



FINAL PRESENTATION

Problem

1

What is it?

Lack of awareness and know-how in the field of astronomy.

2

Who faces it?

People of all ages who have/had a passion for astronomy but can't/ couldn't pursue it

3

Why is it important?

Astronomy is a growing field. Many wasted opportunities. Making it a mainstream career option

Astroonus App

One stop Astronomy Solution

Solution 1

1 Provide learning content related to astronomy in structured manner

Solution 2

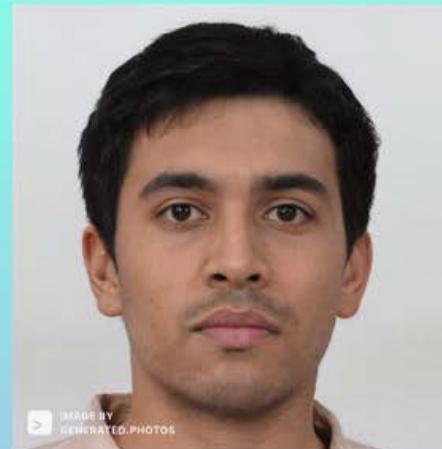
2 To enhance learning by solving users doubt through mentorship

Solution 3

3 To provide astronomy community a better solution in one place



Personas



**Raghav
Chaudhary**

21

Single
College Student
New Delhi

DESCRIPTION

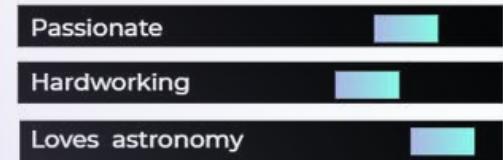
Raghav is a 2nd year mechanical engineering student with a keen interest in astronomy. He loves to gaze stars, planets, constellations and thus considers himself an astrophile. He is great at studies and wants to make a career in astronomy field. He is from an economically weak background and needs cheap yet effective resources for him to continue flourishing in studies.

"Astronomy compels soul to look upwards and teaches humility taking to another world."

GOALS

1. Reading about different stars, constellation, planets etc. in a interactive way.
2. To revisit his love and interest in astronomy by gazing different stars in night sky using the astronomy app.
3. Make a career in astronomy.

SKILLS



FRUSTRATIONS

1. Financial and time constraints due to his college workload.
2. The lack of opportunities has made it difficult for him to make a career in astronomy.
3. He doesn't have any friend who is passionate about astronomy.

NEEDS AND EXPECTATIONS

1. Needs a platform where he can excel his passion for astronomy with credible courses.
2. For getting guidance about following his interest in this field(i.e, astronomy).
3. Increase his knowledge in astronomy.
4. Hoping to get practical knowledge and not get left because of financial issues.



**Rishita
Saxena**

35

Married
Teacher
New Delhi

Description

Rishita works as a high school physics teacher . She is a married and has a son. She is highly interested in Astronomy and Cosmology. She has a good level of knowledge of the subjects and wishes to deepen her understanding of the cosmos. She isn't interested in doing courses and wants to be updated about the current progress and research in the field.

"As a teacher I love to teach but also love to learn new things "

GOALS

1. Wants to become the physics H.O.D of her school
2. Wants to learn and teach astronomy
3. Live a healthy life and explore other domains of science

SKILLS



FRUSTRATIONS

1. Very less free time due to school workload
2. Hard time finding credible resources to study and explore astronomy
3. No like-minded colleagues (No learning environment)

NEEDS AND EXPECTATION

1. Need an app/service for herself and her son to study astronomy
2. A platform to communicate with fellow space enthusiasts
3. Reliable study material for teaching others.

Persona 1

Persona 2

Scenario

	Steps Progression in App interface	Tasks Tasks undertaken by Raghav	Thoughts Different Thoughts Coming to Raghav while going through these steps	Feelings What Raghav felt while going through these steps	Issues Issues faced by Raghav while going through these steps
	SIGNUP/ LOGIN	Raghav came to the sign up page. He selected his google account to sign up into the app. After logging in he got a prompt to link his account and the app.	Is this app going to serve my purpose ? What contents will it provide ?	EXCITED for new experience INTRIGUED	He is not sure what to use as a login credentials He is not comfortable giving his mobile number for signing up hence he used his college email ID
	PERSONAL DETAILS	After sign up the personal details page popped up. Raghav was asked to fill in his Name, Age, Mobile no., education, institute etc.	Why should I give them my personal details ? Will my privacy be going to suffer ?	DOUBTFUL Feeling INSECURE regarding his personal details	will they send me spam messages? why are they asking to give my mobile number shouldn't this information be asked when i actually enroll in any course,
	DASHBOARD	Next he was redirected to his dashboard. Here he received introduction to the app and instructions to perform tasks He saw progress bars and different options like courses, newsletter, discussion forums and app settings	Will these courses be able to help me ? Will doubt forum be able to solve all kinds of doubts i have ? Is dashboard of app easy and user friendly to use and understand for variety of users ?	GLAD after seeing various options for gathering knowledge CURIOUS for exploring new features of app	Where to begin? He isn't familiar with the app's UI yet but there is a chat bot who can help him to kickstart his prep Although he just want to prepare for the club interview, he is not sure whether he should start a new course besides his hectic college schedule
	LEVEL SELECTION	Raghav proceeded to level selection. Here he was given knowledge levels. He selected his knowledge level as intermediate. He was provided with a basic level quiz to test his knowledge for the intermediate level. He attempted the quiz and scored full points to directly reach the intermediate level	Will I be able to replicate my knowledge in interview which i showed here ? Is level indicated by app for me the true reflection of my knowledge ?	UNSURE about the level of knowledge he has WORRIED about the level selection	He is a little doubtful regarding the criteria being used to evaluate the knowledge he posses related to astronomy He couldn't remember some of the basic concepts of physics while attempting that quiz and he want to revisit those concepts.

	Steps Progression in App interface	Tasks Tasks undertaken by Raghav	Thoughts Different Thoughts Coming to Raghav while going through these steps	Feelings What Raghav felt while going through these steps	Issues Issues faced by Raghav while going through these steps
	IN-COURSE STRUCTURE	<p>After completing one module, the user is given a quiz to check their progress and are provided a certificate of completion and badges(depending on their performance). There are also several in-topic quizzes to boost the users confidence.</p> <p>The intermediate course is divided into modules like astrophysics, cosmology, astro-Theories etc. These modules have different topics that need to be completed</p>	<p>After the quiz he was taken to the course page where he was introduced to the in-course structure.</p> <p>What is this timeline given about ?</p> <p>What are these stars conveying here ?</p> <p>What is this cosmos about ?</p>	<p>STRESSED after seeing lots of topics</p> <p>DOUBTFUL whether he will be able to complete the course or not</p>	<p>He is not sure whether the course is based on some standard guidelines or is it designed randomly?</p> <p>Can I skip some topics if I already know that topic?</p>
	COURSES	<p>Raghav went to the astrophysics module and started the course</p> <p>He selected the black hole topic and started watching the lecture. After finishing the lecture one he downloaded the notes for the same. He watched a couple more lectures.</p>	<p>Are courses given trustworthy enough ?</p> <p>Will the courses covers all the basic content which one would learn to attain basic knowledge about that subject ?</p>	<p>AMUSED after seeing explanation of the topic through videos and articles</p> <p>CHEERFUL</p>	<p>Raghav might find it boring to watch lots of video lectures and without quizzes and revision plan he will forget everything eventually.</p> <p>Since these lectures are independent and he isn't enrolled in any class, the interaction will be quite dull and less engaging. App must include an option for student enrollment</p>
	DISCUSSION FORUMS	<p>After he completed the black hole topic he had several doubts related to it.</p> <p>He went to the discussion forum. There he saw some his doubts had already been answered. He posted the others on the forum and they got answered within a few hours.</p>	<p>Will discussion forum provide me the kind of solution which I need ?</p> <p>Will the person give rude or toxic comments on asking silly doubts ?</p>	<p>HESITANT (are my doubts silly)</p> <p>FEELING UNCERTAIN whether my doubts will be clarified or not.</p>	<p>Some of his doubts might not get resolved over discussion forum and he might need more assistance on that.</p> <p>Its not just lectures, He needs explanation of some solutions too, for which an one-one tutor is required</p>
	Career Guidance/ Mentor Newsletter	<p>This was a paid section, which Raghav decided to partake in as the entrance fee was nominal.</p> <p>Raghav was provided a mentor whom he contacted on a regular basis. He got access to the premium courses and 24/7 assistance and updates and guidance about several opportunities in the field.</p>	<p>is the mentor qualified for the job?</p> <p>Will the service be worth the money?</p>	<p>INEXPERIENCE</p> <p>TRUSTWORTHINESS</p>	<p>How credible will the mentor be?</p> <p>The mentor shouldn't leave his job/role, which could lead to wastage of time.</p>

Interviews (Data Collection)



NAME - : Deepa Jain
AGE - : 53
Occupation - : TGT Physics at Vivekanand School, Founder of Pashaar

- What were your childhood experiences with astronomy?
- As a child I was always interested in physics as a whole. Astrophysics was a big part of it. I remember reading books and discussions with friends about constellations and heavenly bodies. We didn't have any digital resources so I didn't explore astronomy much further.

- What is your opinion on space science education in India ?
- As per the infrastructure and job opportunities related to space science, I believe there are several institutes providing degrees and jobs in the sector. Many free digital resources are also easily available. For astronomy to grow as a sector in India, research has to be aided with technology and advancements must be made in all aspects

- What would you suggest we add/change in our app ?
- Physics is a very visual subject, and the astronomy part of it is the most difficult to visualize. If some visual aspects like detailed/Realistic diagrams of galaxies, black holes etc. can be shown to the students during the courses, it would be a game changer. A simple yet effective design will also suffice.

- How much interest do you currently have in astronomy?
- As of now, I don't have much interest left in astronomy. I feel the much I know is enough as it doesn't directly affect my life. I do keep myself updated but never go into detail.



NAME - : Ashutosh Gera
AGE - : 18
OCCUPATION - : Student at IIITD

- What were your childhood experiences with astronomy?
- Yes I was interested in Astronomy in my childhood. My dream was to be a Pilot when I was preparing for JEE but I had to leave that dream because colleges weren't providing specialized courses

- What are your thoughts if we develop an app to teach astronomy?
- Well the app should have diverse features because this field is not limited to only astronomy but other fields as well like Physics, mathematics, Biology and other core science subject. You have to make the app interactive and visual. Try to provide certified teachers that not only teach students but motivate them to further pursue the field

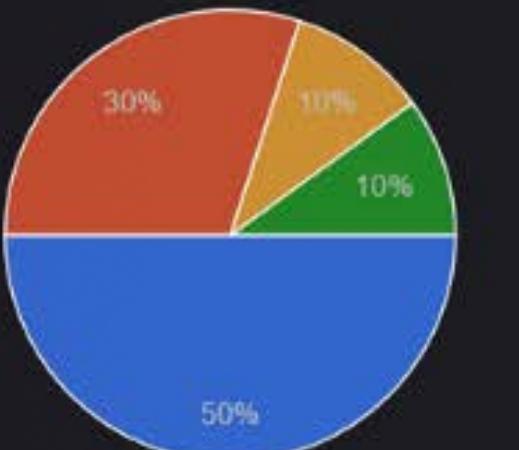
- What would you suggest we add/change in our app ?
- The course videos that you'll be providing must not have any time constraints to watch so that users can watch anytime they want which will give your app more flexibility and a sense of independence.

- In which mode you would like to consume astronomy content.
- I would like to view content in Animated, Graphical and video format it helps in better explanation and imagining things in better way. And Imagination plays a major role in learning astronomy.

Interviews

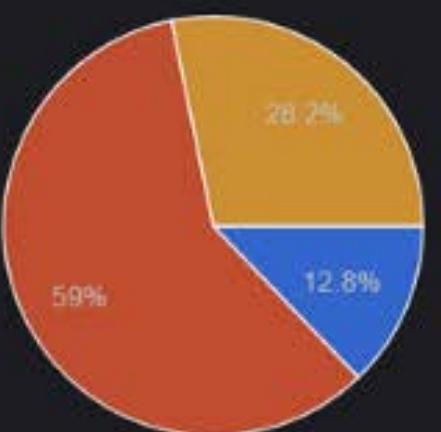
(Data Analysis)

Age group most interested in astronomy



How passionate are you about astronomy?

39 responses



According to the responses recorded the 5-12 age bracket was the most enthusiastic in their passion for astronomy.

