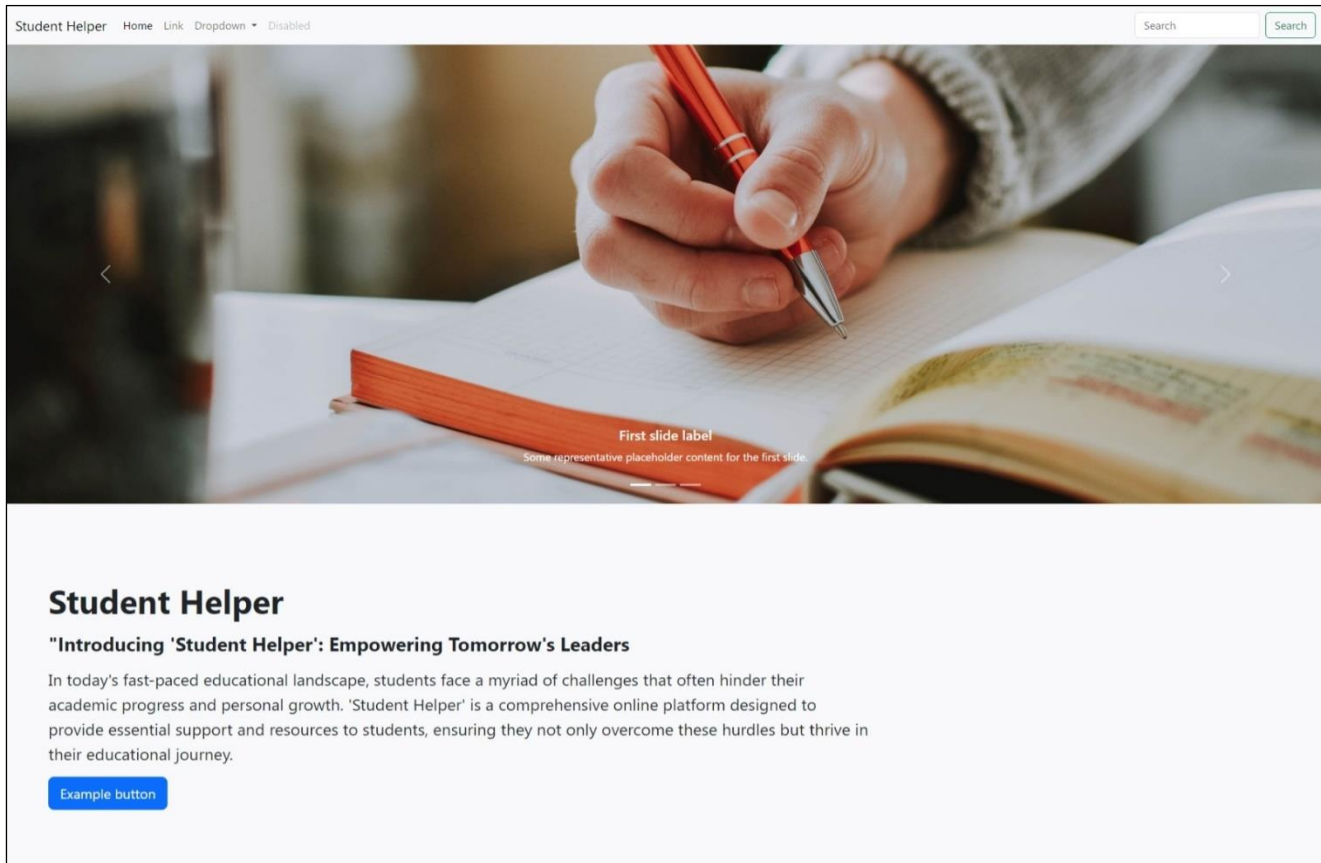
Mind mapping refers to a technique that designers and engineers use to express and generate ideas. All that mind mapping really is, however, is a way to get all the ideas in your head down onto paper. There is no right or wrong way to mind map. Here listed out all the roots of the project and also features and facility available in our project. In this canvas the section is study relate, job related, communication, skill development and guidance.

