ruang guru

Personalization Project

Concept & Usability Test Report

March 2022

Current Situation

Identifying the problem

K12 User Journey Research - Insight Summary

Barriers for users to have frequent meaningful usage are identified during two early stages:

1. **Trial (pre-subscription)**
2. **The habit forming moment**

“Early Adopters cenderung kurang memiliki pemahaman bagaimana produk-produk Ruangguru bisa membantu aktivitas mereka belajar harian”

Beberapa penyebab:

- New users cenderung hanya coba produk spesifik yang disarankan (iklan, konsultan, dll.)
- New users khawatir salah coba bisa berakibat mereka terpaksa bayar
- New users khawatir sign-up akan berujung mereka terpaksa bayar
- Users anggap terdapat banyak barrier/gangguan untuk mencoba produk RG lainnya (sign up, iklan)
- New subscribers khawatir salah coba bisa berakibat batalnya subscription plan mereka, atau mengacau konfigurasi

Daily learning occasions are challenging especially for early adopters. They have little clue how Ruangguru might directly help them

Insight from K12 User Journey Research Report - Dec 2021

Daily learning occasion	am	noon	pm
Challenge:	Direct task to solve during online school	Online teaching by school teacher is unclear, difficult to follow	Multiple homeworks for tomorrow and/or the next days	Mengulang materi sekolah
Early adopters	“Ya biar cepet google soalnya aja, biasanya pasti ada”	“Ngulang pelajaran sekolah di Ruangguru, cari video materi yang sama”	“Tanya temen atau tanya kakak,” Googling soalnya, nanti ketemu yang mirip	“Belajar dari yang buku paket”
Mature users	“Cuma dikasih waktu 20 menit buat ngerjain soal, telat bangun ya udah pakai roboguru”	“Liat di konsep kilat dulu buat materi yang nggak ngerti,”	“Tugasnya merangkum, liat rangkuman di RG” “Cari soal yang mirip di bank soal, lalu ganti angkanya”	“Kalau PR nya udah selesai baru lihat-lihat [video] konsep kilat”
Motive	Just need to get it done ASAP	Need deep comprehension for longer purpose	Quick fix but have time to learn the process	Better and deeper comprehension
Fear	It’ll be more homework to do for tomorrow	I won’t be able to pass exams and tests	Ga boleh ikut kelas ➡ semakin ketinggalan More homework as punishment Affecting school report	Bad rank, underperformance

Missing Action

Current Homepage - Qualitative Insight

Taken from Homepage Evaluative Research Report - Dec 2021



For less frequent users, the top section of the homepage has served their learning needs. Hence, they hesitate to scroll until the lower section of the homepage

approx 2-3 scrolls up is the limit of their tolerance and willingness to scroll and explore the home page.

"gak pernah dan ga pengen scroll kebawah banget, karena males, 2 scroll maksimal buat lihat-lihat" -K, 7 SMP

Frequent user only has willingness to explore the lower page if only have a spare time to open non learning feature such as ruangbaca, ruangcerita.

All of the frequent users feel reluctant to scroll down the home page in daily basis, because they only focus on Rubel learning features for daily use. This also affect the other learning features' discoverability at the lower homepage.

"bagian bawah2 jarang dibuka soalnya yang atas itu lebih prioritas dan aku lebih butuh yang atas... yang bawah ga prioritas kak" -W, 12 IPA

Opportunity Area

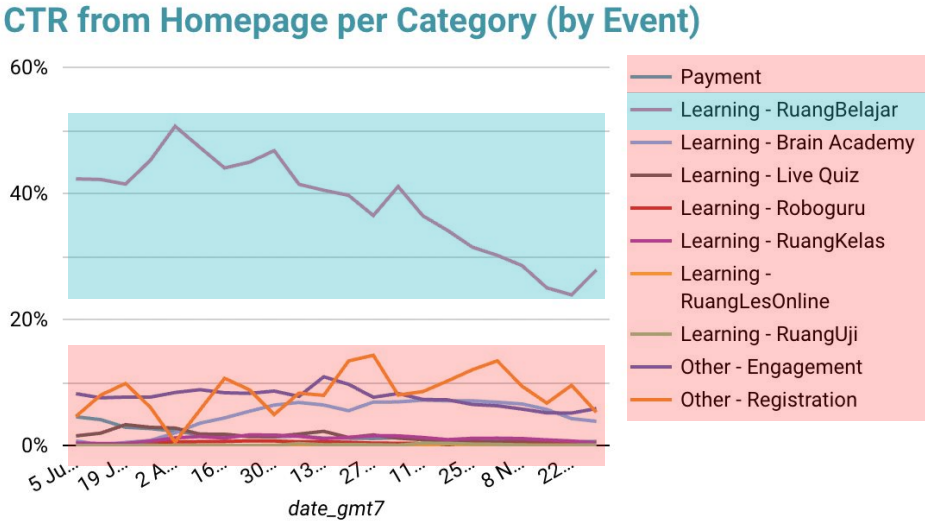
HMW provide more concise homepage and makes the lower homepage more important for users to explore and visit, so that they can be exposed to more features on our homepage.

Current Homepage - Quantitative Insight

Taken from Homepage Evaluative Research Report - Dec 2021

CTR data indicates that lack of usage in several features other than ruangbelajar