The 23-35 age group was the least interested. Meanwhile the teens and young adults had mixed responses

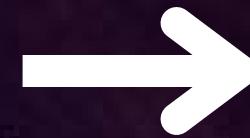
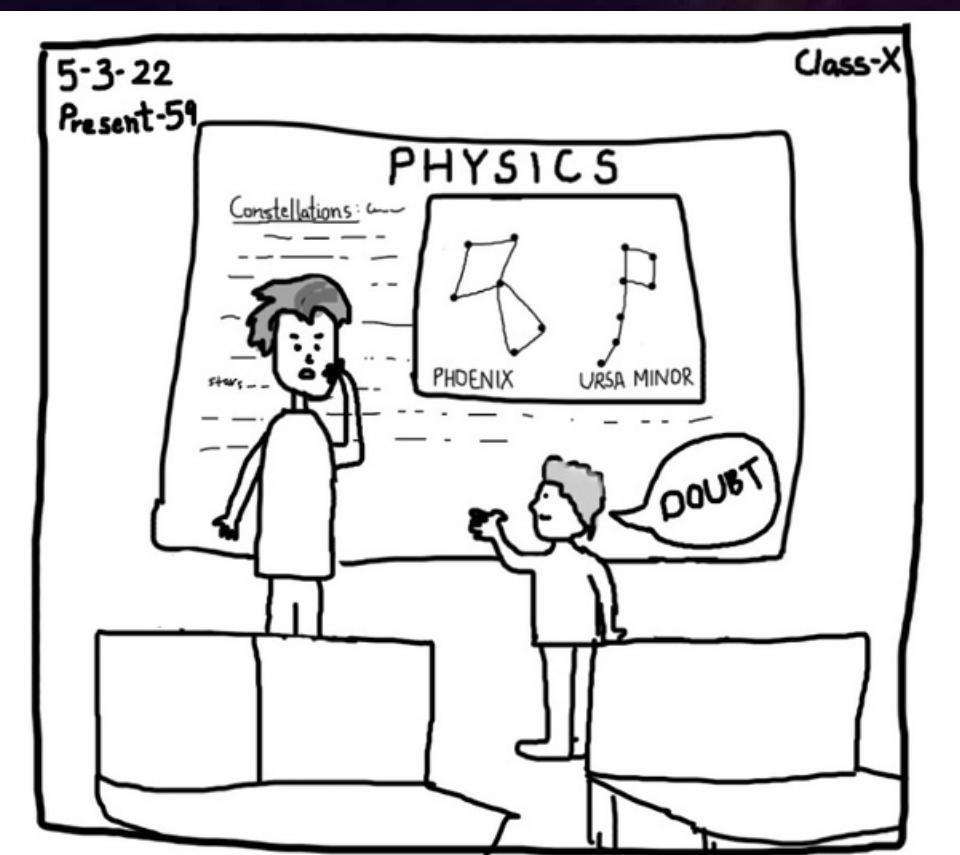
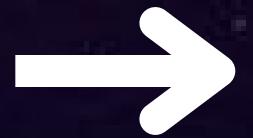
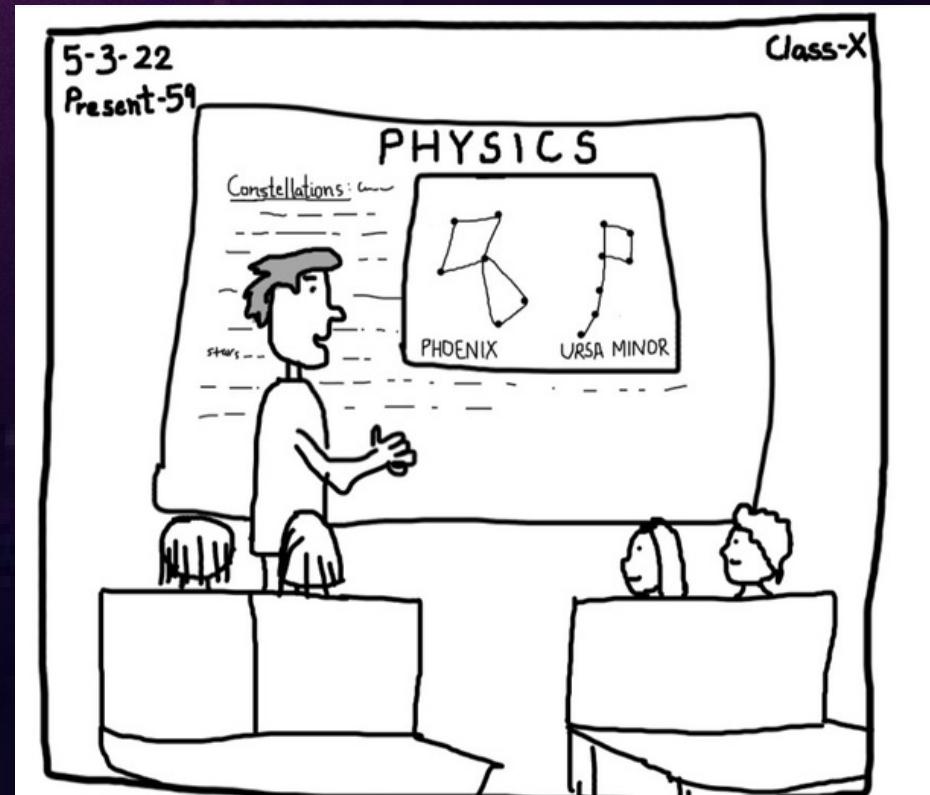
Do you prefer video or text based information or any other way

39 responses



One of the most important finding in our surveys and interviews is that people prefer Video content over the traditional text content. It helps them retain the knowledge for longer period of time. It also helps them visualise

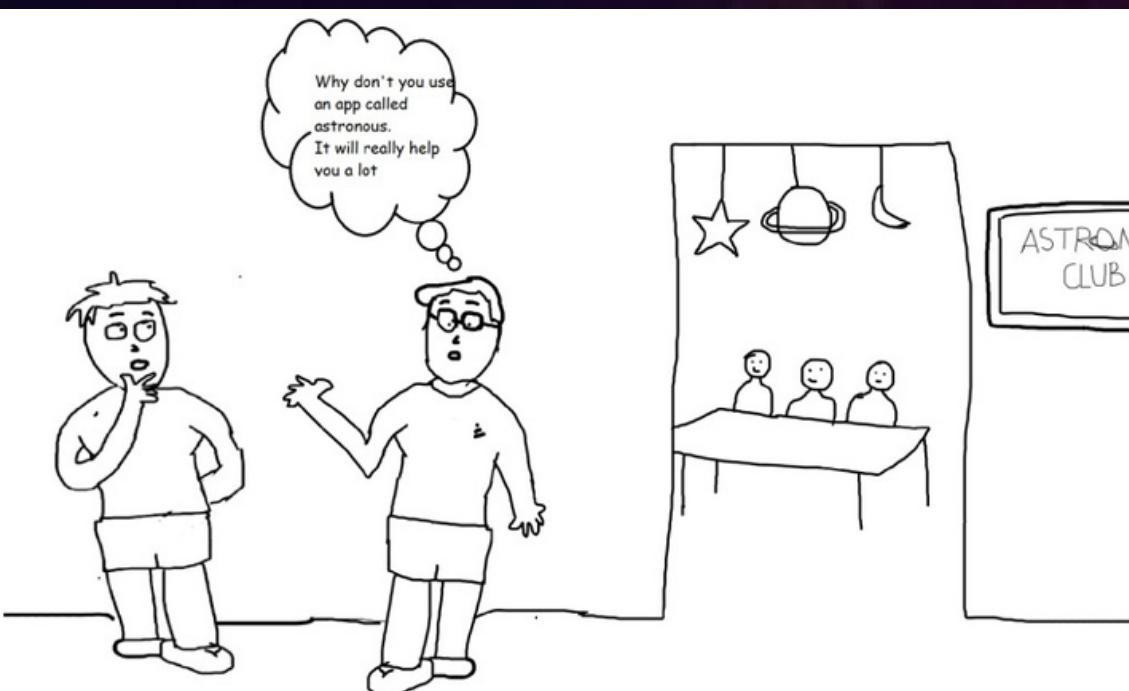
Story Board



Story Board



Michael doesn't get the time to study Sam's doubt due to the big encyclopedias and he didn't want to search the internet as it's not credible and tight school schedule.

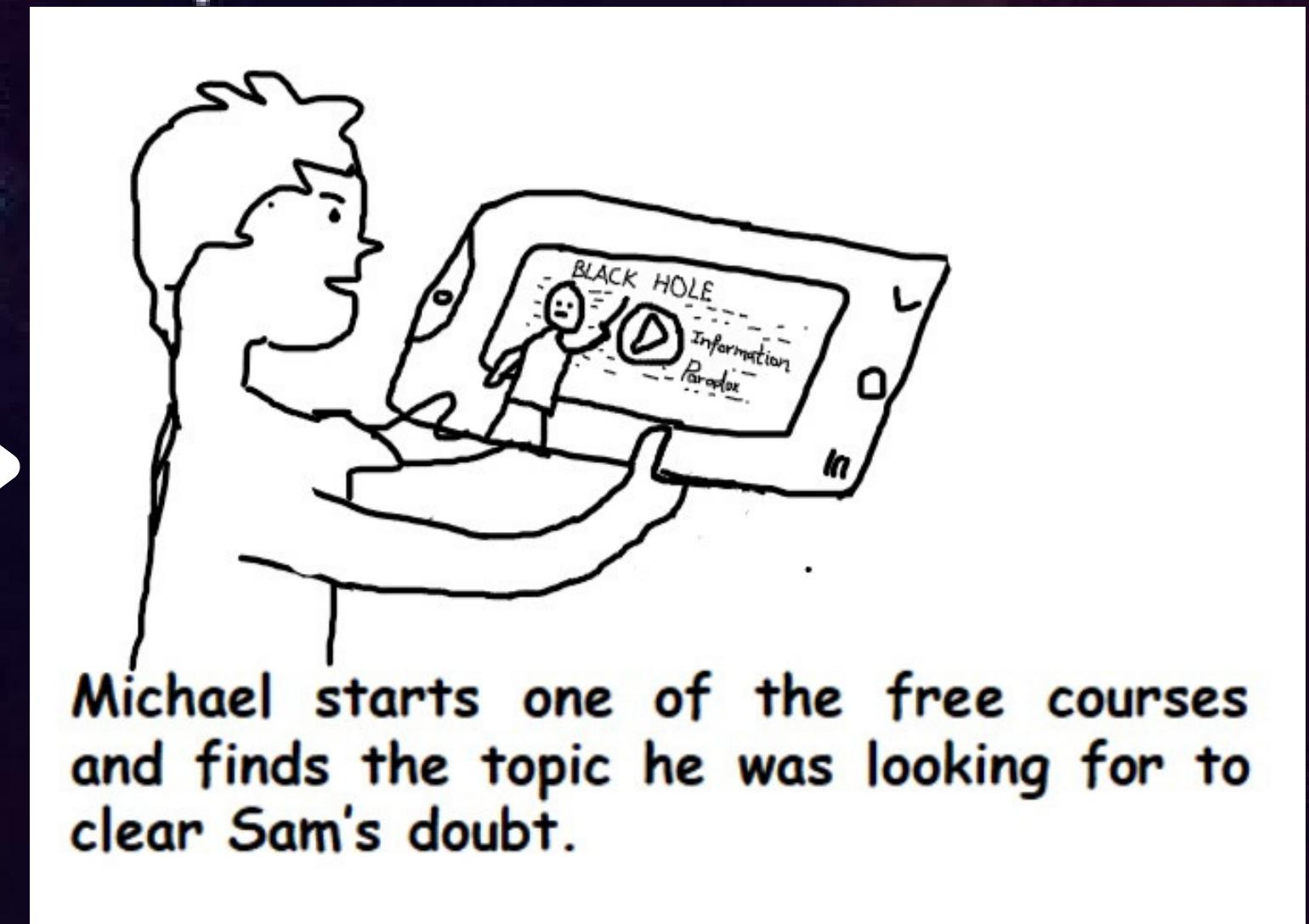
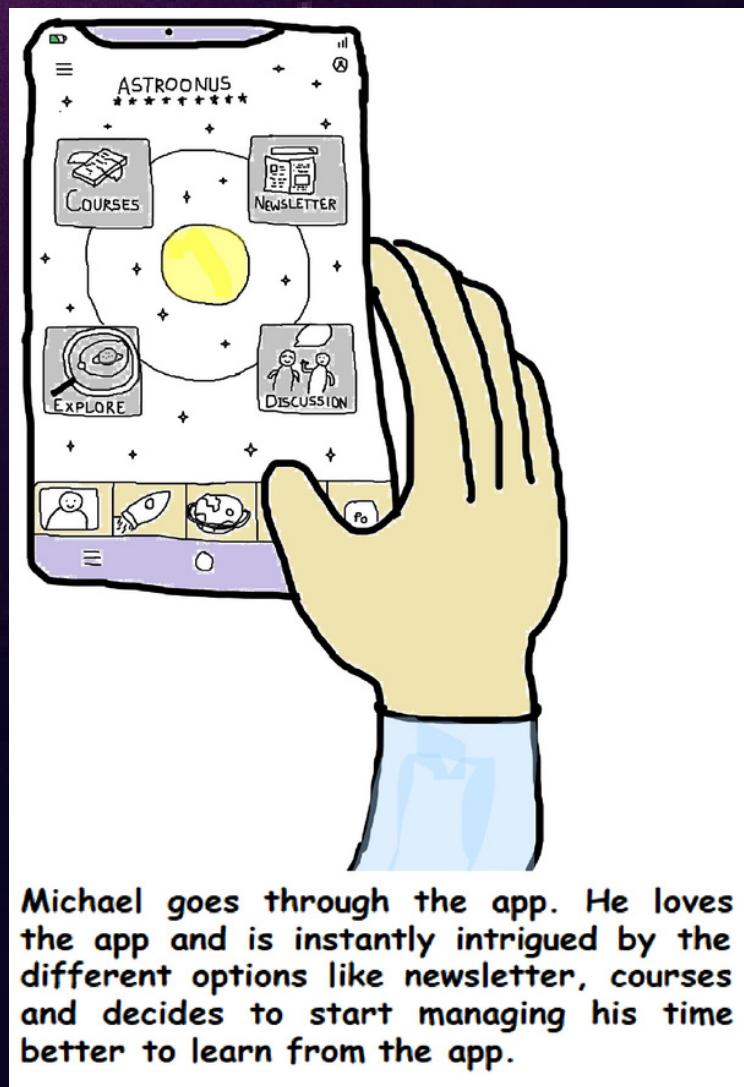