## 6. PROTOTYPE CANVAS



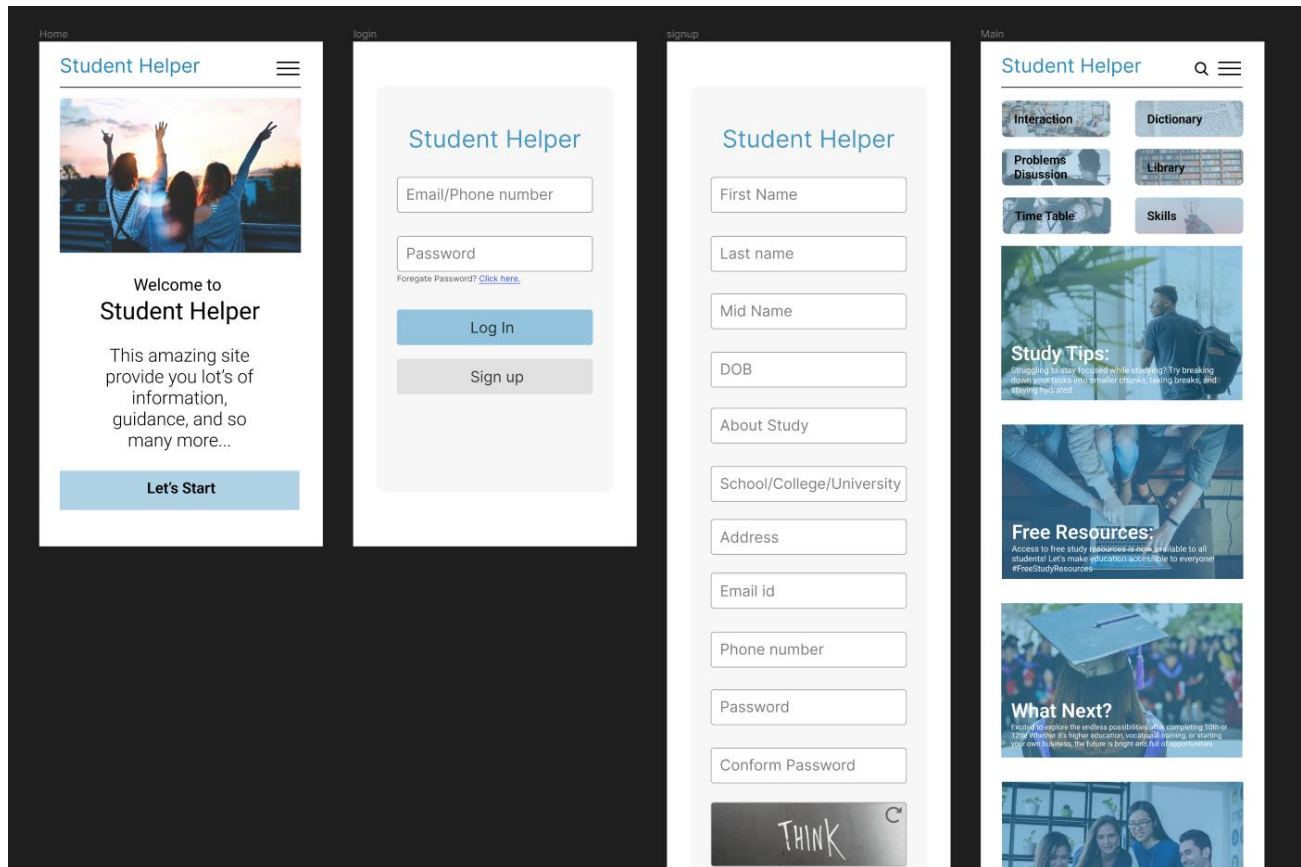
A prototype is an early sample, model or release of a product created to test a concept or process. Typically, a prototype is used to evaluate a new design to improve the accuracy of analysts and system users. It is the step between the formalization and the evaluation of an idea. Prototypes are a crucial part of the design process and a practice used in all design disciplines. From architects, engineers, industrial designers and even service designers, they make their prototypes to test their designs before investing in their mass production.