Data W1 Jun - W1 Dec



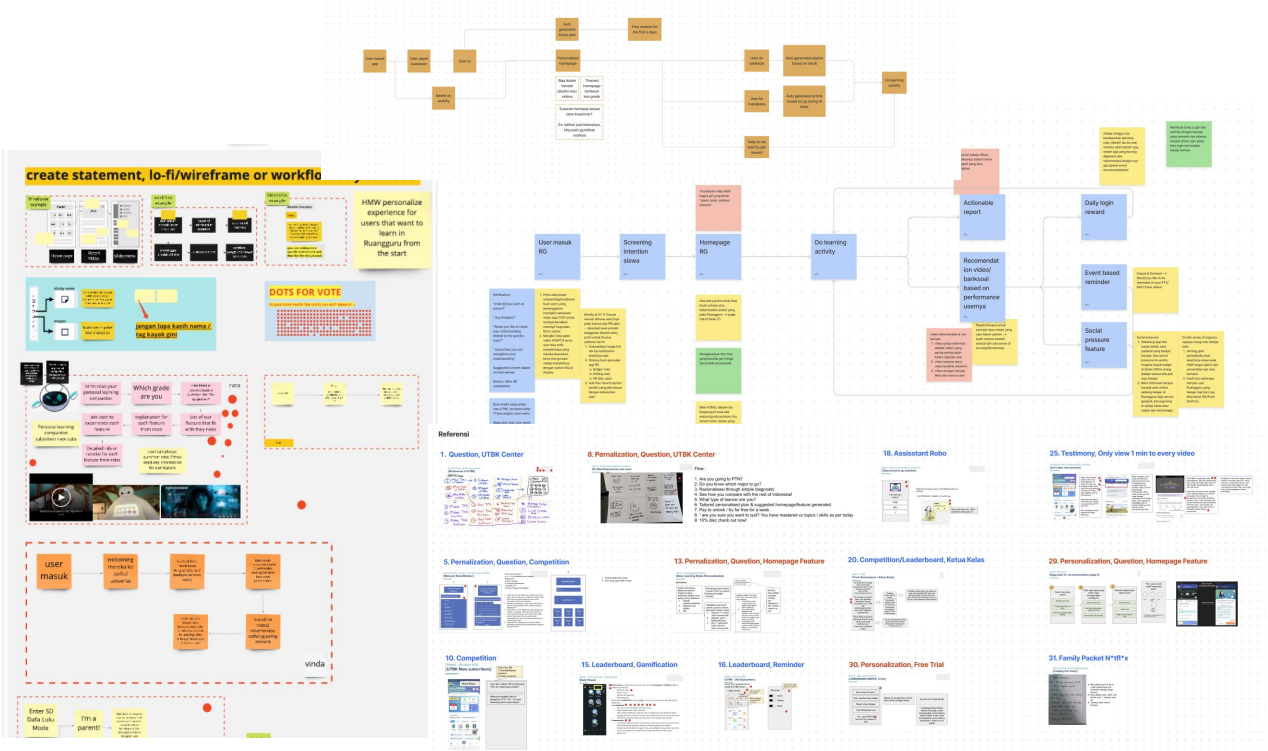
- **ruangbelajar** learning has the highest CTR and clicks/session among other features on our homepage, **assumed because user are less exposed to other feature below ruangbelajar.**

- **To tackle this issue, some initiatives about homepage personalization were already mentioned in the previous strategy meeting. Here the product team needs to know preliminary insights on the homepage personalization concept (A/B concept testing).**

Exploring the Solution

Involving several streams across grades & departments

Ideation Workshop Across Grades, Stream and Departments



We held ideation workshops for personalization for each grade involving design, product, content, marketing, bizops and academics

Ideation Workshop Result Summary



From the ideation we try to look for a pattern and see what kind of personalization idea we can explore in the first phase

Building The Concepts

Lagi sibuk kak, jadi sekarang jarang belajar

Kelas 12 ini sibuk kak, karena banyak tugas jadi belum sempet belajar UTBK

Aku sekarang lagi sering latihan dan nonton video dengan guru karena udah mau PAS, jadi jarang buka dafalulu

Aku tryout menjelang UTBK kak, soalnya sekarang lagi belajar dulu buat pahamin materinya

Aku lagi banyak pake playlist dan Banksoal kak soalnya lagi persiapan ujian

Learning session can serve various purposes for our user

We want to facilitate those purposes because currently they have to figure out by themselves the features that can help their use cases for every purpose

How Our User Differentiate Their Learning Needs

From our various research from December 2021 - March 2022 also validated from this research, our mature user already differentiate their learning session based on these categories

Belajar buat review materi	Belajar buat mengerjakan Tugas	Belajar buat nyicil ujian	Tryout
Belajar buat mapel besok, buat review mapel yang udah dipelajari hari ini di sekolah, biasanya lewat ruangbelajar, kuis, kuis akhir dan rangkuman.	Ngerjain tugas dari guru, biasanya kalo kesulitan tanya roboguru, sharing soal (BA user), ruanglesonline atau klinik PR (BA user)	Belajar buat nyicil buat ujian, biasanya dengan nonton video, ngerangkum dan ngikutin playlist	Tryout, buat mengukur kemampuan mereka dan belajar dengan lebih cepat karena mereka bisa belajar dari hasil tryoutnya (mulai dari yang mereka belum paham)
“... pake RG biar bisa liat pembelajaran yg blm di bahas di skolah. Jadi nanti di sklh ud bisa” ***Novelia**, SD 4 - Active user*	“Biasanya kalo ngerjain PR aku ke roboguru, kalo nggak ketemu aku ke sharing soal, kalo masih belum ketemu aku coba ke klinik PR.” ***Philip**, SMP 7 - Active user*	“Skrg pakeny playlist sama adapto itu. Pas buat pts ini. Kan jarang di terangin materi. Lebih suka liat playlist blajar dan ada soal-soalny juga gitu.” ***Mariskha**, SMA 10 - Active user*	“(aku ikut tryout) Untuk mengukur kemampuan kak, biar aku tau aku mampu apa engga gitu.” ***Lailatul**, SMA 11 - Active user*

Validating The Solution

Concept & Usability Test Strategy

Figuring Out User Behavior

Early adopters	“Ya biar cepet google soalnya aja, biasanya pasti ada”	“Ngulang pelajaran sekolah di Ruangguru, cari video materi yang sama”	“Tanya temen atau tanya kakak,” Googling soalnya, nanti ketemu yang mirip	“Belajar dari yang buku paket”
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Missing Action

We have a lot of feature that serve various needs for our user but we lack non-subscriber to aha moment driver and also there is a missing link from aha user to help them build their habit

Beside our new concept, we also want to find out

- How our active user develop their habit and how they use our app
- How our dormant user first experience leads to less frequent use of RG app

Validation Method

Research Methodology: In-depth interviews, Concept test and Usability test

Participant Criteria:

Group A-1: Grade 1-6 Active user	Group A-2: Grade 1-6 Dormant user	Group B-1: Grade 7-9 Active user	Group B-2: Grade 7-9 Dormant user	Group C-1: Grade 10-11 Active user	Group C-2: Grade 10-11 Dormant user	Group C-1: Grade 12-UTBK Active user	Group C-2: Grade 12-UTBK Dormant user

Total participant: 12 users across grade and type

Prototype we tested:

Design being Validated

User Behavior in RG App

The Result of Our Research about How Our User Use RG App

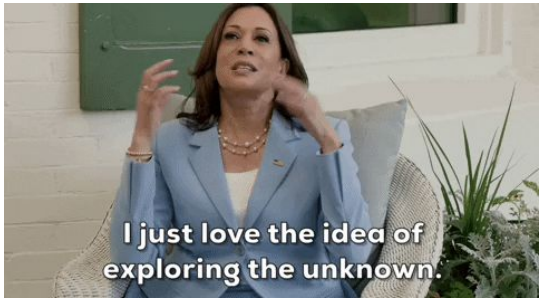
User Behavior in Their First Access to RG Homepage (Current)