The next day Michael goes to the astronomy club of the school. There a colleague of his suggested the Astroonus app for regaining his mastery over astronomy.



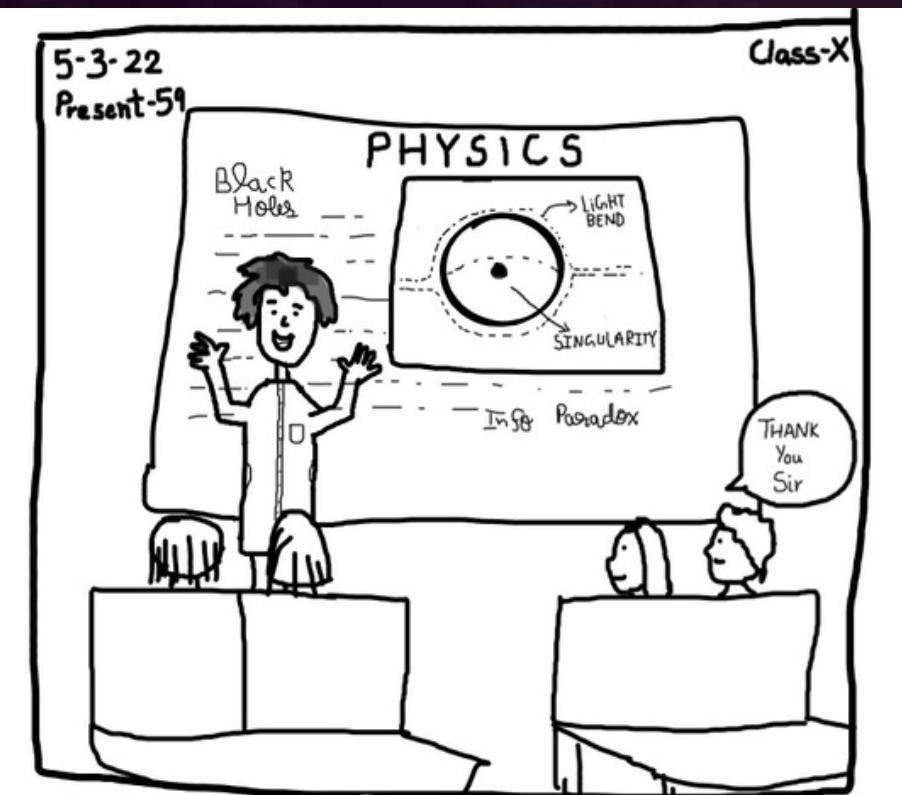
Michael went home and installed the Astroonus App. He started exploring the app and all its engrossing features.

Story Board



Michael starts one of the free courses and finds the topic he was looking for to clear Sam's doubt.

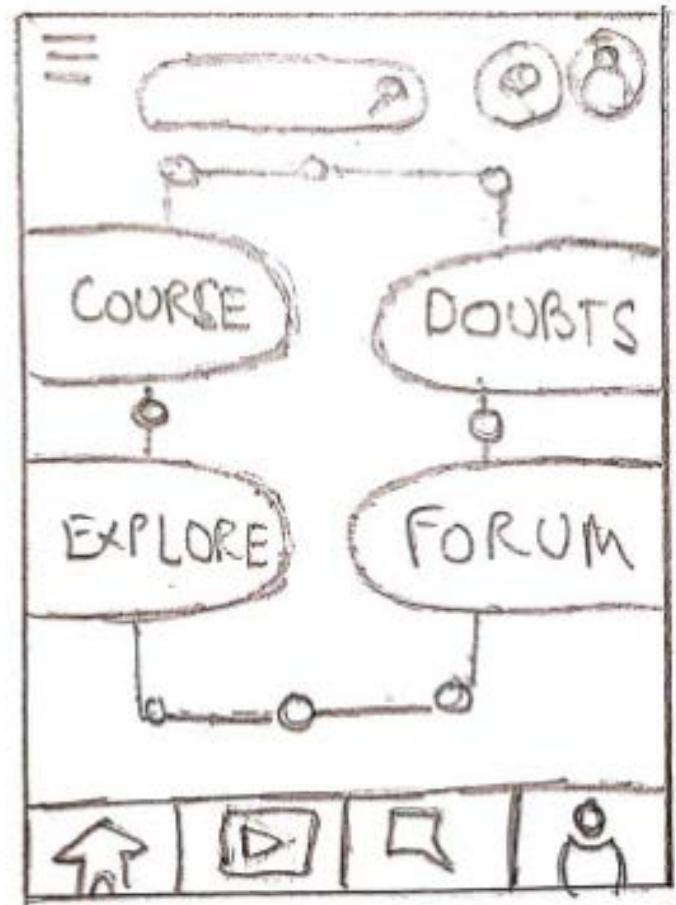
Michael goes through the app. He loves the app and is instantly intrigued by the different options like newsletter, courses and decides to start managing his time better to learn from the app.



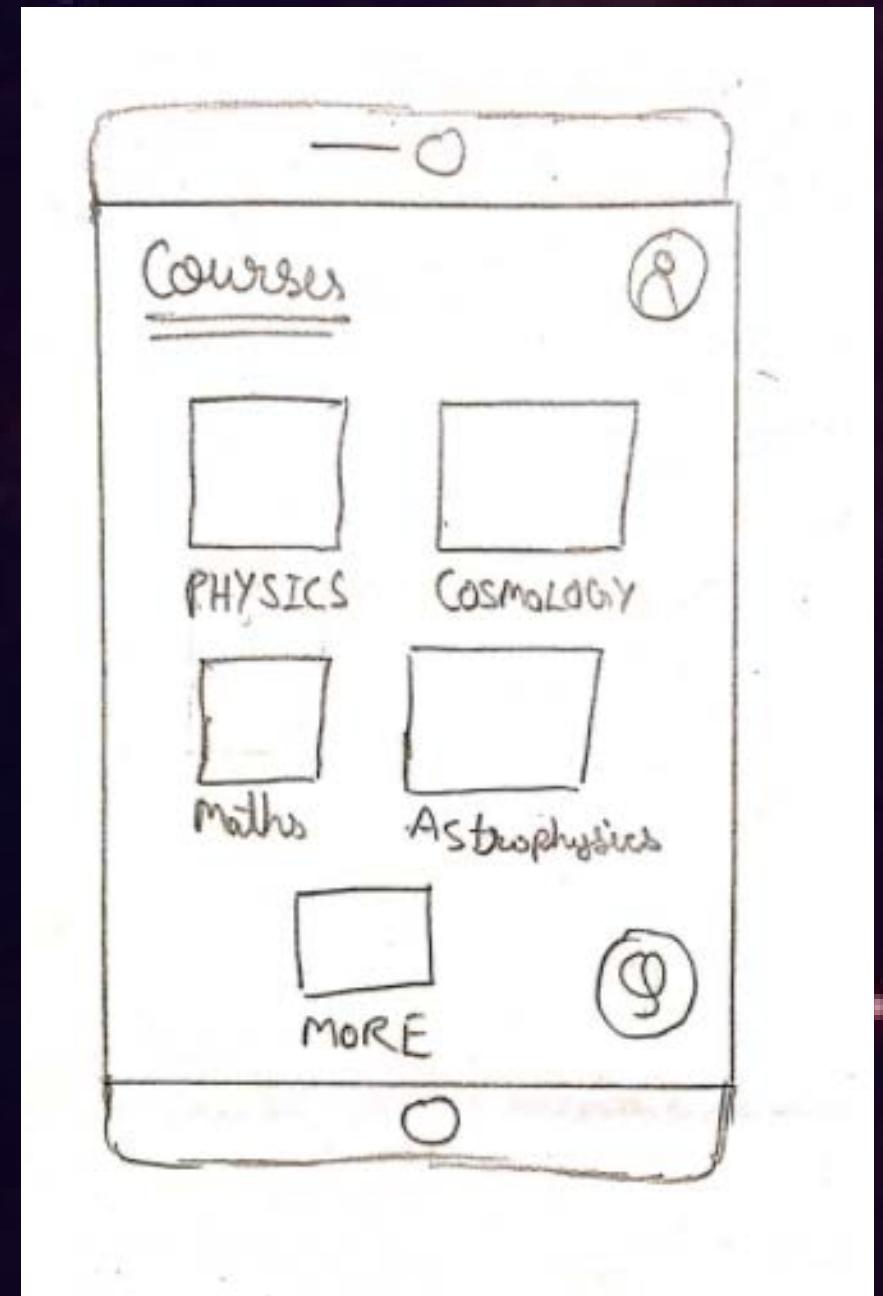
Michael takes his next class on Black holes and explains the advanced topics and solved several doubts his students had. Finally, he recommended the Astroonus app to all his students.

Low-Fi Prototypes

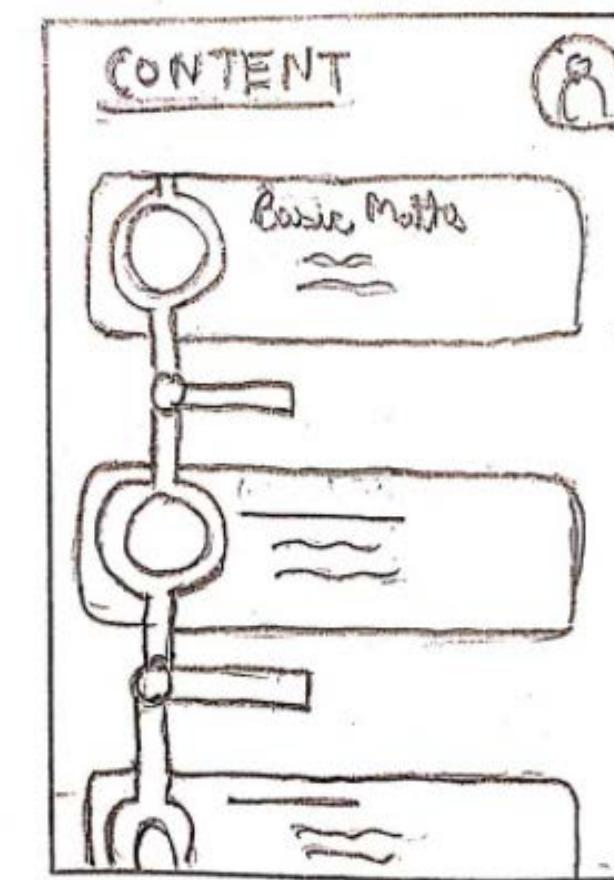
Dashboard → shows all the main functions at the home page like courses, explore, doubts, Forum and a taskbar at the bottom.



