Margin

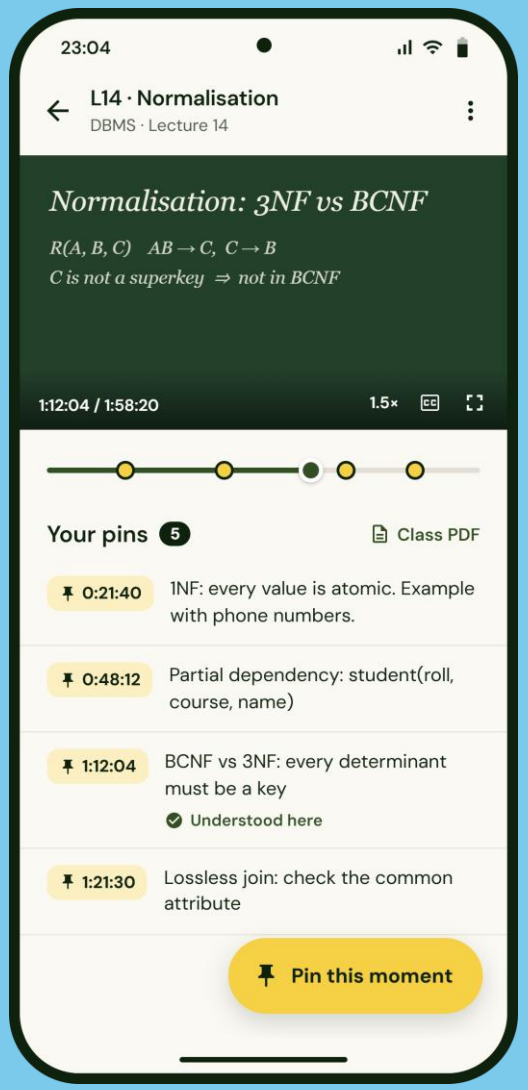
UX case study · 2026

Every note, pinned to its second.

A study companion for students who learn from long recorded lectures. It works offline, keeps notes on the lecture's timeline, and turns revision into minutes.

Nabaskar Brahma

UX research · Product design



The short version

The problem

Students learn from 2-hour recorded lectures. 177 of 607 relevant posts are about studying offline; 20 say a “downloaded” lecture still wouldn’t play.

What I did

I collected 10,657 public app reviews and forum posts, coded 935 against a study-moment codebook, and tested 7 hypotheses before designing anything.

What I designed

Margin: an offline-first player where every note is pinned to its second, resume starts where you understood, and revision replays only your pins.

> “one has to search for the course and find the specific lecture”
>
> App Store review (India), Unacademy, 2021

10,657 posts, narrowed to the 607 that matter

10,657 public reviews and posts collected

1,267 matched study-moment keywords

935 coded one by one

607 relevant: the evidence base

Keyword matching alone was 65% precise, so I coded every candidate individually against 11 study-moment codes, and kept each source link in evidence.csv.

