



# E learning for intermediate students

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# Problem statement:

Intermediate students prepare for entrance exam and for that they need to refer lot of websites,apps and youtube videos and also they need to use other apps for previous years question papers.it's very hard for them to prepare jumping from one app to other this would also reduce their interest in studying.



## Mission statement:

- Entrance exams are one of important factor in any once life for further education and we see lot of students facing difficulties in their preparation don't knowing what to refer and to what to stick to as they have many options available this software helps students to reduce their headache in choosing the best website for their preparation.
- Students who are preparing for entrance exam are the main beneficiaries of this software because it reduces the switching time from site to site.and also understands the real need of student.
- It has a lot of scope in the future because every student has to face their entrance exam for any field they choose as their career.

## Value proposition:

- Preparation plays an important role in the success of any exam .
- Due to the vast increase of websites,apps and media students are confused to use the right app or site.This not only kills the time but also affects the preparation.
- Yes,we do have stories where we found it difficult to choose the right website or app for the preparation.
- As it is directly related to students we as a team wanted to do it.

# Assumptions:

There are many sites which don't provide everything that the student need.

- They not contain with full content but also confuse the students
- Assumption is that it directly navigates to the topic the user wants.
- Reduces search time



# Stakeholders:

- Students who are present studying intermediate will face this problem.
- According to the research young adults aged 17-18 years are most likely to effected by the problem.
- Students are mostly distrubed during preparation because of switching apps and sites .
- We have interacted with present intermediate students and students who completed .



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## Empathy tools used:

- Survey with google forms
- We have circulated the google forms to the students.
- We also interacted with the present intermediate students like our brothers,sisters and friends.

# USER PERSONA:

- A person named SuryaTeja, currently studying Intermediate 2nd year in Impulse Junior College, stays in Hyderabad. He wants to prepare for his entrance exams while preparing he used to prepare online and he goes on searching the topics and searching from books that make him feel nervous and stressed due to less time. And he didn't cover overall topics and problems it makes him fear and lose his confidence on exam day.
- A person named Srikar, studying inter 2nd year. He didn't cover all
  - topics in a particular subject because of a lack of finding topics
  - from a huge number of books.





# Insights:

As a part of empathization we have observed the following:

- Most of the students love to stick to one website which provide everything they need with.
- Also we observed that most of them saying the there is inconsistency in the topics which is effecting their preparation and also we got to know that because of this students are skipping lot of topics without even knowing they are.
- And about 25 percentage of students are switching more than 10 apps and websites and more than 40 percent of students are switching more than 5 apps which is very trying.

## Primary needs:

- It should provide with all the syllabus reducing the search time.
- It should provide the environment where students find it interesting to study.
- Provides with all the syllabus for the exams.

## Secondary needs:

- Register if the student is new to the website.
- Access subject wise material.
- Reducess the search time.



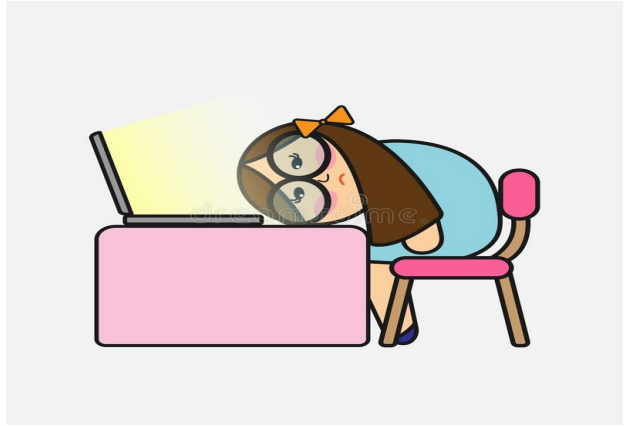
# Latent needs:

- Syllabus at one website.
- No need to search or switch to many .
- Also provide model question papers
- Provides previous questions and most weightage topics
- Frequently asked questions on particular topics.



## Pain points:

- People are wasting lot of time for searching best concepts
- Searching best concept
- Student losing their interest in the process of searching.



## Gain points :

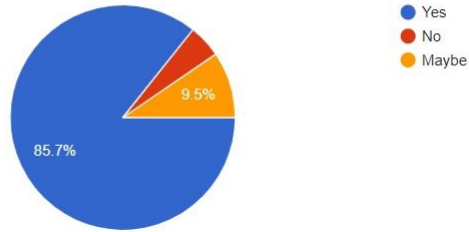
- No need to search
- Time got saved
- No losing of interest



# Statistics of the responses:

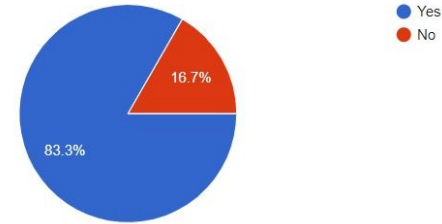
Do you face any difficulty while preparing for entrance exam?

