At LasaLara.com, teachers create study books for their students. A study book is a collection of questions (with answers) which let students test themselves on the material for one course.

Teachers organize their books into chapters. They write their own chapters, but they can also link to chapters created by other teachers. Sharing their work lets all teachers produce more complete study books, more quickly.

Students know that each question in a study book is relevant to them because all questions were either created, or selected, by their teacher. This makes a study book invaluable. It becomes the best resource for students to prepare for an exam.

You will develop an Android app that works with study books efficiently. For example, the app should hide questions when they are learned, and then reveal them again just before the student is likely to forget the answer. (This is called “Spaced Repetition”.)

The app should also track, and graphically display, the student's progress. Students should *see* how much they have learned.

(When a student chooses a study book, it must be downloaded and stored locally. All progress tracking will be done on device, not at lasalara.com.)

Finally, the app’s UI should adapt to different screen sizes and orientations.
Here are screenshots from the iOS version of the app:

1. **Home screen, showing a list of the student’s study books.**
   Red numbers are the **percent** of learned questions in the book. Grey numbers show the absolute number of learned questions. Blue numbers (top left) are totals for all the student’s books. The black bar is a progress indicator.

   ![Home screen screenshot]

   **Carrier**: 3:16 PM

   **12/4667**

   **TestData**
   Thomas Narbeshuber, Narbeshuber… 9/4650

   **Welcome to Lasalara**
   lasalara.help@gmail.com 3/17
2. Adding a new study book to the student’s personal library.
A book is uniquely identified by its title and the author’s email address. (The author is probably the student’s teacher.)

Carrier  
3:16 PM  

Cancel  Add Book  Done

Author  Author's Email Address

Book  Title of the book
3. A list of chapters in the currently selected book.
Same as the home screen, except it lists chapters instead of books.
The blue, circle-arrow button (top right) updates all the chapters of the book with any changes made by the author at lasalara.com.
4. The study screen, where a student works through questions. Once again, blue numbers are learned questions / total questions. Red/black bar indicates progress (on the current chapter). Here we see an “unlearned” question. A student would read the question, try to think of the answer, then tap the screen to reveal the correct answer. (Swiping horizontally moves forward or backward through the questions, without showing answers.)

Why does the length of time that the question stays hidden keep getting extended?
5. The study screen, now showing both question and answer. If you knew the answer, you’d tap the red [+] button to mark it “learned”.

Why does the length of time that the question stays hidden keep getting extended?

The theory is, the more times you correctly answer a question, the longer you will keep the answer in memory.

However, this is only true if you have to work to remember the answer. It doesn't help to see the same question repeatedly within a short timespan because it quickly becomes effortless to answer. It is the effort to recall something that helps you remember it.
6. The study screen, after the blue [+] button is tapped.
Tapping the plus [+] button (when it is blue) shows a menu of options:
1. Reset the progress bar to 0 “learned” questions for the chapter.
2. Display all questions in a single page on screen.
3. Show the answer first, then the question.
4. Scramble the order of questions in the chapter.
5. Propose/Send your own question to the chapter’s author.
(The author can choose to add the question to the chapter.)
Reset Progress

Turn Page View ON

Switch Question/Answer

Scramble Question Order

Propose Question

Cancel