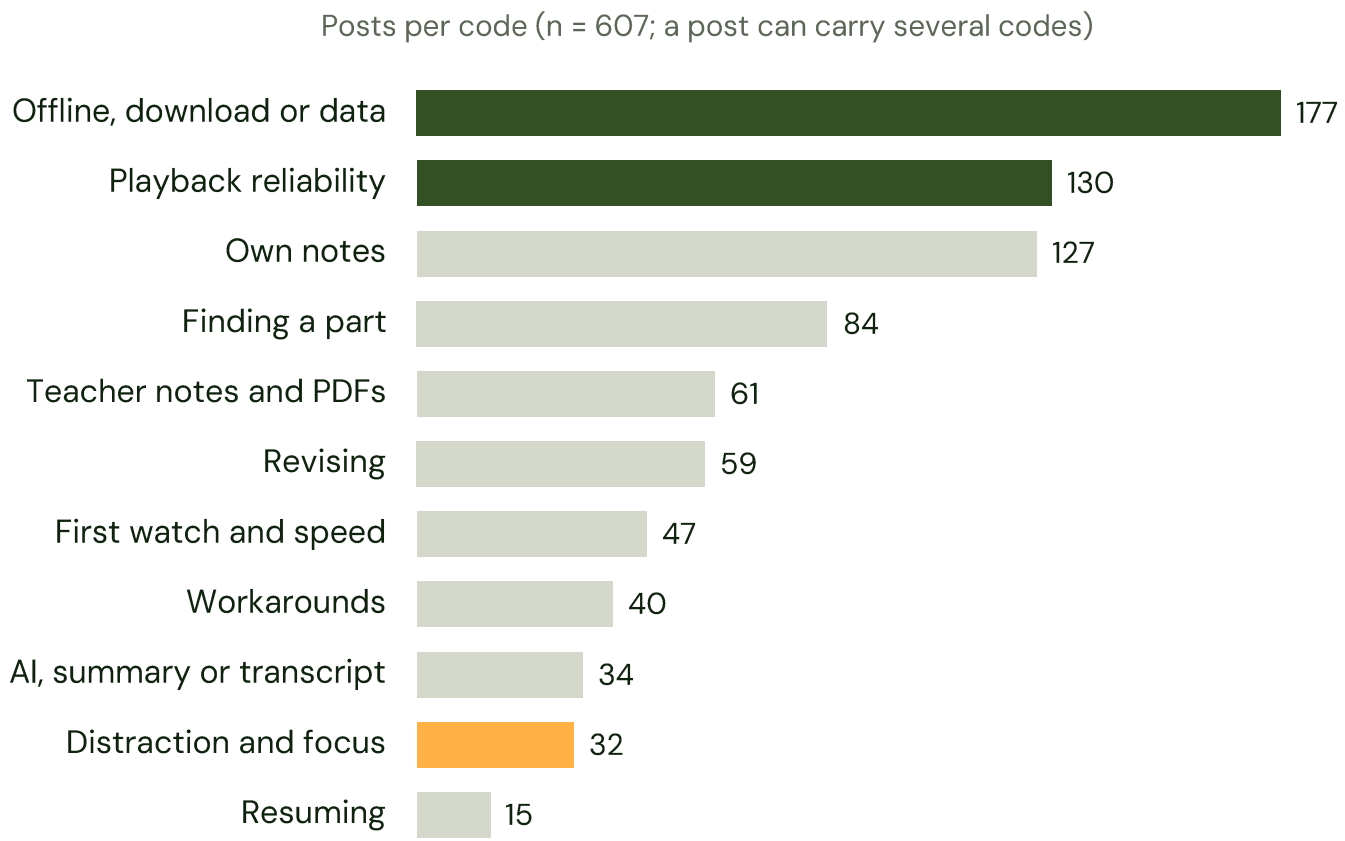
Where the 607 come from

452 App Store reviews (India) across 16 study apps, including PW, Unacademy and Udemy

126 Hacker News comments on learning from lecture videos

29 Stack Exchange posts on studying and note-taking

Study sessions break on access, not attention



177

posts (29%) are about offline use, downloads or data, the largest code. 168 are India store reviews.

130

reviews describe playback that freezes, lags or goes black.

32

mention distraction: 10th of 11 codes.

Seven hypotheses, tested against the data

H1	Students lose their place in long lectures	Confirmed, sharpened	97 posts. Finding fails twice: the lecture (18) and the second (17). Resume restarts from zero (9).
H2	Notes live apart from the video and lose context	Confirmed	127 posts. 15 ask to see notes beside the video; 7 say blocked screenshots broke their notes.
H3	Revision is the most painful moment	Changed	59 posts, mostly positive: revision is why students value recordings.
H4	Recommendations pull students away mid-study	Rejected	32 posts (5%), and 6 say online lectures are less distracting than class.
H5	Low data and slow networks shape how they study	Confirmed, strongest	177 posts (29%). 20 say downloads still need the internet or disappear.
H6	Students build workarounds that reveal needs	Confirmed	40 workarounds, and 114 public GitHub tools built to bookmark video moments.
H7	Students would trust AI summaries with a source link	Not supported	No student asks for it, so AI summaries stay out of v1.

Distraction wasn’t the problem

I expected the feed to be the enemy. The data says otherwise.

32 of 607

posts mention distraction, and 6 of those say online lectures are less distracting than class.

“download the lectures and then turn off ur internet to increase focus”

App Store review (India), PW, 2023

What breaks the session instead

130

reviews describe playback that freezes, lags or goes black. The tool breaks focus, not the feed.

Design decision

No focus mode. The watch screen simply has nothing else on it.

No product connects the whole study loop

	Resume	Notes on a moment	Search inside	Revision	Offline
YouTube	—	No	Partly	No	Partly
PW (Physics Wallah)	—	No	—	Partly	Yes
Unacademy	—	No	—	Partly	—
Coursera	—	Partly	Partly	Partly	Yes
Khan Academy	Yes	—	—	Partly	Yes
Google Keep	—	No	Yes	No	Yes
Notion	—	No	Yes	No	—

— not listed in the product's official help pages or store listing, 28 Oct 2026

The gap

Players handle watching. Note apps handle notes. Coursera comes closest, with notes saved against a frame, but it is reported missing on Android.