	Introduction	Intention to subscribe	First access	Exploring	Habit Forming
Active user	EC	Ngejar pelajaran sekolah, review yang sudah dipelajarin, ngerjain tugas, persiapan ujian	Rubel	EC help to guide them what feature to use in what case	User feel the benefit of our features and start to explore more
Dormant user			They're overwhelmed. Too much choice, hard to navigate.	In some cases, EC cannot teach them how to use our features	User lose confidence, resulting in less frequent access
Active user	TV Commercial	Ngejar pelajaran sekolah, review yang sudah dipelajarin, ngerjain tugas, persiapan ujian	Rubel, Roboguru	More tech savvy user able to navigate ruangbelajar	User feel the benefit of our features and start to explore more through commercials, social media and in-app
Dormant user			They're overwhelmed. Too much choice resulted to their fallback to what they already familiar with.	Less tech savvy user face difficulty when learning in rubel but unlike EC case they have no one to ask.	User lose confidence, resulting in less frequent access and less willingness to explore

How Our User Build Their Habit

AHA User

Once **user find a use case** in the apps, **they will try to explore the other use case.** e.g. When they face difficulty when doing homework, they will explore and may find roboguru or try to search the topic they need to learn from search function.



Dormant User

Once they **find a blocker** in homepage or ruangbelajar and **failed to resolve it,** e.g. one user searching for a topic but the result is the video still locked although they already subscribed, **they will stop exploring** other use case that fit them because they lose confidence to be able to utilize the app. They will only try to do the most familiar things for them because they find the app hard to understand.



How Our User Build Their Habit **Belajar Sehari-hari Case**

User defined belajar sehari-hari as a way to review topic they just learned in school or learn topic for tomorrow's school session

	Learning	Validate Comprehension	Follow Up
Ruangbelajar SD-SMA user	Start from watching **video/adapto/playlist**.	Use **quiz and banksoal to supplement** their learning and further test their understanding of the concept learned.	Re-watch **video of the concept** they cannot answer or do not understand.
Brain Academy user	Focus on **live teaching** as their **main learning activities**.		Re-watch **live teaching history or video of the concept** they cannot answer or do not understand.
UTBK user	**Focus on main subjects** (e.g. Bio, Kimia, Fisika, B.Ing for science major).	Use **quiz, banksoal or tryout to supplement** their learning and further test their understanding of the concept learned.	Learn from **analisis materi** or **videos from the concept** they don't understand from the quiz or Banksoal they did.

How Our User Build Their Habit **Mengerjakan Tugas/PR Use Cases**

	Start with	Face Any Difficulty		Can't find anything
For Rubel User	Reading their homework	Start using **Roboguru**	If found nothing from Roboguru, **Try to use RuangLesOnline**, *How did they found RLO?* *Our respondent found out from EC.*	If not familiar or found nothing in RuangLesOnline, **they will use Google** instead
For BA User	Reading their homework	Start using **Roboguru** / **Sharing Soal**		If found nothing in Roboguru / Sharing Soal, **they will use Klinik PR**
Dormant User	Reading their homework	Start by looking for the topic in **their book**		If found nothing in their book, **They will ask their family members or friends**

How Our User Build Their Habit Persiapan Ujian Use Cases

Si cicil2 belajar (The Planner)

Quiz
They will learn from module from school and playlist or rubel related to the subject being tested.

Bank Soal
Evaluate their understanding with BankSoal.

Summarize
Summarize the material they read and watch.

Back to videos/summary
When they did not understand when doing BankSoal.

Si belajar dadakan (The SKS)

TO PTS/PAS
They will start form PTS/PAS tryout.

Latihan Bab/Banksoal
Latihan Bab/BankSoal to maximize time they have by only learn what they don't understand from rubel.

Si tanya teman (Dormant User)

Relying on their peers or material from their school

Usually they only relying on their peers or material from their school because They assume it is took them a lot of time to figure out how to use and is hard enough to watch video in Ruangguru, so they stick to what works for them by asking their peers or creating study group.

How Our User Build Their Habit **Tryout Use Cases**

Active User

Tend to use TO (or ruanguji) more regularly, especially when they are preparing for upcoming PTS/PAS. Some also use it to further test the learning comprehension.



Dormant User

Have **not used TO (or ruanguji)**. When preparing for upcoming exam, they would make their own summary of the materials, read their textbooks and **join group study sessions** with their friends. The case is because they face difficulty when watching video then they lose motivation to explore other function that may cover their other use cases.

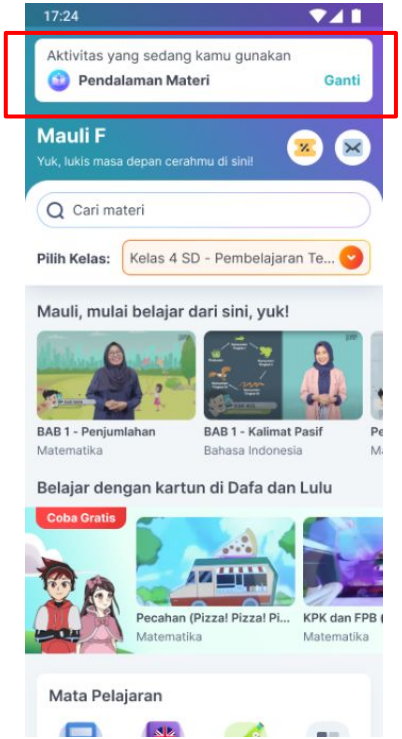


Concept & Usability Test Result

The Result of Our Validation if Our Concept is Aligned with Users Needs

We have tested 3 different concepts to users (1/2)