After clicking on courses button page is directed to main course page where all the options related to courses are displayed like practice and main content are displayed

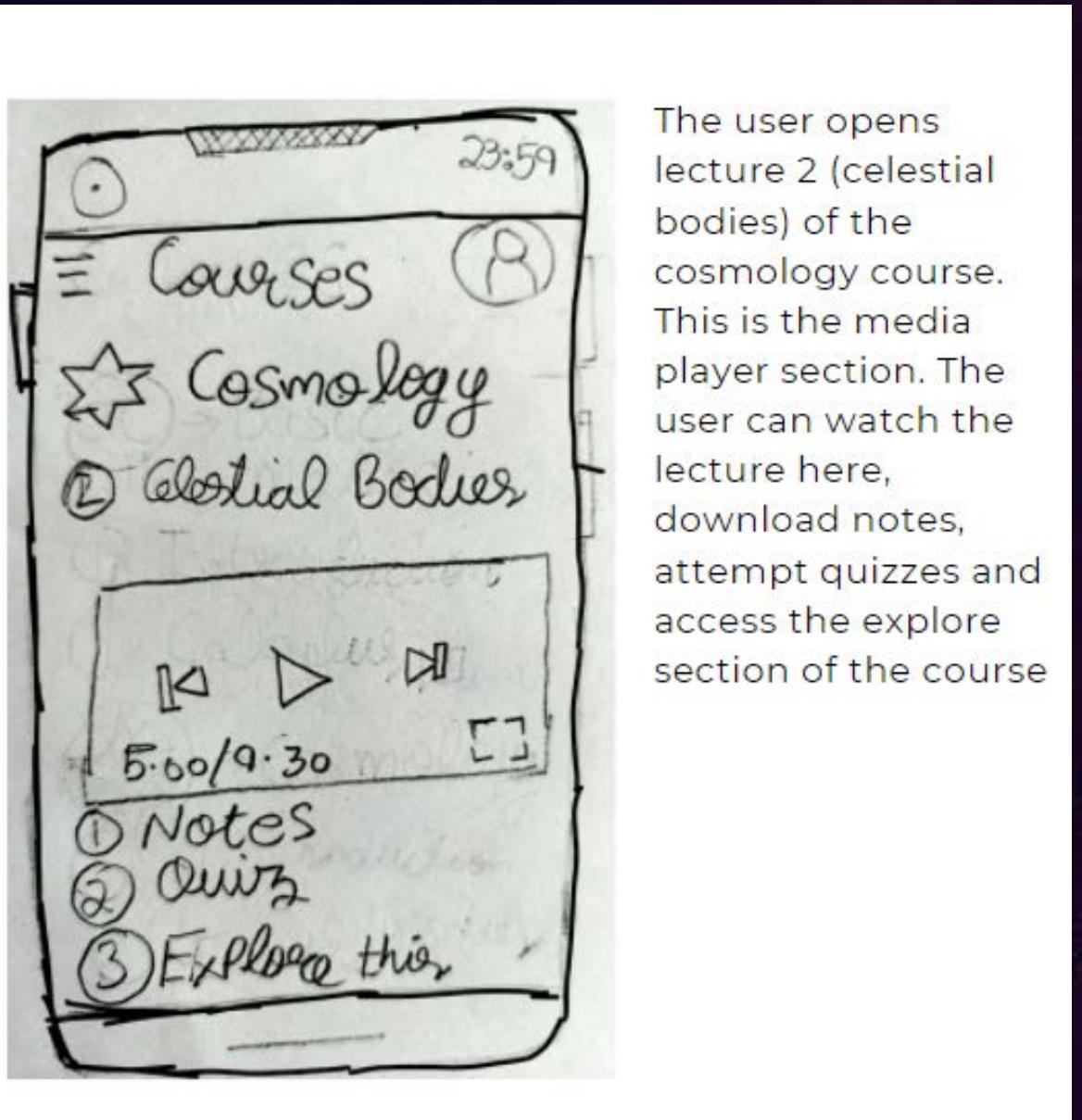
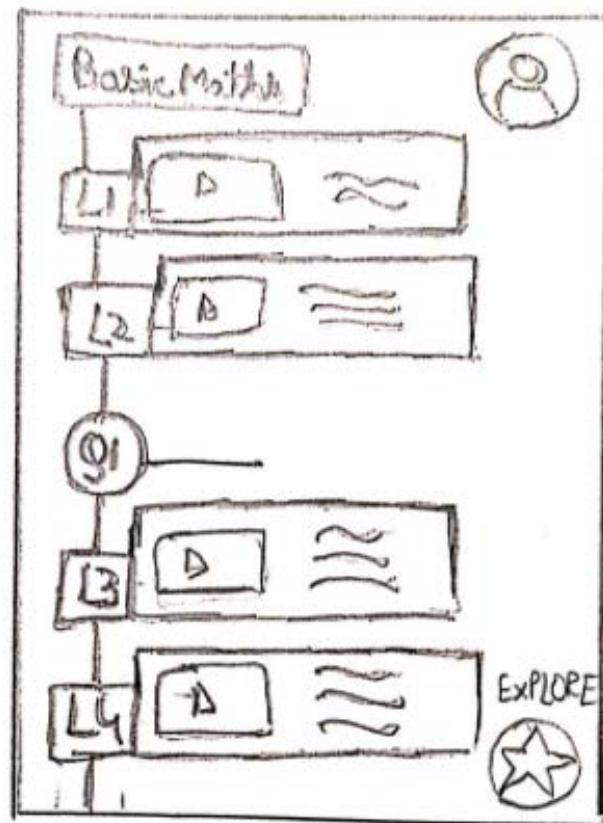


In content, different courses are shown with course flow. If the user selects any one of the courses he/she is directed to the content page of that course like the example here user selects Basic Maths course

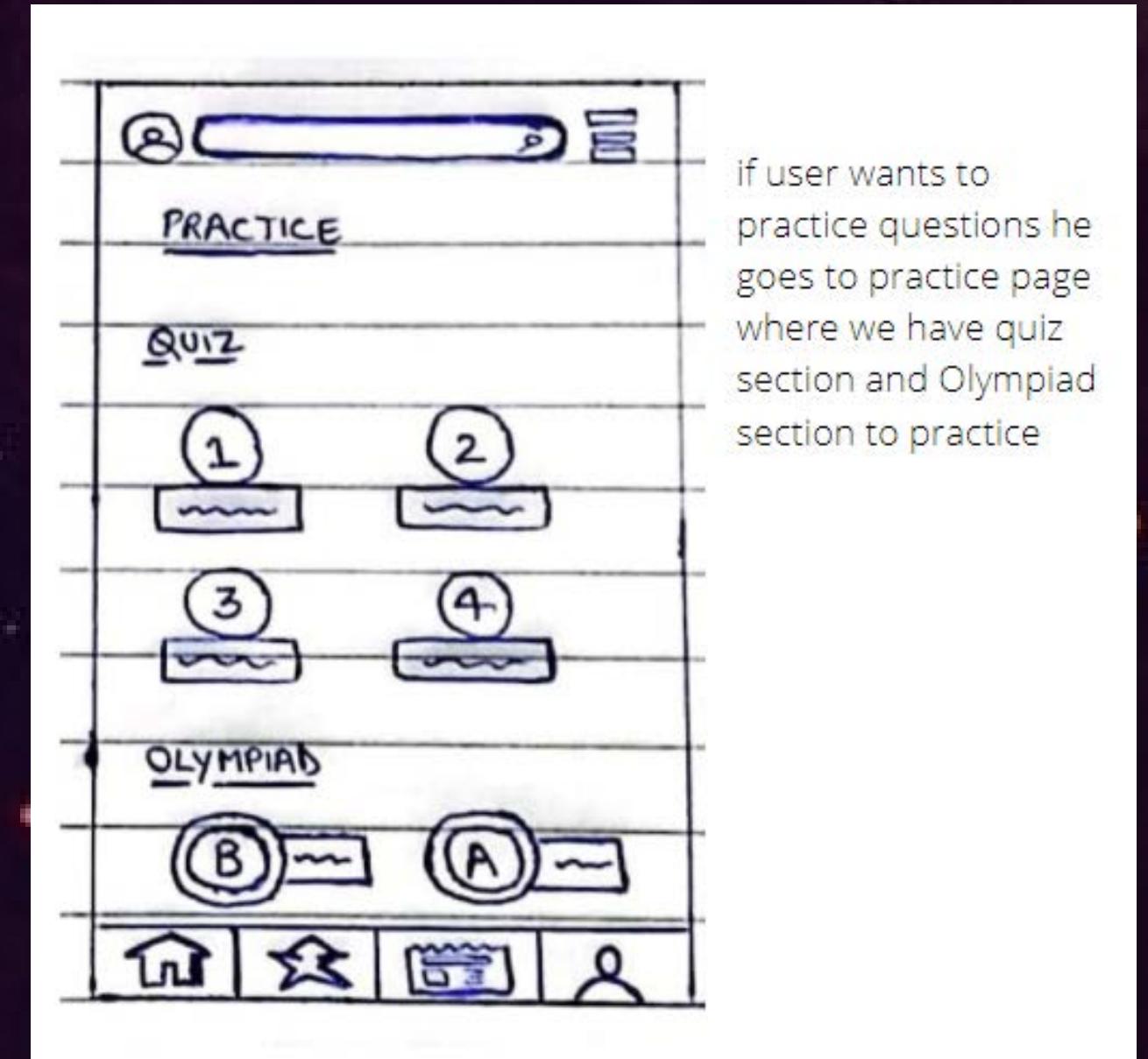


Low-Fi Prototypes

In the Basic maths page, all the content in basic maths are shown lecture wise with the quiz after a particular topic completion further with detailed description of the lecture, and the explore button helps the user to directly find the newsletter, events related to that particular topic.



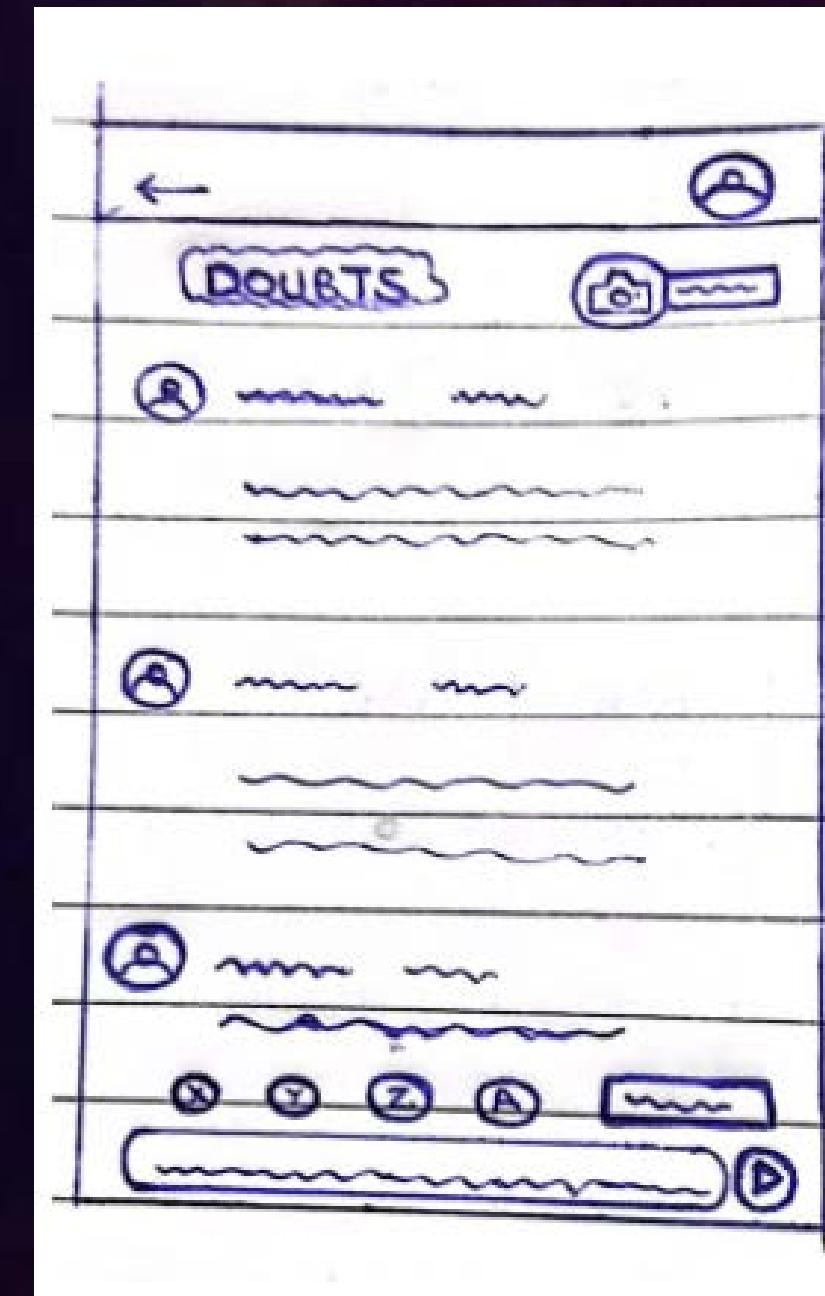
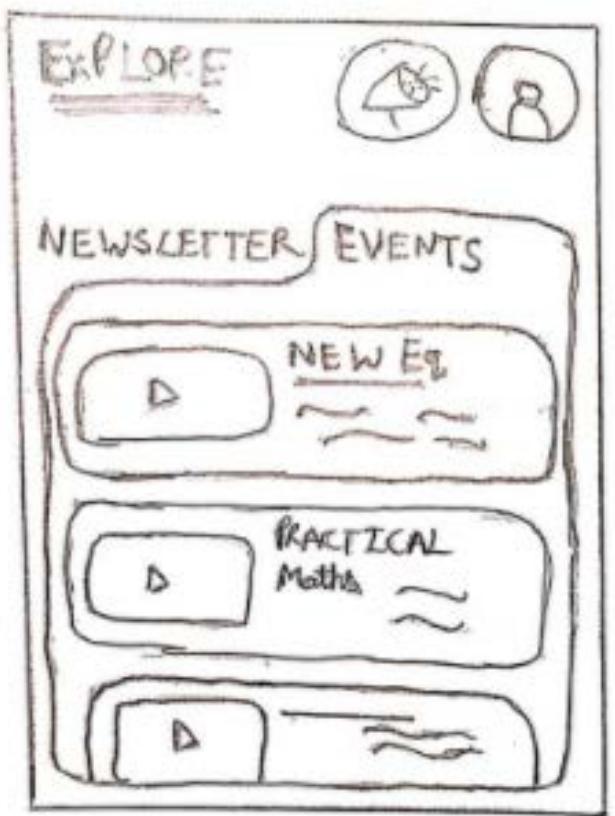
The user opens lecture 2 (celestial bodies) of the cosmology course. This is the media player section. The user can watch the lecture here, download notes, attempt quizzes and access the explore section of the course