Nothing lets a student mark where they understood, or revise by replaying their own moments.

Four insights, four design principles

177

posts on offline, downloads or data

"Downloaded" doesn't mean offline

"I downloaded some lectures but can't play them without internet"

Adda247 review, 2023

Offline is the default

15

reviews ask for notes beside the video

Notes belong next to the lecture

"I want to see the class notes side by side with the lecture"

PW review, 2023

Every note knows its second

18 + 17

can't find the lecture · can't find the second

Finding fails twice

"the video starts playing from the beginning rather than resuming"

Udemy review, 2021

The student's pins are the map

59

posts on revision, mostly as the reason recordings matter

Revision is the payoff

"Watch lectures at 1.5X speed (2X if review)."

Hacker News, 2019

Revise the moments, not the lecture

Two behaviour modes, built from real posts

Backlog clearer

Works through missed recorded classes in long late-night sittings, pausing to check the teacher's PDF.

"I missed a few classes and I was watching them to cover my backlog"

Unacademy review, 2022

Where today's apps fail them

- Pausing to check the PDF restarts the video
- Resume starts from zero
- Downloaded lectures disappear

Revision sprinter

In the days before an exam, rewatches only the parts that matter, at high speed.

"Watch lectures at 1.5X speed (2X if review)."

Hacker News, 2019

Where today's apps fail them

- Can't find the part again
- Skipping lags
- Screenshots for notes are blocked

Three concepts, one direction, two cuts

Concept A

Chosen

Smarter player with pins



Pins live on the player itself, which fixes access and reliability, where the evidence is (177 + 130 posts).

Concept B

Notes-first notebook



Depends most on player APIs, and embedded videos can’t be clipped or frame-captured.

Concept C

Exam planner

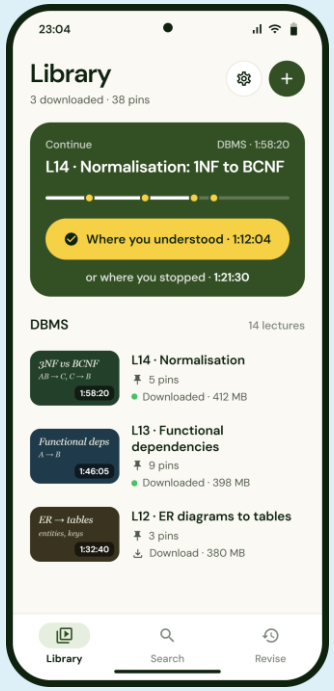


Cold start with no pins, and no help at the 11 pm first watch. Its revision mode became an entry point in A.

Cut on purpose

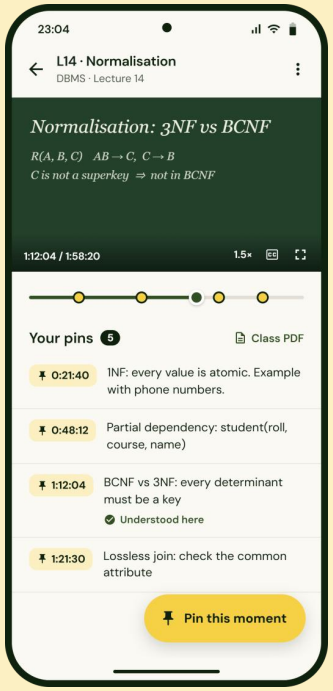
- **AI summaries:** no student asks for them; trust needs proof first.
- **A focus mode:** distraction isn’t the problem, so the watch screen simply stays empty.

Every note pinned to its second



Resume where you understood

Two labelled choices, never a silent jump to zero.



Pin without stopping

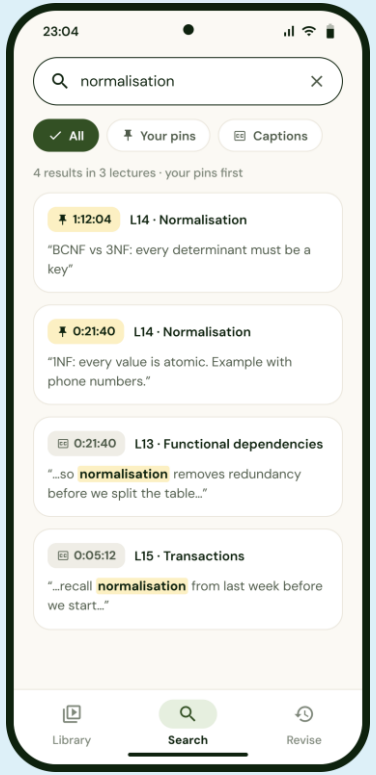
One thumb-reach button. Pins sit under the video, each tied to its second.