Concept 1

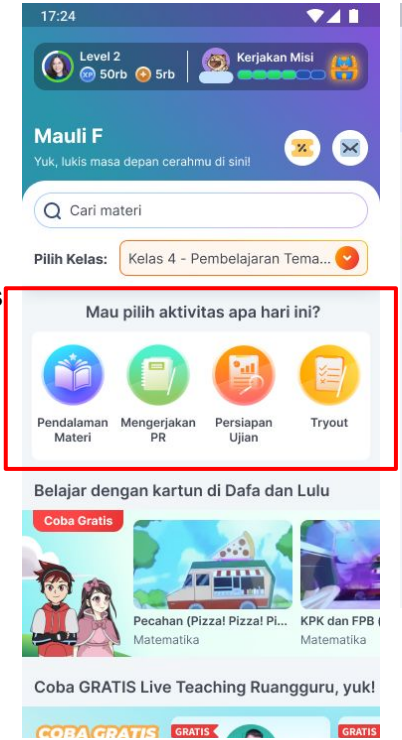


User chooses mode

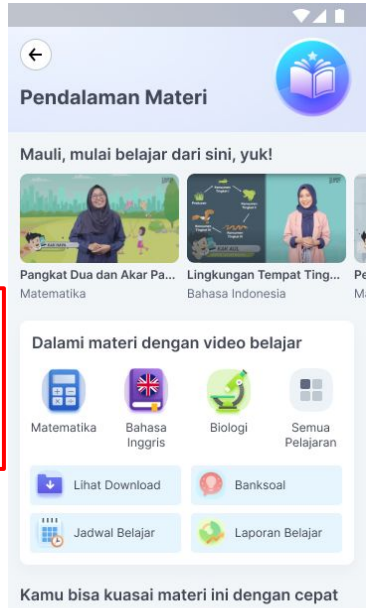
Homepage component will change

Concept 2

User chooses mode



Explore mode

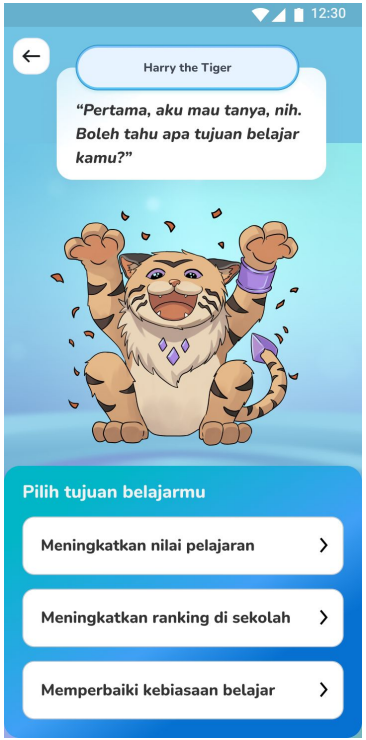


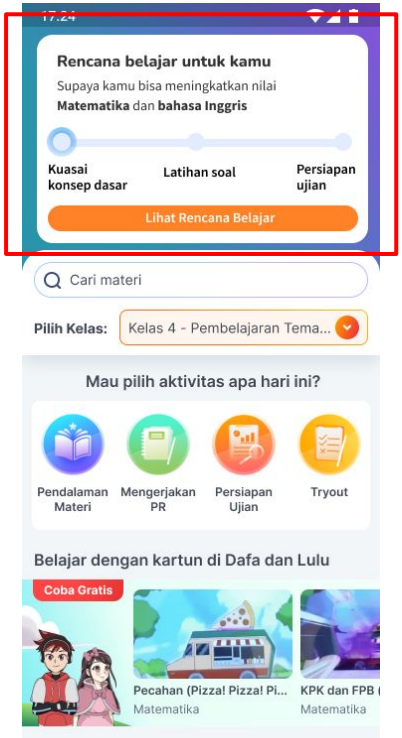
Learning mode

We have tested 3 different concepts to users (2/2)

Concept 3

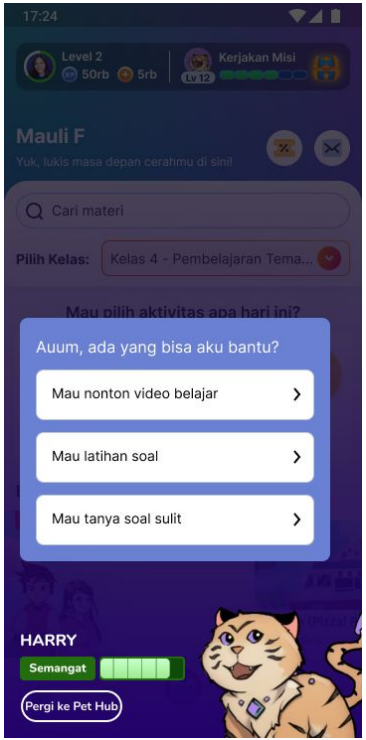
User answers questions after registrations





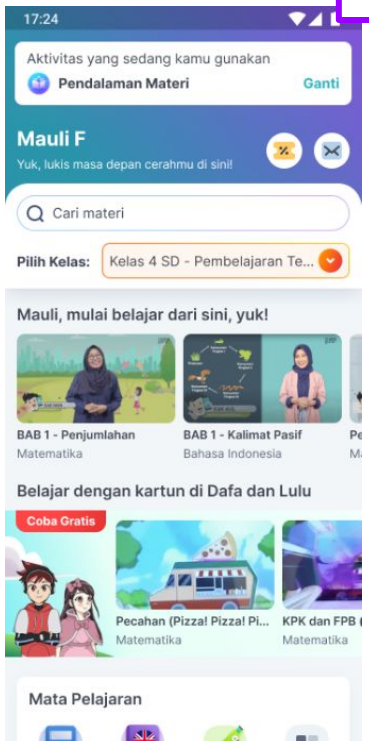
User gets personalized learning plan on their homepage