if user wants to practice questions he goes to practice page where we have quiz section and Olympiad section to practice

Low-Fi Prototypes

In explore page newsletter shows the latest happening related to that topic when redirected from the content page and similar with event

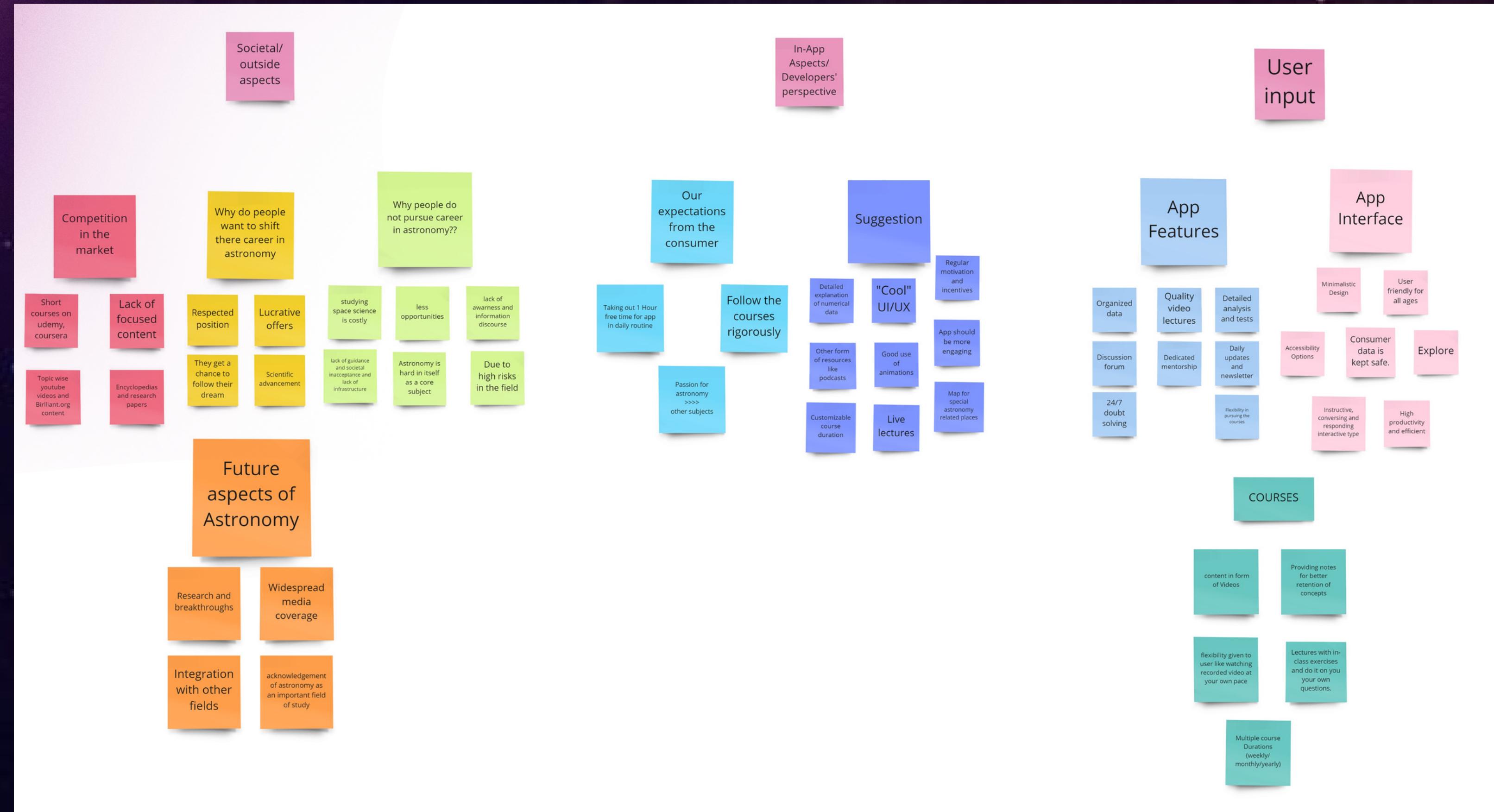


Whenever he/she has come up with any doubt in his mind he can ask his/her doubts by visiting doubt page of our app where you can send pic of question or can also type the question and can also choose subjects in which he/she has doubts and language preference of his/her

Affinity Diagram-Unorganised

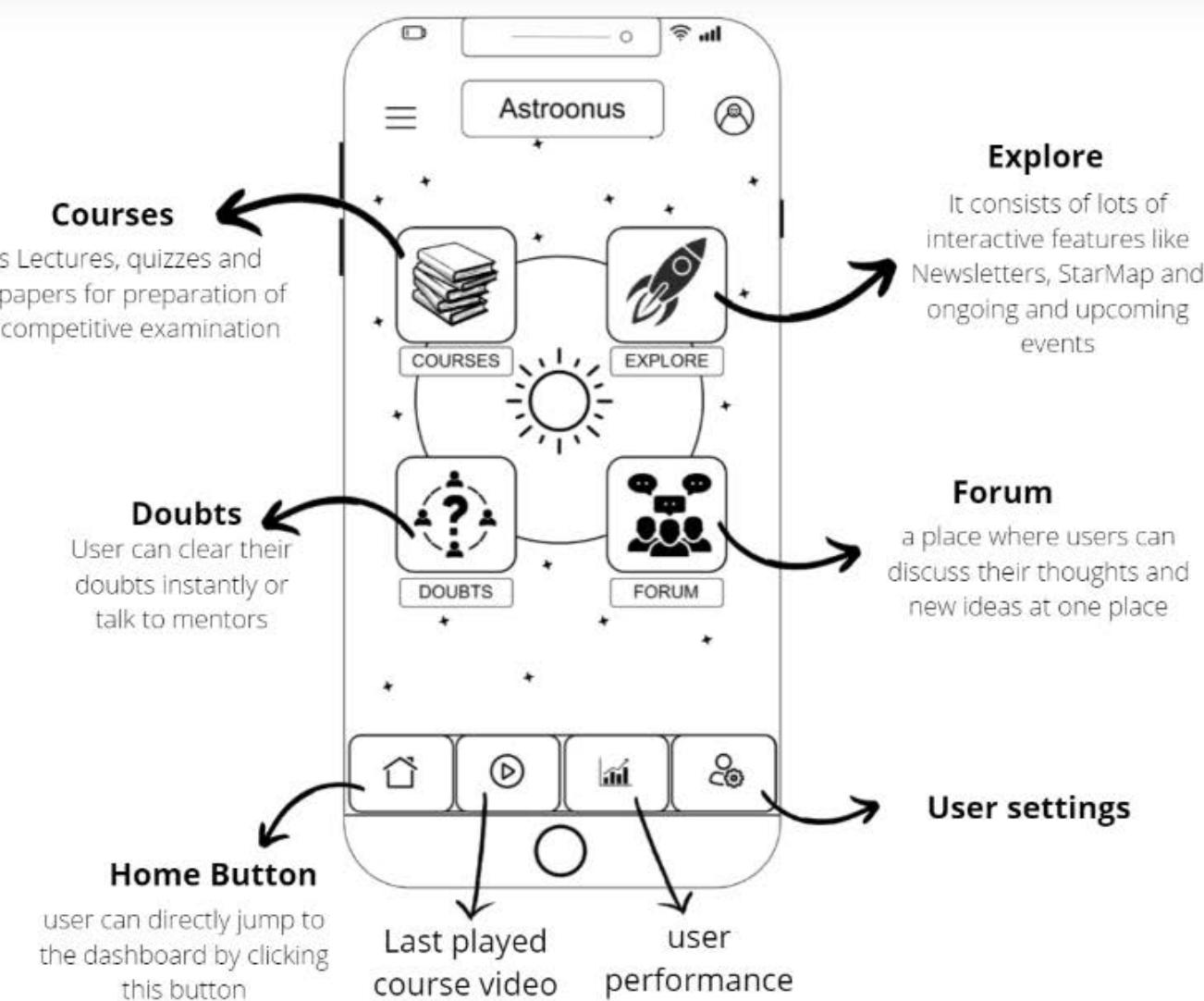


Affinity Diagram-Organised

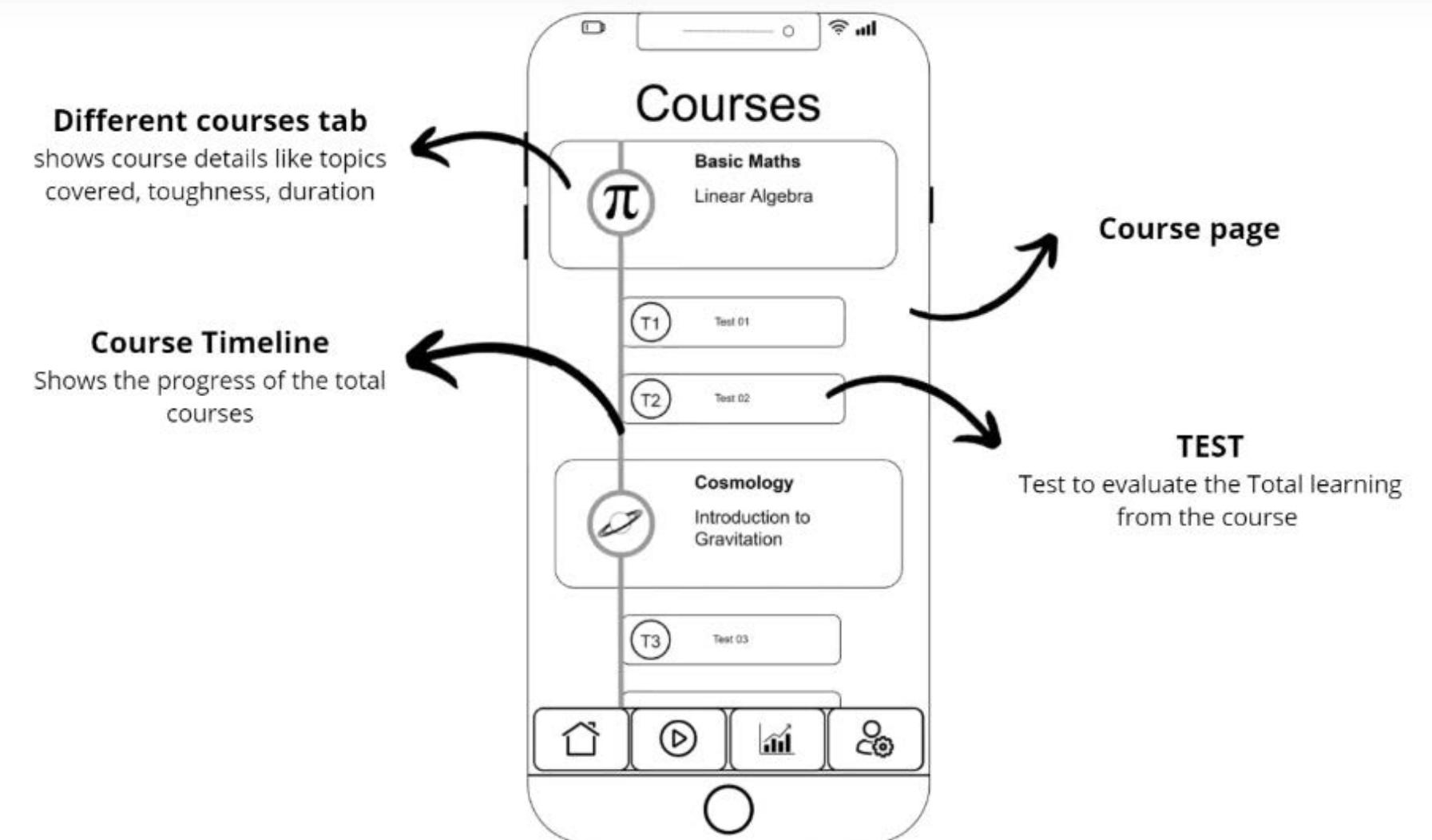


Mid-Fi Prototypes

The Dashboard of Astroonus app where user can choose the option they wanted to choose.