## Home page



Our homepage is your gateway to a world of academic empowerment and personal growth. Designed with students in mind, 'Student Helper' offers a wealth of resources, guidance, and support to help you navigate the challenges of your educational journey. As you step into our digital campus, you'll find a rich tapestry of study materials, motivational content, self-assessment tools, a thriving community, and so much more.

## Android app prototype:



Below is a sneak peek at our 'Student Helper' Android app prototype, meticulously crafted in Figma. This preview encapsulates the essence of what's to come: a user-friendly interface featuring the Home Page, Login Page, Registration Page, and a glimpse of the rich content awaiting you. The design seamlessly blends form and function, ensuring an intuitive and engaging user experience. Get ready to embark on a seamless educational journey with our app, where every screen has been thoughtfully designed to make your student life more inspiring and productive.

## SCOPE OF THE PROJECT

The 'Student Helper' project encompasses a wide range of features and services aimed at addressing the multifaceted challenges faced by students in their educational journey. The project's scope includes, but is not limited to:

- ✓ Educational Resources: Providing access to an extensive library of study materials, including textbooks, notes, and interactive learning resources, catering to diverse subjects and educational levels.
- ✓ Guidance and Motivation: Offering expert guidance, inspirational content, and practical advice to foster a positive mindset and personal growth.
- ✓ Assessment and Improvement: Facilitating self-performance tests, quizzes, and mock exams to assess and enhance academic progress.
- ✓ Doubt Resolution: Creating a supportive online community and engaging educators to assist in resolving academic queries and challenges.
- ✓ Productivity and Time Management: Offering strategies and resources to improve time management skills, aiding in maintaining focus and achieving a balanced work-life approach.
- ✓ Study Strategies: Providing proven study techniques and strategies to suit various learning styles and promote efficient study habits.
- ✓ Communication Skills: Enhancing interpersonal and communication skills to facilitate better interactions with peers, educators, and future employers.
- ✓ Performance Tracking: Enabling students to monitor their academic performance through grade tracking and personalized assessments.

The 'Student Helper' project is committed to addressing the holistic needs of students, offering a diverse array of resources and services to empower them in their educational endeavors. It aims to be a comprehensive, all-encompassing platform for students seeking academic excellence and personal growth."

## LITERATURE REVIEW

In the current landscape, several similar projects and platforms exist; however, a thorough examination reveals a unique proposition in the 'Student Helper' project. While alternatives like Biju's serve educational purposes and platforms like Pep Talk focus on motivational content, and I Dream Career app specializes in career counseling, and social media facilitates worldwide text and video chats, none of these solutions offer the comprehensive range of services available in one unified location, all provided free of cost.

For instance, Biju's is well-known for its educational resources, while Pep Talk excels in motivational videos, and the I Dream Career app is dedicated to career counseling. Social media platforms enable global text and video chats. In contrast, the 'Student Helper' project consolidates all these features into a single, user-friendly interface, making it a one-stop solution for students. Additionally, we offer a well-organized library of study and research materials, further enhancing the project's value and utility in the educational landscape."

## CONCLUSION

The 'Student Helper' project has been an invaluable learning journey for all team members. It has allowed us to engage with and address real-world challenges that people encounter in their daily lives, highlighting the complexities and nuances of devising effective solutions. This project has guided us through various phases of project development, offering a genuine glimpse into the realm of software engineering and web development.

The experience of working on this project, along with the exhilaration of confronting and resolving a diverse array of issues and challenges, has immersed us in the developer's world. Through this endeavor, we gained insight into the intricacies of designing a professional website, and we've also learned from our mistakes, providing us with valuable experience and preparing us to tackle the challenges we may encounter in our future professional careers."

## REFERENCES

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- [www.figma.com](http://www.figma.com)
- [getbootstrap.com](http://getbootstrap.com)
- YouTube