Additional: Learning Companion

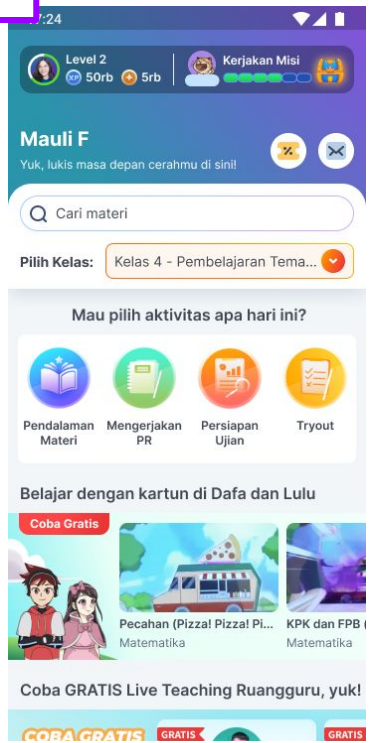


Concept We Bring to Users

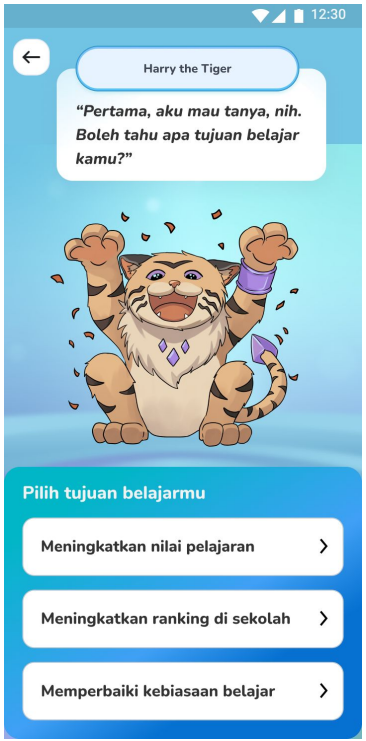
Options



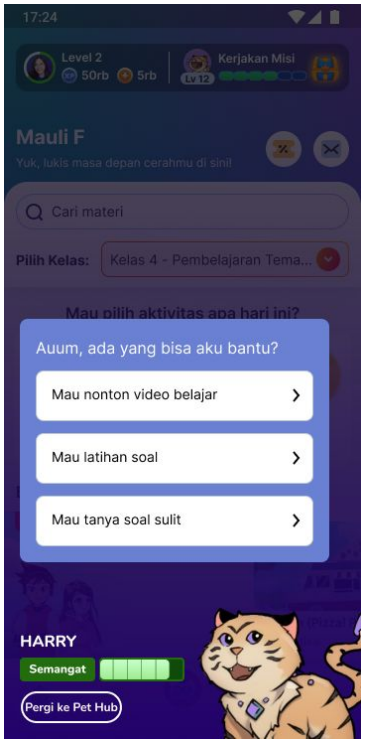
Switch mode 1



Switch mode 2



Di guide sama Pets



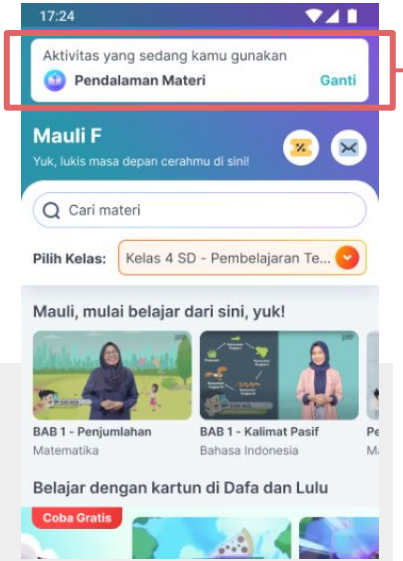
Learning Companion

About Switch mode 1

To help user connect their learning purpose to our features and recommendations



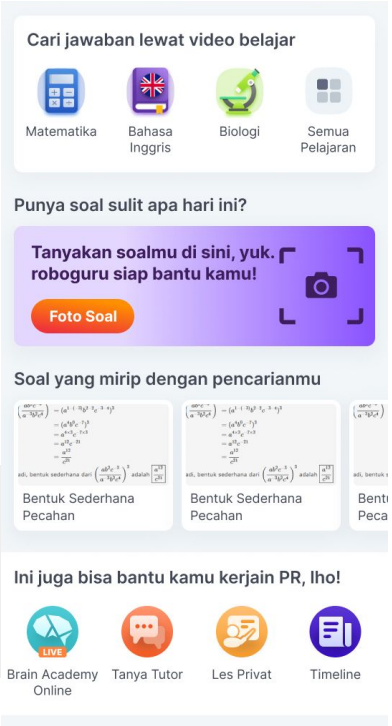
1 Offered a set of activities user can choose based on their need or goal when opening the app.



Switch mode by pressing “Ganti” on the top right.

2 User has to switch between modes to get specific recommendations based on activities.

3 User gets product recommendation based on activity chosen.



Respondents Impression About **Switch mode 1**





Users mentioned that **recommended video** will **help them when they are confused about what to study** and can be useful to choose the material they want to learn.

When showed Switch mode 1, user claimed they like it better than current homepage.

Pros

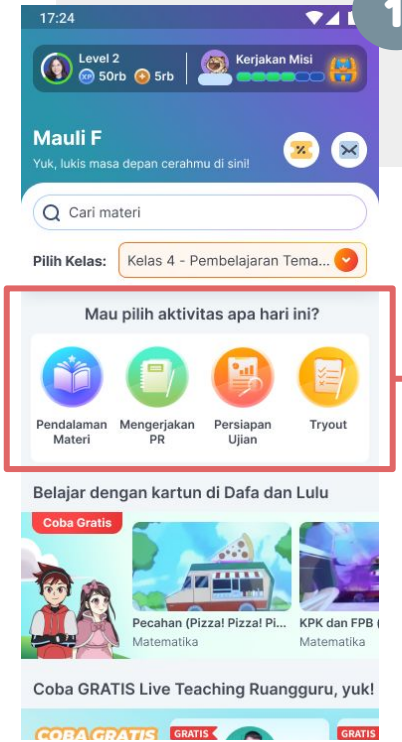
Users said they **can easily find the content they need based on activity** in Switch mode 1 compared to the current homepage because it adapts well to their needs.

Cons

They find it **difficult to change activities in concept one**, especially with "ganti aktivitas". It's too complicated for them to go through the previous screen again if they want to change it. They also **didn't notice** how to **"ganti aktivitas"** because they do not expect it to be on top of homepage and the action is not obvious enough.

About Switch mode 2

To help user connect their learning purpose to our features and recommendations



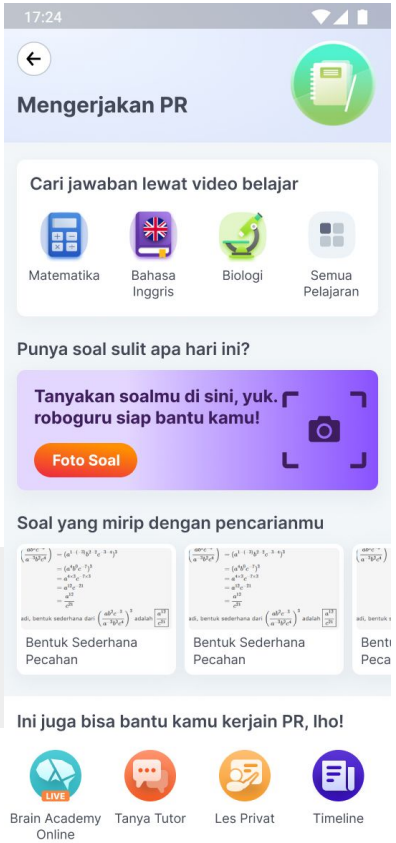
1

Similar to Switch mode 1, also offered a set of activities user can choose based on their need or goal when opening the app.