The user chose to explore the courses section and is directed to the courses page

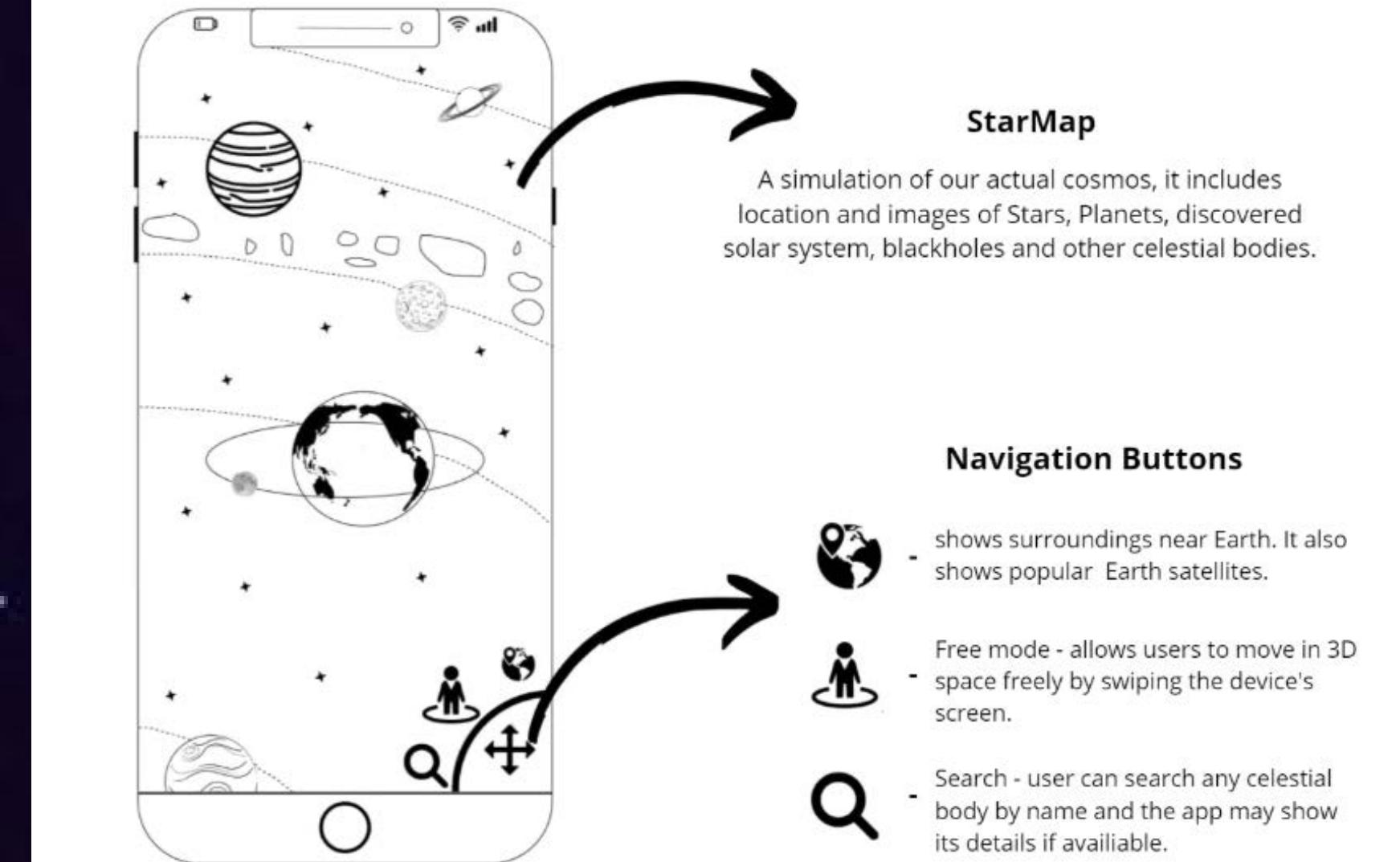


Mid-Fi Prototypes

After watching the lecture the user decided to head to the explore page

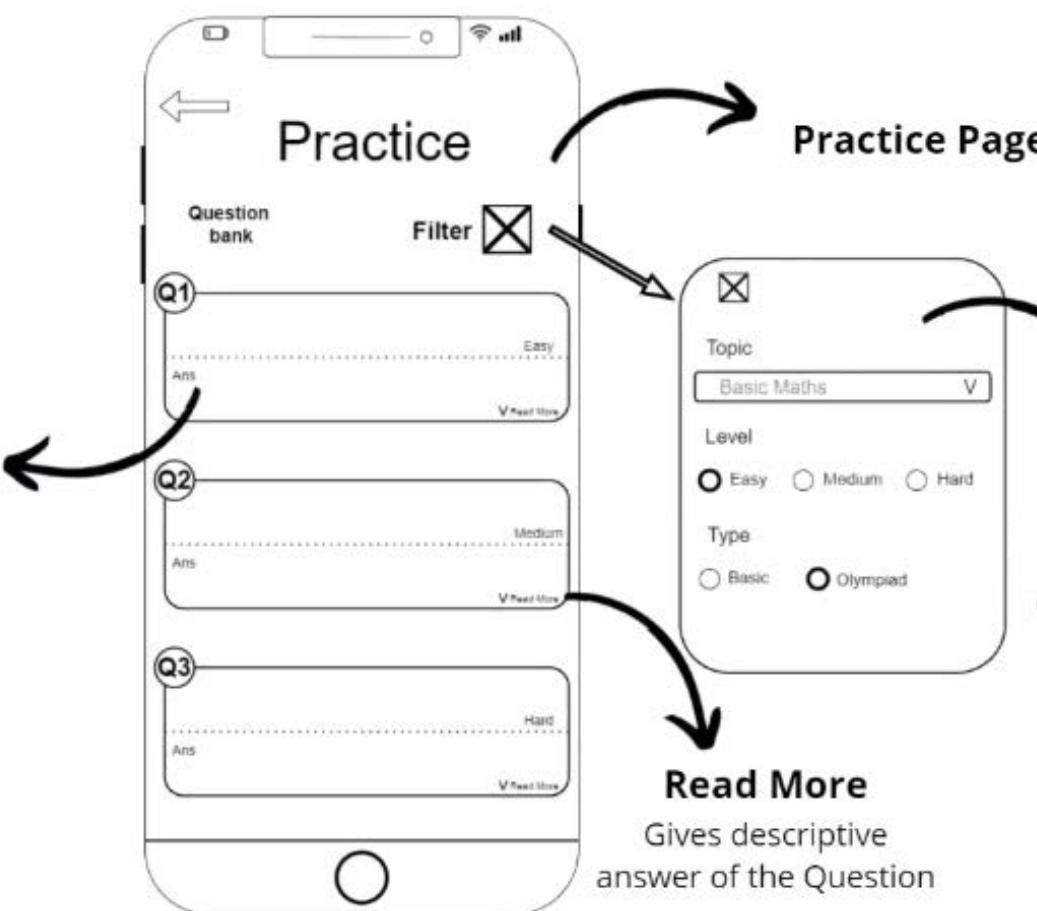


After watching the NASA stream of the asteroid belt, the user went to Star Map section to see it's simulation