112 responses



Have you found inconsistency in topics or topics not in order.

112 responses



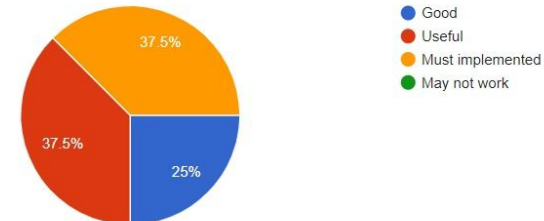
What solution and features do you suggest.

22 responses



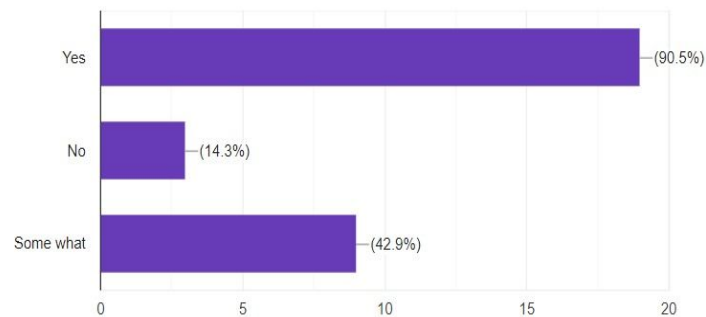
What do you think about our project

112 responses



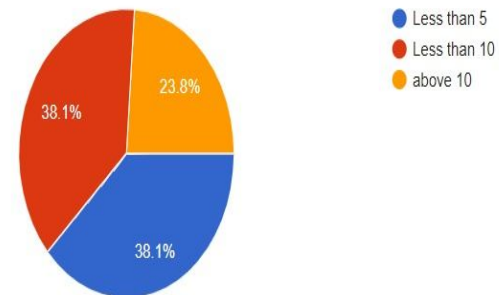
Have you faced any problem while searching and borrowing the heavy books.

112 responses



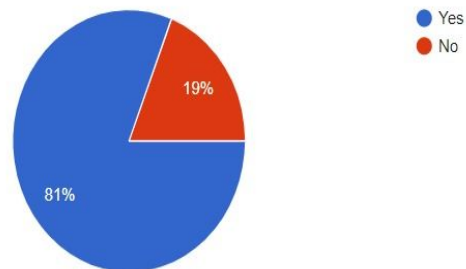
How many websites or apps did you switch on an average , while preparations.

112 responses



Do you find incomplete topics. Have you faced this where you can't find a specific topic that you need more.