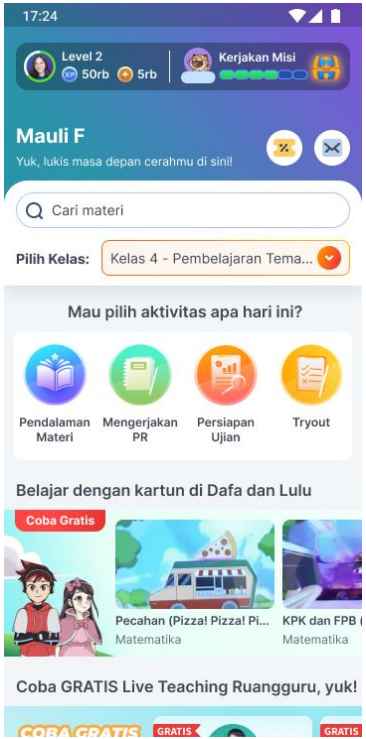
User can switch between modes by choosing activities here.

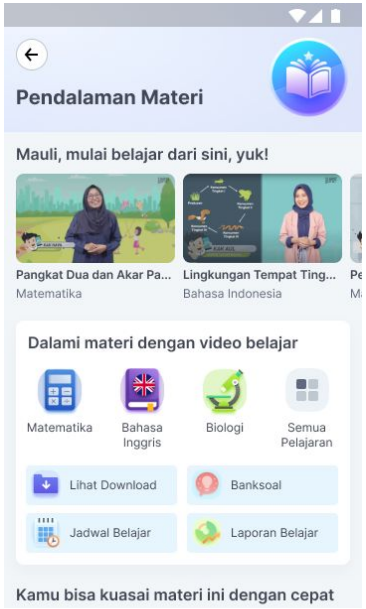
2

User gets product recommendation based on activity chosen.



Respondents Impression About **Switch mode 2**





User feels that Switch mode 2 is better and easier to navigate than Switch mode 1.

Pros

It's **more straightforward when they want to change their activities from homepage**. They can see it clearly without any complicated flow. It can also directly match their needs based on the activity they'll use later.

Cons

Their concern mostly related to the recommendation, **if it is not accurate or irrelevant it will make their experience worse.**

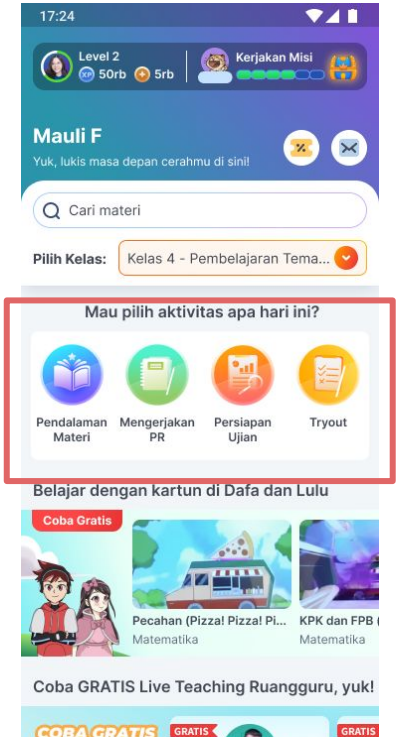
"Konsep 2 ini lebih rinci, dan lgsg 4 kategori didepan mata, tinggal milih aja. Ada tujuannya."

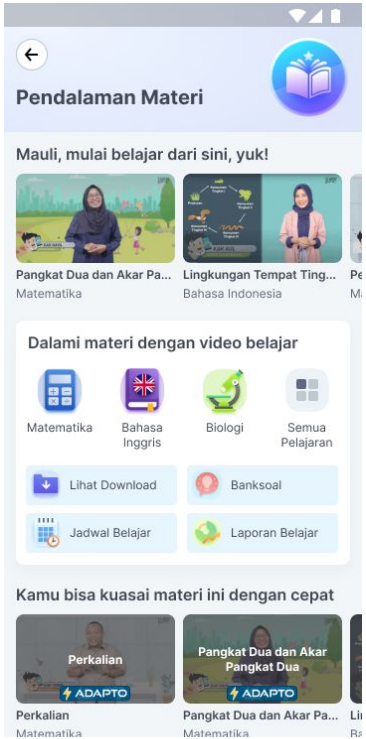
***Mariskha**, SMA 10 - Active user*

"Menurut aku namanya udah sesuai sama lebih gampang dipahami sih kak kalo kayak gini. …ini lebih gampang pindah2nya"

***Zetta**, SD 5 - Dormant user*

Which Concept They Prefer





Users of all types (SD, SMP, SMA & UTBK), both active and dormant preferred Concept 2 for the following reason:

User from all types

Concept 2 is **easier to use and understand** because the learning mode is in the homepage, it is **obvious and always there** and we don't have to do extra step to switch mode

"Aku ngerasa yang konsep kedua ini lebih enak soalnya aktivitasnya langsung keliatan di homepage" **- Salwa, 9 SMP**

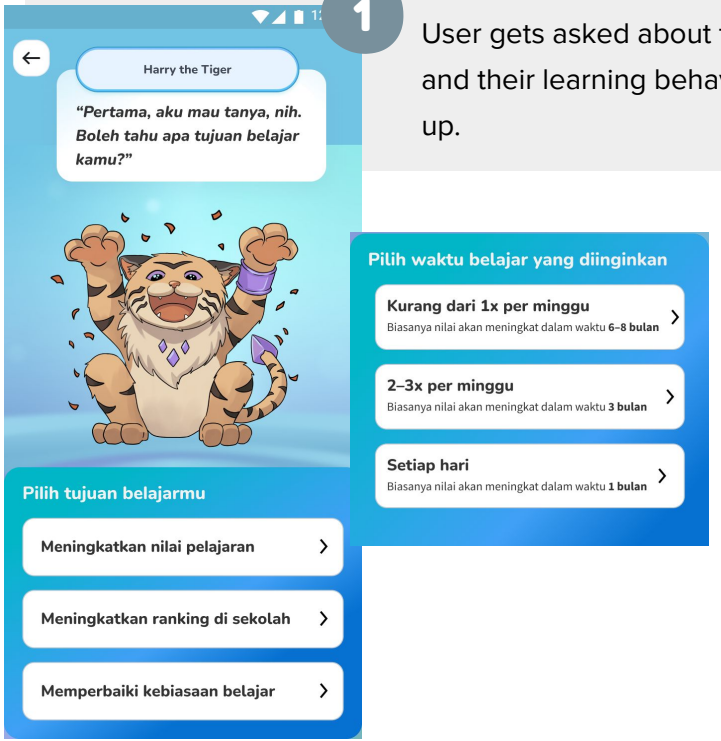
Dormant user

Concept 2 is **less overwhelming and easier to navigate** because we **don't have to figure out which feature to use in which use case**. So we can go straight to the pendalaman materi, etc.