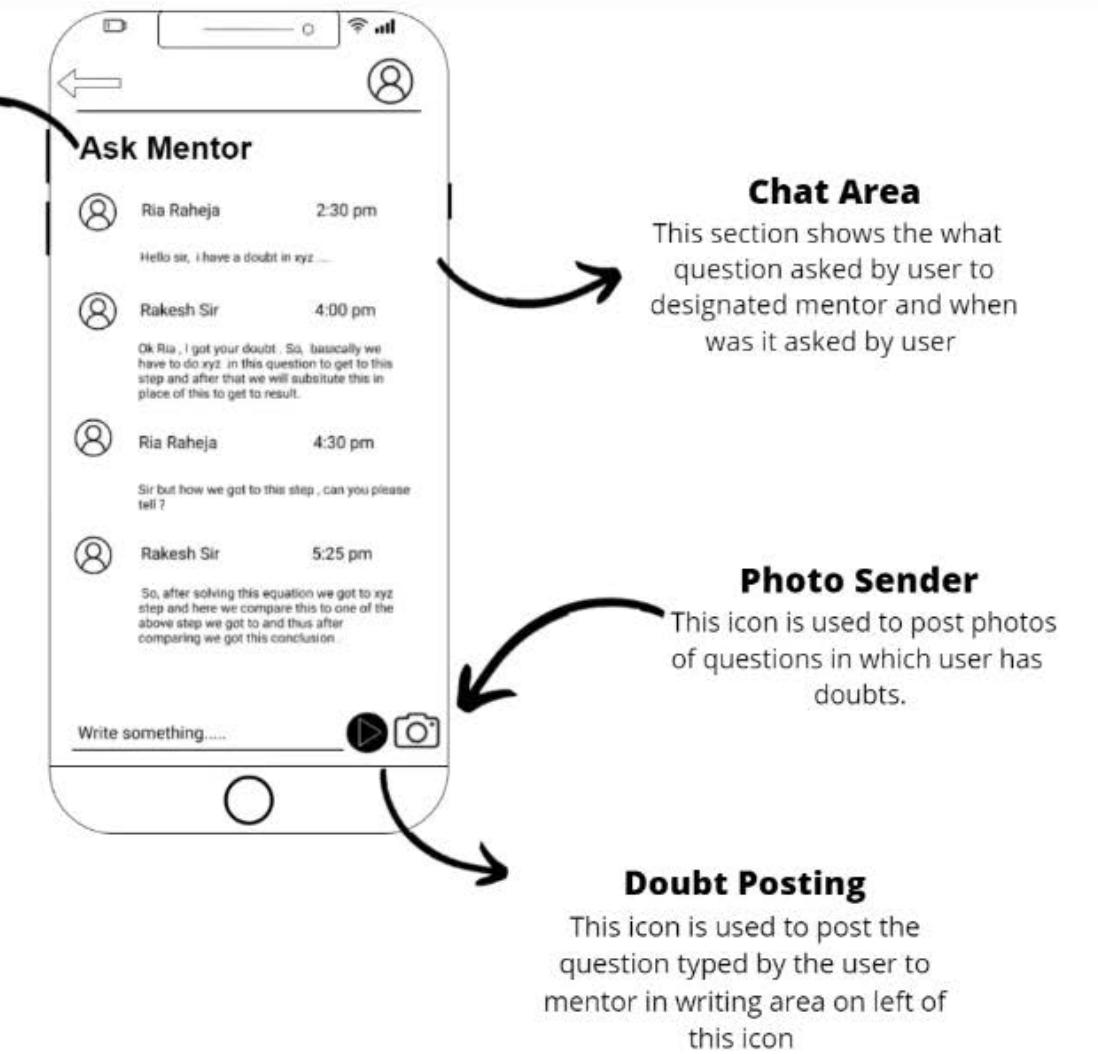


Mid-Fi Prototypes

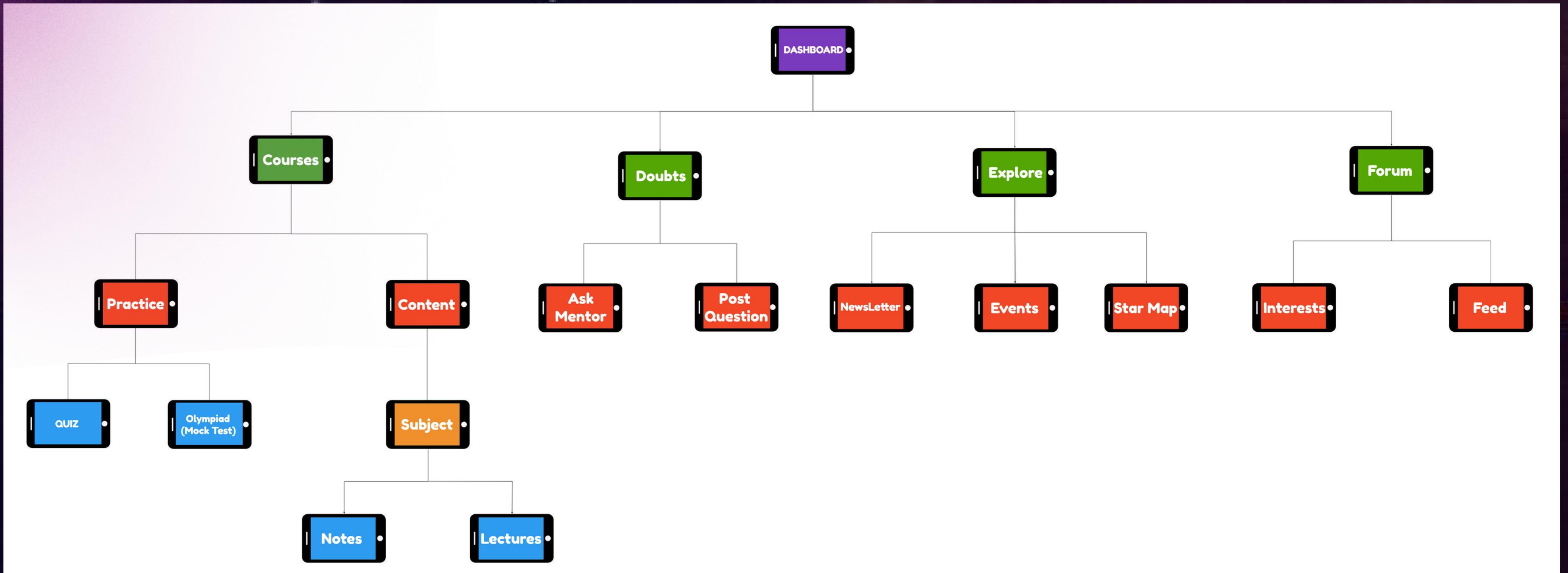
He then realized he wasted a lot of time and went to practice section



The user got stuck on a question and headed to the Ask Mentor section to clarify his doubt

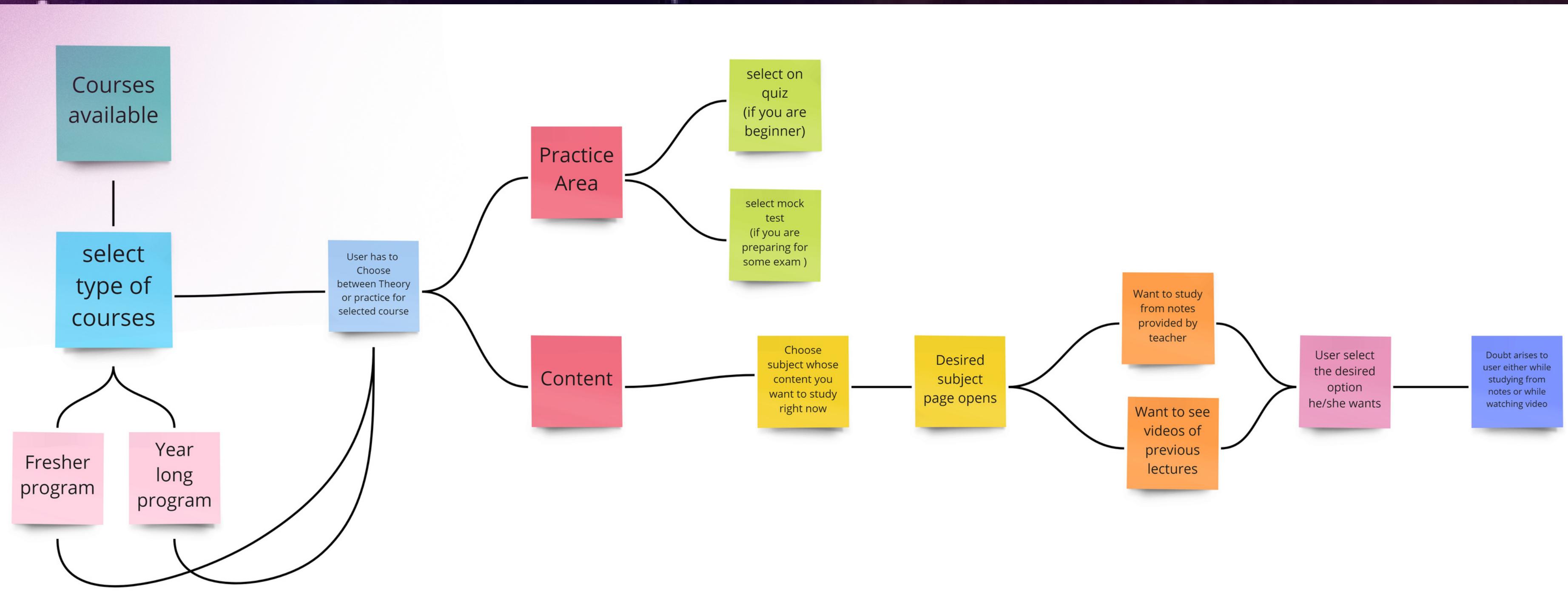


Information Architecture

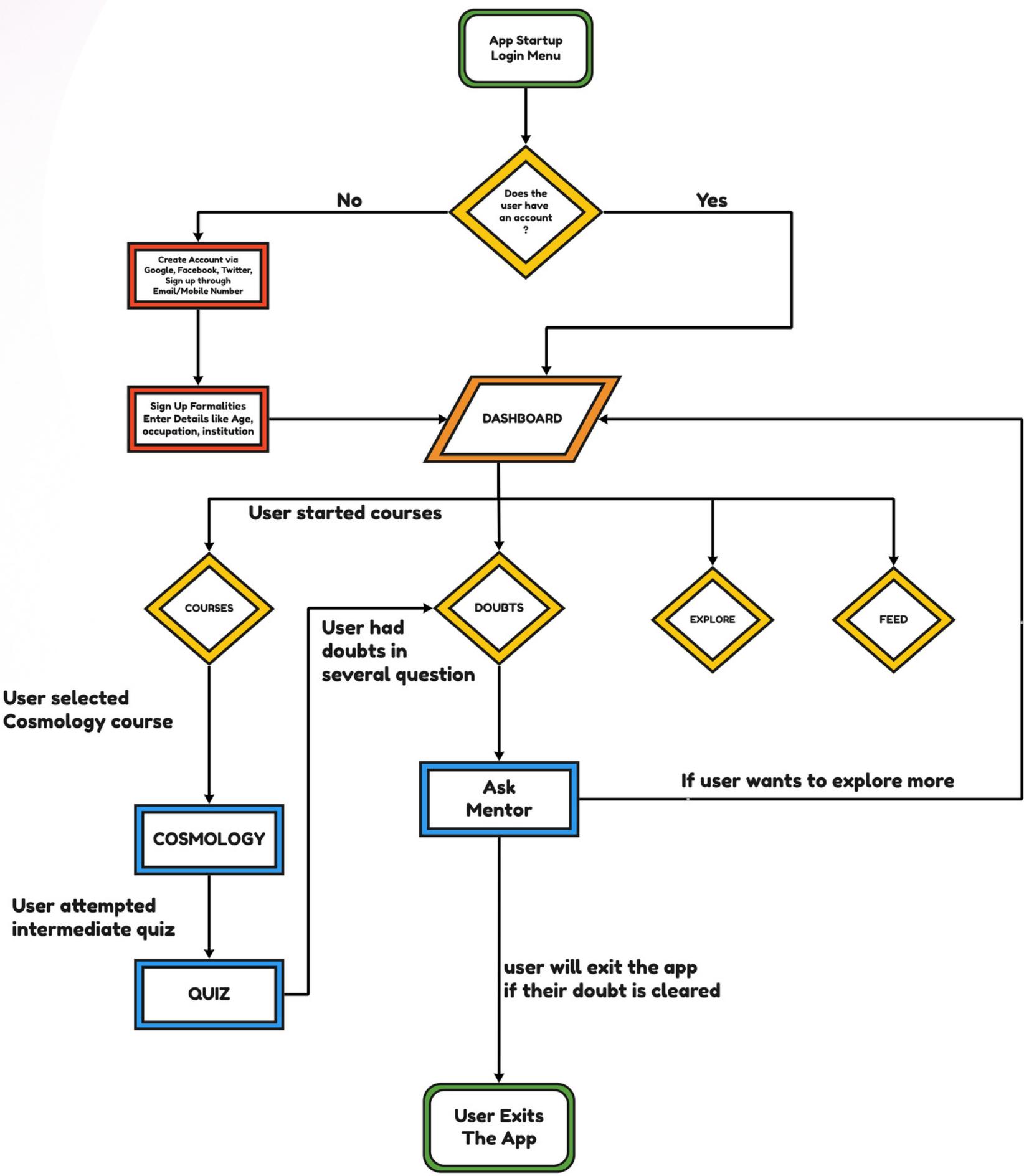


Information Architecture

(Shallow example of App walkthrough)