112 responses



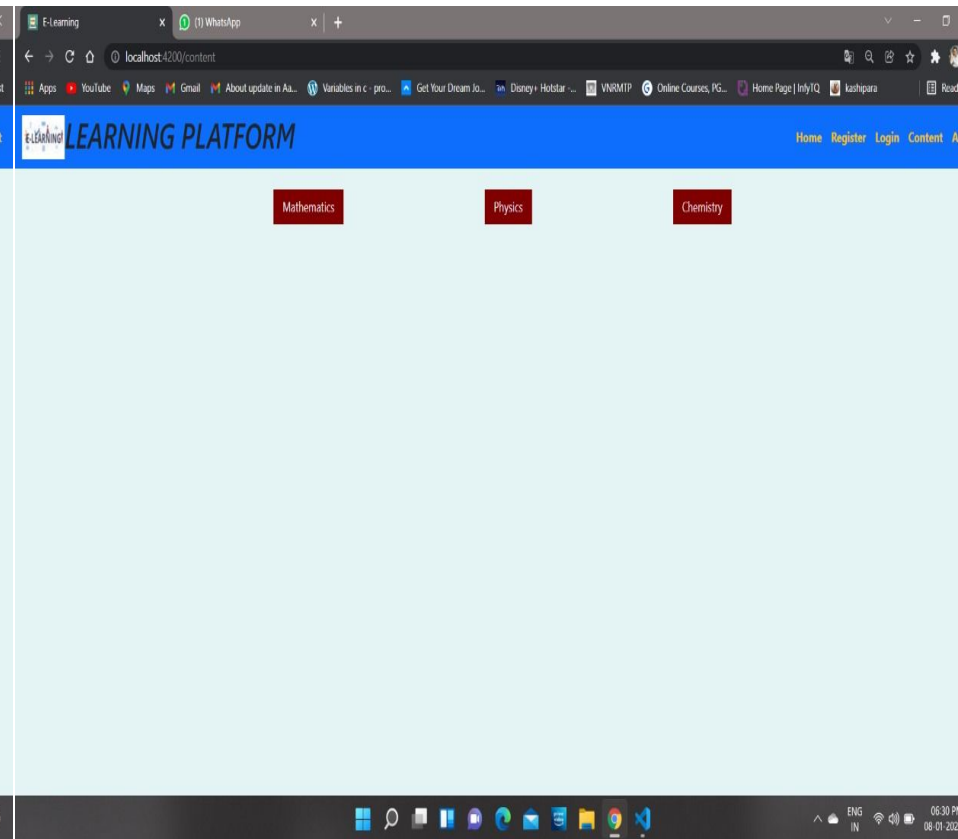
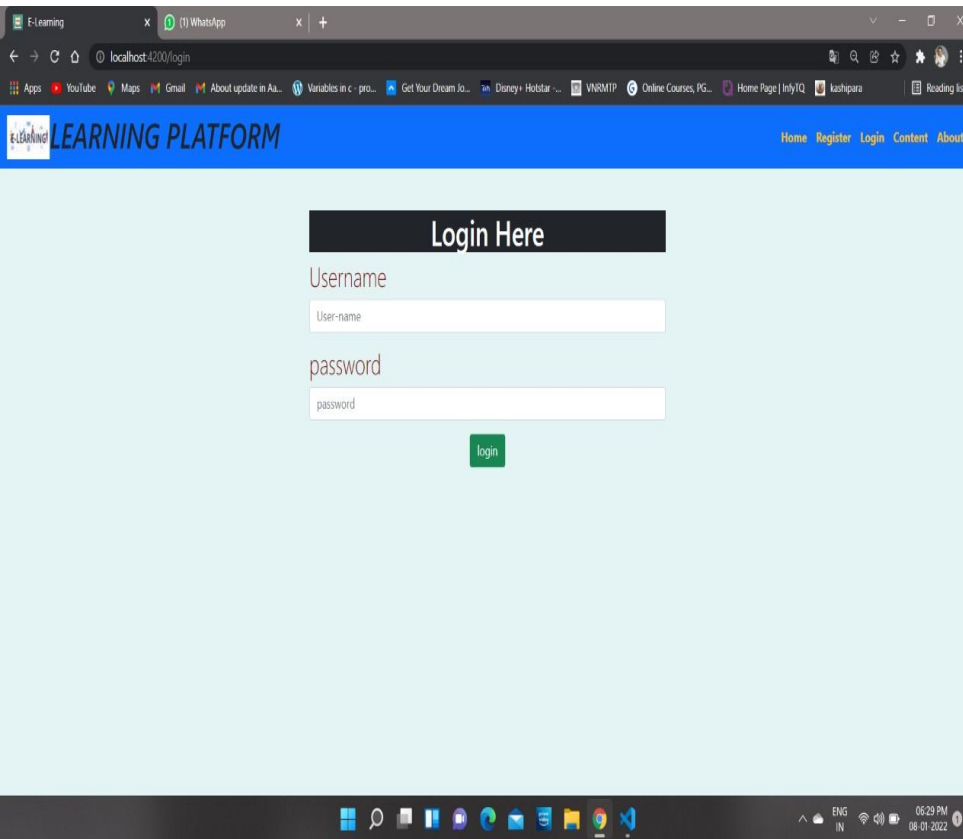
# Ideation:

This solution is designed for all intermediate students how are facing problem to find right material and website which contains all the required content in it

- Student can login with the correct details after successful registration.
- After logging in he can find subject wise material.
- In each section of subject it has its related topics



# Results of our prototype:







# LEARNING PLATFORM

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Mathematics

Physics

Chemistry

### Functions

$f(x, y) = x^2 + 3xy + 2y$   
If  $f(x, y) = 48$   
then  $y = ?$

Functions

MATHEMATICS-1A

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### Matrices

$A = \begin{bmatrix} 2 & 7 & -4 \\ 6 & 3 & 5 \end{bmatrix} \rightarrow 2 \times 3$   
Rows  $\times$  columns  
 $A_{23} = 5$   $A_{12} = 7$   $A_{21} = 6$

Matrices

MATHEMATICS-1A

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### Addition of Vectors

$F_x = F \cos \theta$   
 $F_y = F \sin \theta$   
 $\theta = \tan^{-1}(F_y/F_x)$   
 $F_R = \sqrt{F_x^2 + F_y^2}$