"Lebih ke yg 2 sih kak. Karna ya, kek ini semua ada di lamaan depan. Kalo tadi mau pindah, mesti back" lagi. Pilih ulang lagi." **- Evangeline, 10 SMA**

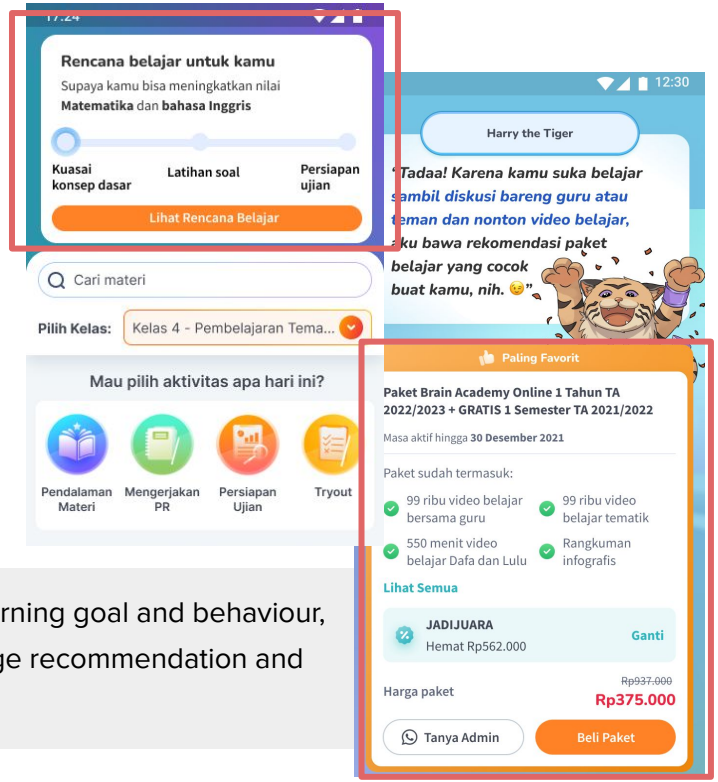
About Di guide Sama Pets Concept

To help new user find a package that fit their needs and guide to AHA moment



1

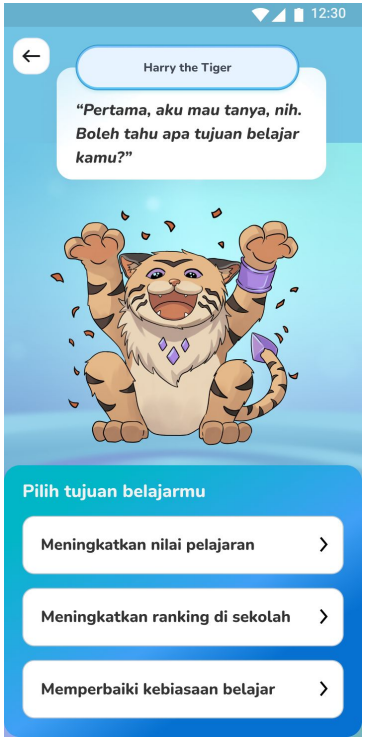
User gets asked about their learning goal and their learning behaviour when they sign up.

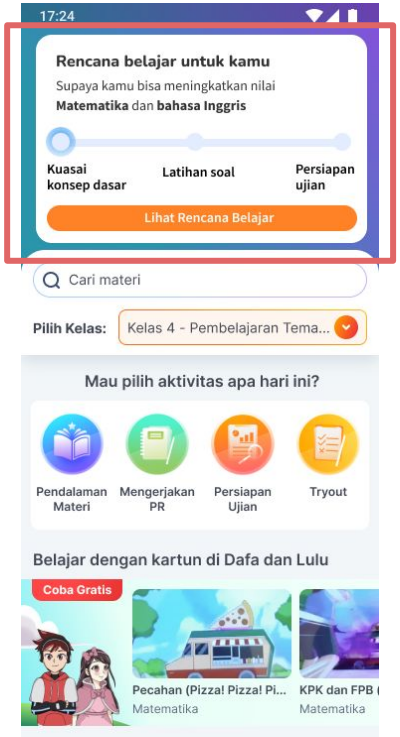


2

Based on user's learning goal and behaviour, they will get package recommendation and study plan.

Respondents Impression About Diguide Sama Pets Concept





User showed positive first impression response to diguide sama pets Concept.

Pros

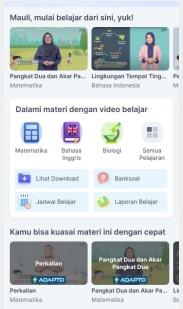
Pet is liked by user because it's cute.
Since a lot of questions are asked to profile user's learning goals and behaviour, **recommendation is thought to be more accurate and personalized**.

Cons

The **number of questions are too much**.
Might **confuse user** who haven't planned their learning method yet, since it's being asked at the beginning.

Considering user's **dynamic school schedule & learning needs**, there's the **risk** that if the **recommendation offered can't accommodate the dynamics**, then it'll **become irrelevant**.

Recommendation Model



Rekomendasi bentuk Spotify/Netflix

For **dormant user**, this concept is **easier to follow** because the **videos are upfront** and they **simply have to follow the recommendation.**

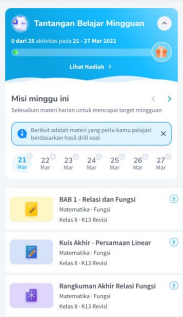
"Aku lebih suka yang rekomendasi video sih kak, langsung keliatan videonya daripada yang misi mingguan, karena kita tinggal pencet kan tanpa harus pencet yang lain2 lagi, tinggal tonton."

***Zetta**, SD 5 - Dormant user*

Note:
User don't seem to be aware that the recommendation they get is based on their performance & activities.

Pro:
Subtle recommendation, not 'in your face'. Could be great when really fits user's needs.

Cons:
User don't realise, so they might not know if recommendation given really fits their needs.



Tantangan Misi

For **active user** this concept is **more interesting** because it **guides them and have gamification mechanic** which make it more interesting.

They also prefer to be guided instead of having to figure out what next.

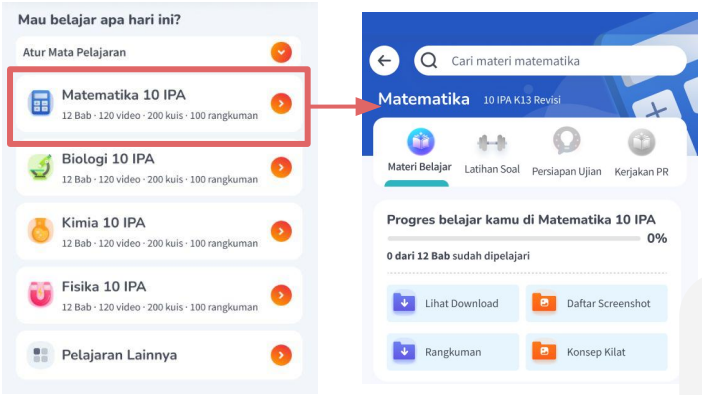
"Aku takutnya jadwal per harinya nggak sesuai kak, kayak misalnya kita dikasinya matematika tapi jadwal ulangannya IPA."