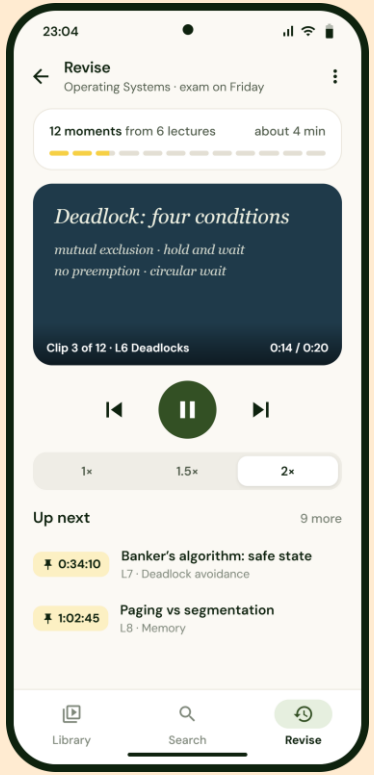
Offline says what still works

Downloaded lectures and every pin keep working. Missing ones say why.

Find the moment, then revise the moments



Search



Revise

1. **A pin is a second plus text, not a screenshot**

   7 reviews say screenshots are blocked in their app.

2. **Search ranks the student's own pins first**

   Every result shows lecture, time and source. 18 posts can't find the lecture.

3. **Revise replays pins as 20-second clips, up to 2×**

   59 revision posts; students review at "2X if review".

4. **Downloads show size and free storage up front**

   A 4-hour class can cost "approx 3 gb".

5. **Yellow means pin, and only pin**

   Pin marks carry an ink outline: yellow alone is 1.4:1 on paper, the outline 15.8:1.