Addition of vectors

MATHEMATICS-1A

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### Cross Product

$\vec{a} = \langle a_x, a_y, a_z \rangle$   
 $\vec{b} = \langle b_x, b_y, b_z \rangle$   
 $\vec{c} = \vec{a} \times \vec{b}$   
 $\begin{vmatrix} \hat{i} & \hat{j} & \hat{k} \\ a_x & a_y & a_z \\ b_x & b_y & b_z \end{vmatrix} = \hat{i} \begin{vmatrix} a_y & a_z \\ b_y & b_z \end{vmatrix} - \hat{j} \begin{vmatrix} a_x & a_z \\ b_x & b_z \end{vmatrix} + \hat{k} \begin{vmatrix} a_x & a_y \\ b_x & b_y \end{vmatrix}$

vector products

MATHEMATICS-1A

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### Trigonometric Ratios

sin, cos, tan, sec, csc, cot

SOH:  $\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}}$   
CAH:  $\cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}}$   
TOA:  $\tan \theta = \frac{\text{opposite}}{\text{adjacent}}$

### Types of Triangles

By Side	By Angle
<b>Equilateral Triangle</b> has three equal sides	<b>Acute Triangle</b> has three angles $< 90^\circ$
<b>Isosceles Triangle</b> has two equal sides	<b>Right Triangle</b> has one angle $= 90^\circ$
<b>Scalene Triangle</b> has three unequal sides	

### Locus of Points

Locus of points equidistant from a point A and a line l will form a circle with center A.

Locus of points that are equidistant from two lines will bisect the angle formed by the two lines.

### Straight Line

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# Vectors

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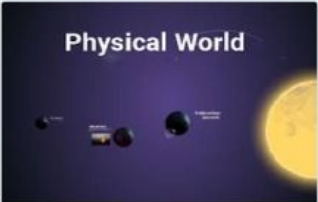
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Mathematics

Physics

Chemistry



Physical Worlds  
PHYSICS-1

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Motion in StraightLine and Plane  
PHYSICS-1

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Laws of Motion  
PHYSICS-1

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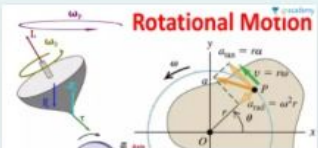
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Work power energy  
PHYSICS-1

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E-Learning

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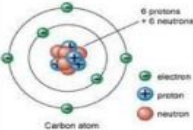
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MathematicsPhysicsChemistry

Atomic Structure



6 protons  
+ 6 neutrons

electron  
proton  
neutron

Carbon atom

All matter is made of atoms. Atoms have 2 regions: nucleus (electrons orbit). The nucleus is made of protons and neutrons. The electrons orbit the nucleus. Electrons are negatively charged. Electrons are present in all atoms.


Atomic Structures

CHEMISTRY PART-1

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PERIODICITY OF ELEMENTS



PERIODICITY OF ELEMENTS

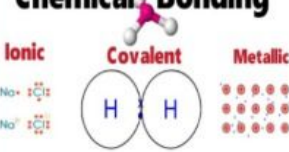
PERIODICITY OF ELEMENTS

CHEMISTRY PART-1

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Chemical Bonding



Ionic  
Covalent  
Metallic

Na+  
Cl-

H  
H

Na+  
Cl-


CHEMICAL BONDING

CHEMISTRY PART-1

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Three States of Matter



Solid  
Liquid  
Gas


States of matter

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Stoichiometry



Chemical  
Reaction

Amounts of reactants before reaction

Stoichiometry


Stoichiometry

CHEMISTRY PART-1

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Thermodynamics



Hot  
Heat Flow  
Cold


Thermodynamics

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ACIDS AND BASES



ACIDS AND BASES


ACIDS AND BASES

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Hydrogen And Its Components



Hydrogen  
And  
Its  
Components

Hydrogen And Its Components

CHEMISTRY PART-1

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# Our personal experience:



**Venkat::**Working on this problem statement was very satisfying as this is a major problem for all Intermediate students during entrance exams. Learned a lot about the process of the Ideation Method, prototype and lastly, I learned user empathization which plays a key role in this course.

**vandana::**As we and our cousins faced the problem while preparing for emcet and also Last 2 batch people faced a lot of difficulty as they have online classes keeping this in mind we could come up with this solution .

**Manasa::**it's a wonderful experience and had learned many things through out the project its very great experience doing things that really meant to be fixed, and the working of the project along with the team knowing their thoughts was good and has given me great satisfaction .

**Halika::**it was very good working with team and getting knowledge on the work we did and best part was we could come up with real problem something we really faced.

**Arun::** this is a very great experience bring up the solution to the upcoming students so that they don't face the same problem we faced in our times.i think i have learned a lot through this project.

## Final Real-Win-Worth

We can say our project satisfy the Desirability because,desirability is something that user should favour it and should have desire for it and yes..!! Students are definitely desirable for the solution like this .

We think this project is viable because it has a lot of scope in the future and also can survive a long through

We are pretty much sure that we reached our goal to build this project and gave good end product to the primary users



*Thank  
you*