***Philip**, SMP 7 - Active user*

Note:
User's **concerned what would happen if they joined in the middle of the semester,** where their needs might lean more towards preparing for exams or learning certain topics instead of basic concepts.

They feel the concept don't give them much flexibility considering their dynamic schedule, which might resulted in the mission becoming irrelevant.

Recommendation Model



Pilih mapel => aktivitas

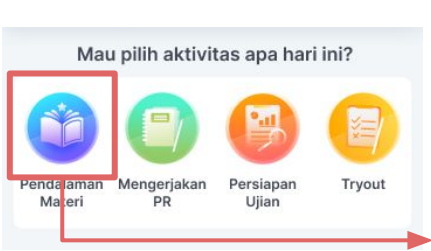
User feels that there are **too many things on the homepage** and it's making them feel **confused**.

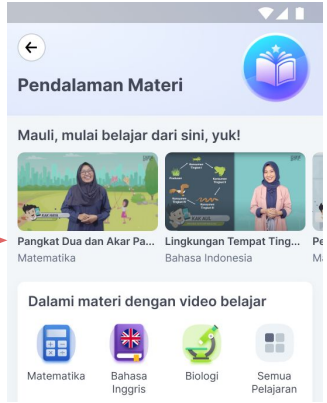
"…rada membingungkan. Terlalu banyak fiturnya."

***Fajar**, SMA 12 - Active user*

Karna kan itu tadi, udah tau duluan mau kemana. Mau dalami materi, kerjakan soal ato ujian. Tujuan awal udah tau mau kemana, baru lah cari materinya.

***Adithya**, SMA 12 - Dormant user*



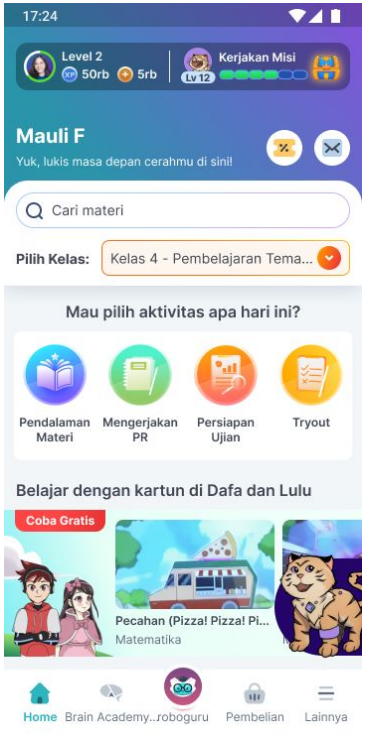


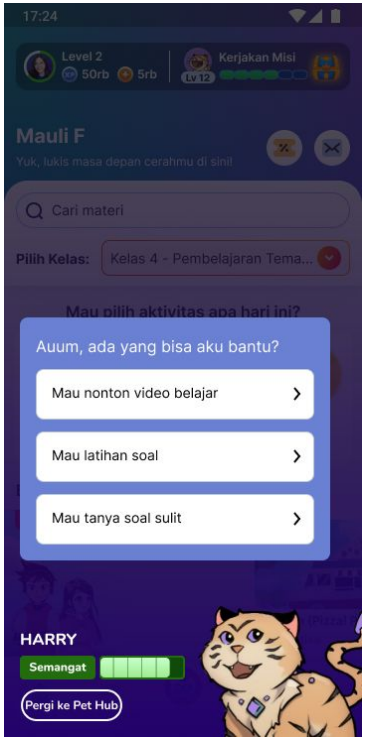
Pilih aktivitas => mapel

User **prefers to have activities on the homepage**, instead of choosing subjects first.

This is because when they entered the app, they already know what they want to do, then they will look for the topic/subject they want.

Other Opportunities to Explore **Learning Companion**





User mentioned that the learning companion can be very helpful for them when they are first time register to Ruangguru apps, because it will **help them navigating the apps** without having to figure out themselves and **can teach them basic feature**

They also said they expect this learning companion **to guide them in first 2 weeks** or once they **complete all the missions for new joiner**

> “Mungkin klo buat aku ngebantu sih, karna kan dia yg arahin Ud ada pertayana dan kita tingal ikutin aja.”
>
> ***Adithya**, SMA 12 - Dormant user*

> “Kalo menurut aku tapi kak dibantunya nggak yang lama sih kak, kalo kita udah ngerti ga akan kepake lagi sih, menurut aku mungkin seminggu atau 2 minggu sih kak”
>
> ***Zetta**, SD 5 - Dormant user*

Sample Features Recommendation

	Non-Subscribers	BAO		
	All	SD	SMP-SMA 10-11	SMA12 - UTBK
Belajar sama guru langsung	Recommend paket belajar	1/ Nonton live teaching 2/ Belajar di Klinik PR Bertopik (P1)	1/ Nonton live teaching 2/ Belajar di Klinik PR Bertopik (P1)	1/ Nonton live teaching 2/ Belajar di Klinik PR Bertopik (P1)
Review mata pelajaran		1/ Dafa Lulu or video topik (preferensi) 2/ Riwayat live teaching	1/ Konsep Kilat or Playlist (preferensi) 2/ Riwayat live teaching	1/ Konsep Kilat or Playlist (preferensi) 2/ Riwayat live teaching
Tanya PR		1/ Sharing soal 2/ Klinik PR 3/ roboguru	1/ Sharing soal 2/ Klinik PR 3/ roboguru	1/ Sharing soal 2/ Klinik PR 3/ roboguru
Latihan soal		1/ Drill soal 2/ DT/PT	1/ Drill soal 2/ DT/PT	1/ Drill soal 2/ DT/PT
Persiapan Ujian (PTS/PAS)		1/ TO PTS/PAS 2/ Drill soal 3/ Bank soal	1/ TO PTS/PAS 2/ Drill soal 3/ Bank soal	
Persiapan masuk PTN				1/ UTBK Center 2/ TO UTBK
Sosial (P2)		1/ Klub Hobi 2/ Friends Hub	1/ Klub Hobi 2/ Friends Hub	1/ Klub Hobi 2/ Friends Hub

ruang guru

Thank you

Interaction Design Team

Documentation link