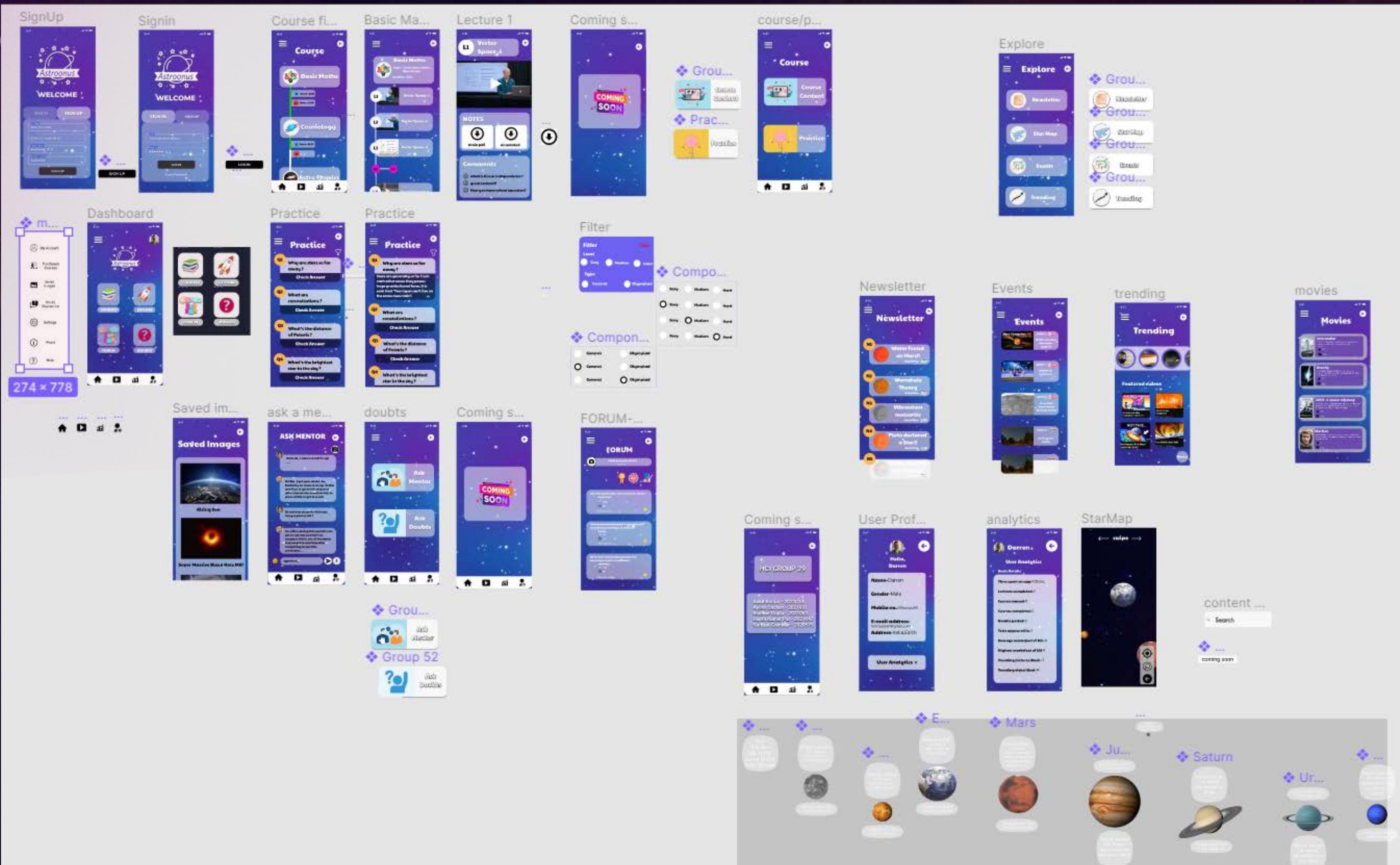


Taskflow

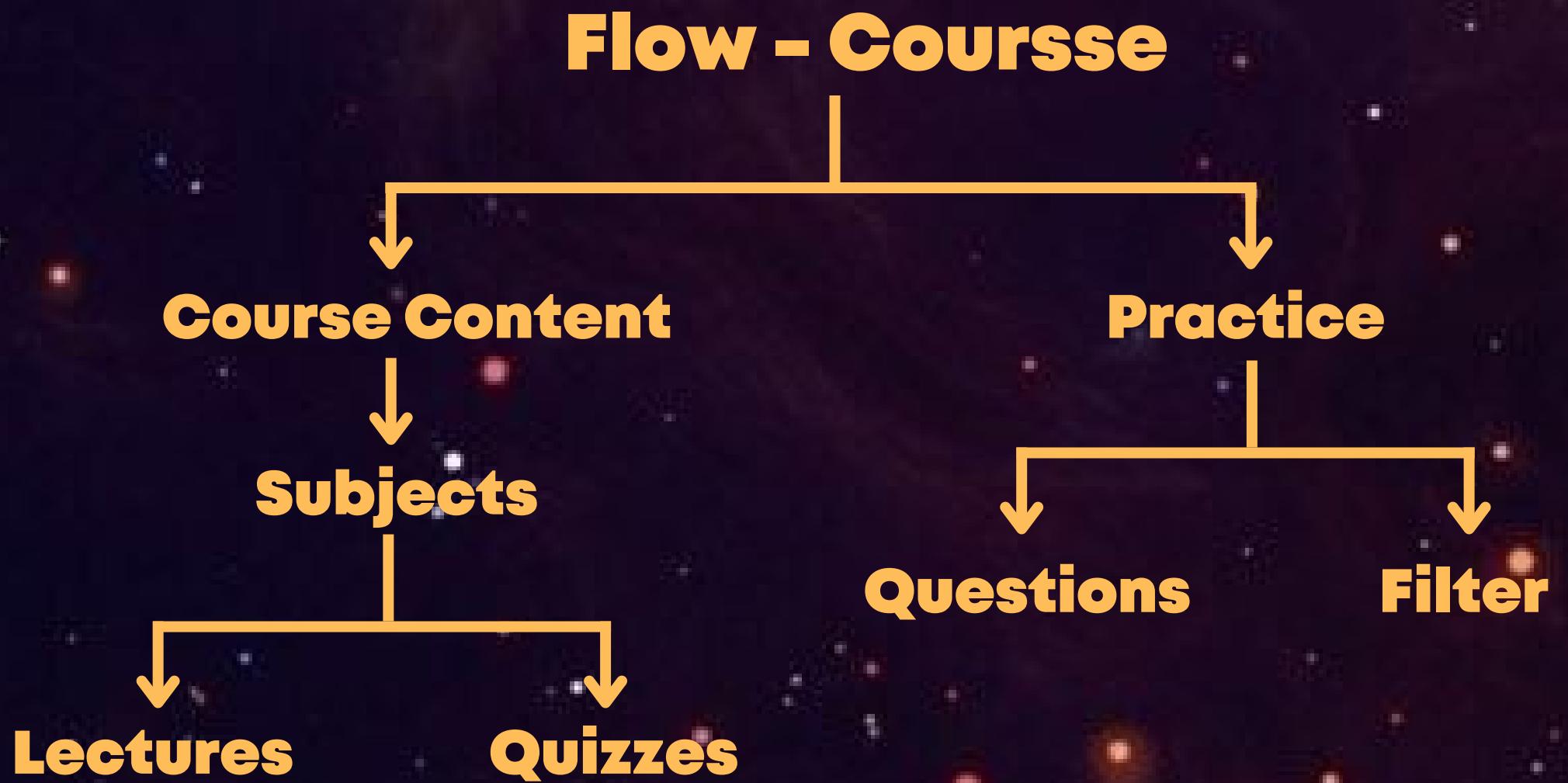


High Fidelity Prototyping

(Figma Workspace)



High Fidelity Prototyping





Flow - Explore

Newsletter

StarMap

Events

Trending

Movies

User Evaluation

4. Then they click on the subject Basic Maths to view available lectures

COURSES

DASHBOARD>COURSES>OPTIONS>COURSES

The Courses page displays three course cards:

- Basic Maths:** Score 8/10
- Cosmology:** Score 8/10
- Astro Physics:** Score 8/10

Annotations:

- Red circle highlights the "Basic Maths" card.
- Red box highlights the "Astro Physics" card.
- Red arrows point from the annotations to the following list of user feedback.

- Visibility issue with black color text
- Text color can be changed to enhance the readability
- Spacing between text and logos are inconsistent
- Tab size can be increased to improve spacing

5. Then they clicked the lecture number they wanted to watch

BASIC MATHS

DASHBOARD>COURSES>OPTIONS>COURSES>BASIC MATHS

The Basic Maths page shows three lecture tabs:

- L1:** Vector Space -1
- L2:** Vector Space -2
- L3:** Vector Space -3

Annotations:

- Red arrows point from the annotations to the following list of user feedback.
- Red box highlights the "Basic Maths" card at the top of the page.
- Red arrows point from the "Basic Maths" card to the following list of user feedback.

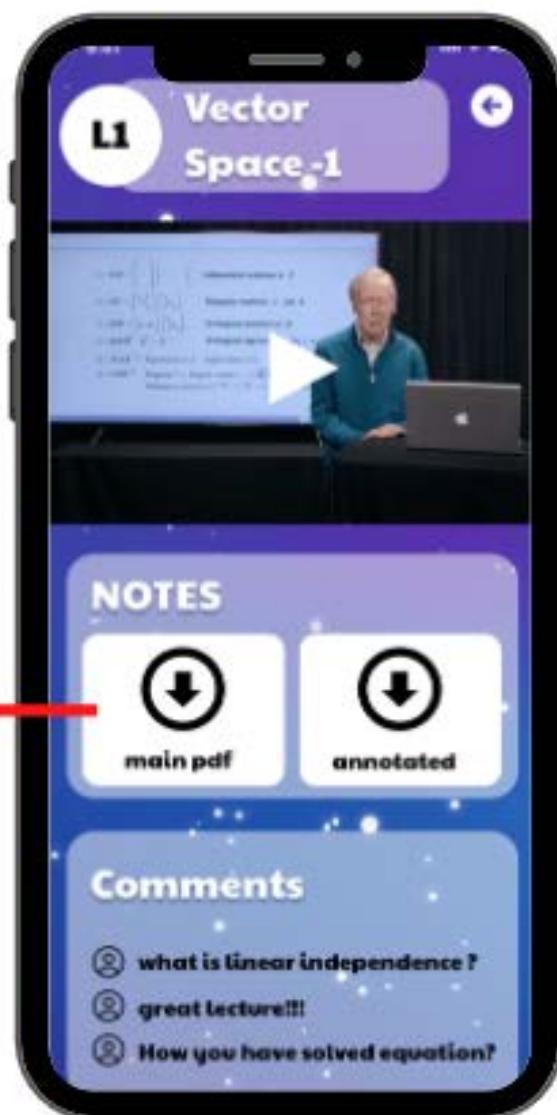
- No description of the lectures
- Lecture tabs can be made more informative
- Not able to jump to particular lecture easily(have to scroll a lot)
- Search bar can be provided so that user can easily jump to particular lecture

6. After clicking the first lecture, they were redirected to the lecture page where a video player is available and they can start watching the lecture. A comment box is also available below the video player

LECTURE 01

DASHBOARD>COURSES>OPTIONS>COURSES>BAISC MATHS>LECTURE 01

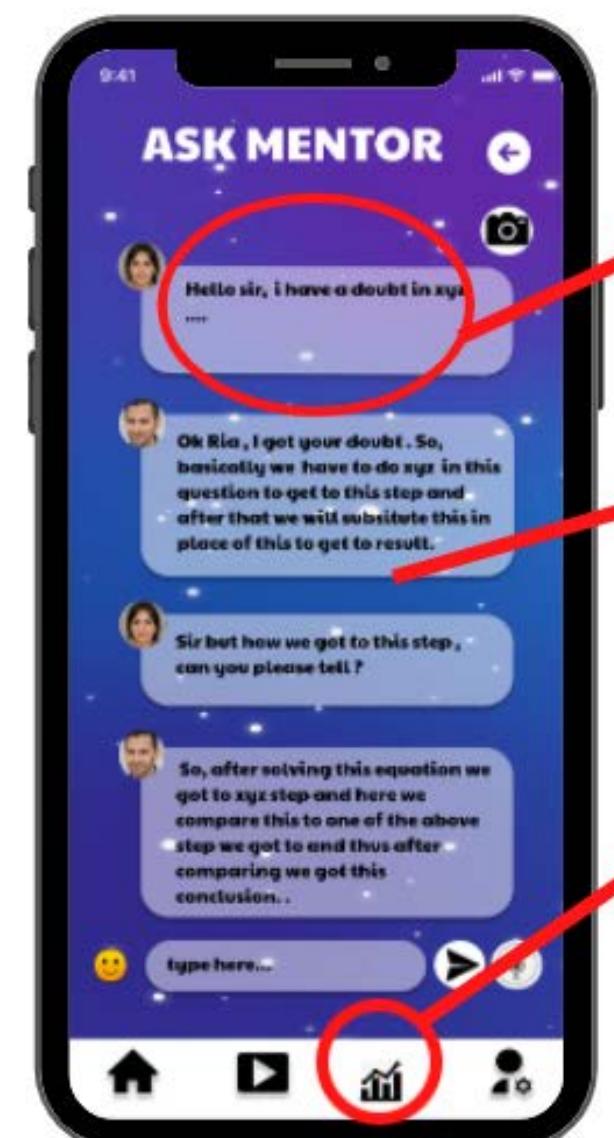
- Navigation error as the current video option in the taskbar doesn't redirect back to the original page
- The page should redirect back to the intial page and not the course page
- Download notes option is too big
- Small buttons with a preview/other details can be added



8. The user had some doubts after the lectures that they intended to clarify in the ask mentor section

DOUBTS SECTION

DASHBOARD>DOUBTS>ASK A MENTOR



- Inconsistency in text colour (should have been white)
- Disoriented Aspect Ratio of the background
- In taskbar Stats icon is little downward to rest of icons
- In taskbar all icons must be aligned at same level.

Social media integration is missing.

There should be a search option. Give them serial numbers.

On clicking video option in taskbar at bottom only one video appears and user has to go back to main page of course to select other videos

There should be a filter of chapter/course.

Comments should be renamed to something like discussion forum

UI is not polished enough and spacing in the dashboard icons are not equal and text below icons should be merged into each other

Thank You

Madhur Gupta

2021063

Ankit kumar

2021015

Ayush Sachan

2021031

Sarthak Gambhir

2020575

Harsh Kumar Pal

2021047



References

- **Figma Prototype Link-**

[https://www.figma.com/proto/szWw1TAiKRyx429Z5nkSvS/Astroonus version 1.0.1?node-id=201%3A703&scaling=scale-down&page-id=0%3A1&starting-point-node-id=18%3A546&show-proto-sidebar=1](https://www.figma.com/proto/szWw1TAiKRyx429Z5nkSvS/Astroonus%20version%201.0.1?node-id=201%3A703&scaling=scale-down&page-id=0%3A1&starting-point-node-id=18%3A546&show-proto-sidebar=1)

- **Guerrilla Testing Google Form-**

<https://forms.gle/XCvCe5r7jGVN7nLB7ere>

- **Interviews-**

https://miro.com/app/board/uXjVOFo2OAs=/?invite_link_id=919914795407

- **App Task Flow-**

https://miro.com/app/board/uXjVOFpeRw=/?invite_link_id=319733772205

- **Scenarios-**

https://miro.com/app/board/uXjVONstVY8=/?invite_link_id=666133927954

- **Information Architecture-**

https://miro.com/app/board/uXjVOFpSO34=/?invite_link_id=313412318043

- **Affinity Diagram-**

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