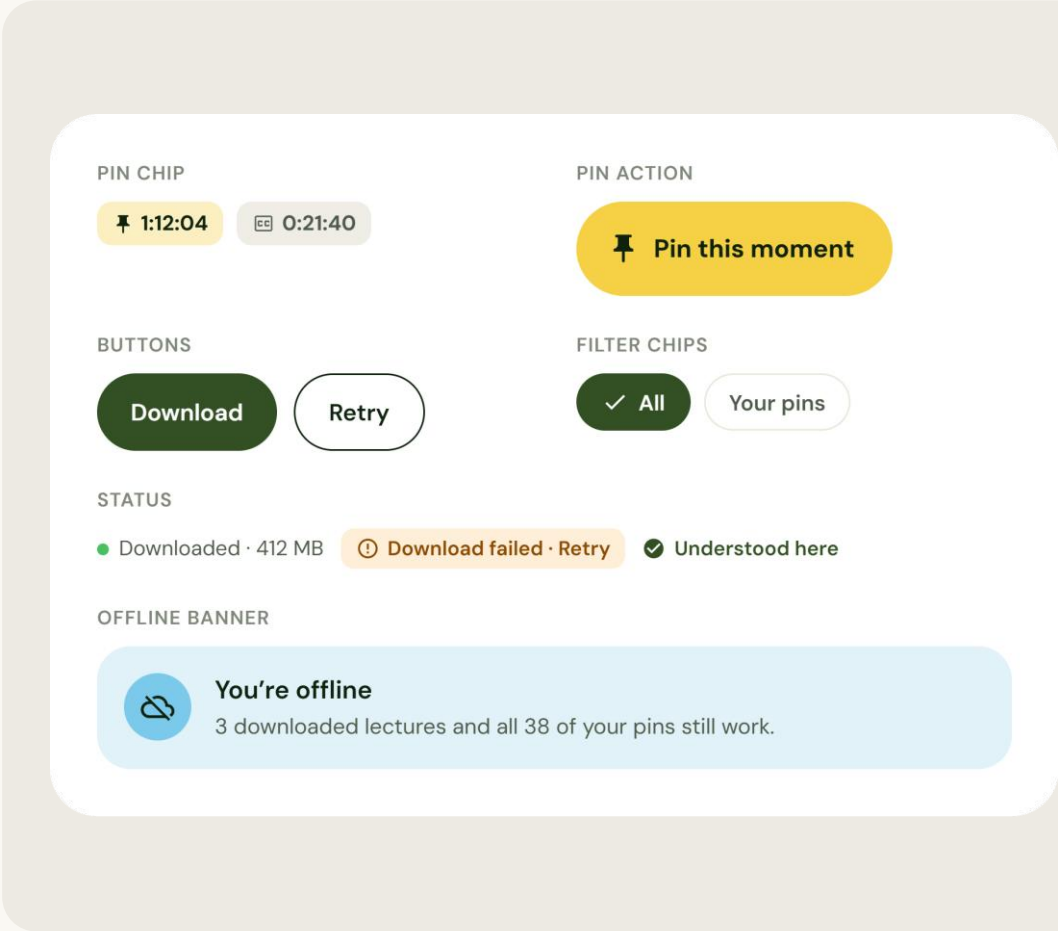
A calm system with one highlighter

Ink	Evergreen	Sprout	Sky	Pin	Amber	Paper
#0E220E	#335024	#47C163	#7BC9EB	#F6D045	#FFB145	#FAF8F3

Aa

DM Sans
Medium for headings, Regular for reading.
Tabular figures for every timestamp.

Measured contrast: ink on paper 15.8:1 · white on Evergreen 9.1:1 · ink on Pin 11.2:1. All pass WCAG AA.



From first wireframe to final screen



v1 wireframe

1 The pin hid on the video overlay, out of thumb reach

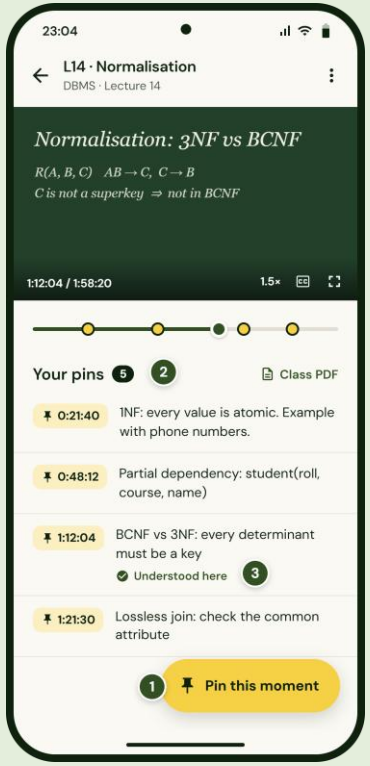
1 A persistent Pin button in the thumb zone

2 Notes hid behind a swipe-up sheet

2 Pins listed under the video, always visible

3 An unlabelled flag meant “understood”

3 A labelled “Understood here” marker



Final

Two review rounds, every failing step fixed

Round 1 · v1 wireframes

9 of 13

walkthrough steps failed or partly failed

Round 2 · final design

0 of 13

steps fail after the redesign

Method: a Nielsen heuristic review (13 issues, rated 0–4) and a cognitive walkthrough of five core tasks: pin, resume, find, revise and study offline.

Sev.	Issue in v1	Fix
4	Offline shown only as a crossed-cloud icon	A banner says what still works; every lecture shows its status
3	Pin out of thumb reach, hidden with the controls	A persistent Pin button, bottom right
3	Notes hidden behind a swipe-up sheet	Notes listed under the video
3	Silent auto-resume and an unlabelled flag	Two labelled resume choices
3	Search results without lecture or time	Every result shows lecture, time and source

How I'd measure success

		Goal	Signal
H	Happiness	Studying feels less frustrating	Post-exam in-app rating, 1 to 5
E	Engagement	Pins become part of studying	Pins per hour of lecture watched
A	Adoption	New users get value fast	Share of new users who pin within their first lecture
R	Retention	Margin is used for revision, not just once	Share of users who open Revise in the week before exams
T	Task success	Students find the part they need	Median time from search to playing the right moment

Guardrail: total watch time must not rise. Margin should make studying shorter, not longer.

What the research proved, and what Margin does

01

Study apps fail on access, not attention

Offline and playback reliability are the two biggest codes: 177 and 130 posts. So Margin treats offline as the default state.

02

Notes belong on the timeline

A pin, a second plus text, turns a 2-hour lecture into a map the student made, searchable across every lecture.

03

Revision is the payoff

Revise replays only the student's pins: 12 moments in about 4 minutes, instead of hours of rewatching.

Next An interactive Figma prototype of these flows, tested with students on the same five tasks.

Thank you