

CBR PARTOUT

Concept Proposal

Problem statement

Teens are having low success rates of passing their exams.
There is a higher risk of young people getting in driving accidents.

Research Findings

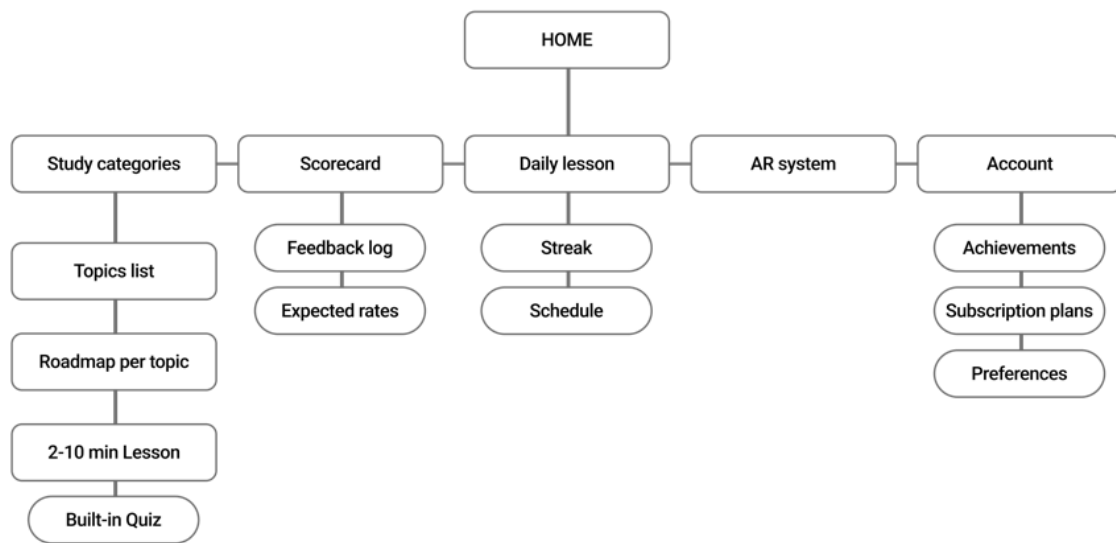
We conducted surveys, interviews and have researched ways to improve the success rates of students passing their exams as well as making sure they are educated well to reduce the likelihood of driving accidents. The results from the survey have shown us the correlation between theoretical and practical exam taking [Survey findings](#). We researched ways to make CBR feel like the companion [Sub-question research](#) and how to make students pass on the first try [See sub-question](#). We learned that gamification of the process, own paced adaptive learning and social learning platform could all help to reduce pre-exam stress and help students pass both theoretical and practical exams.

Our solution

Our concept is to create an app that would act as a central learning software, that prepares you for both theoretical and practical exams. The app will include lessons that will be divided into categories and given to students to study. These lessons would be recommended based on your scores from your driving instructor. They will be short and have visual supportive content, while providing the needed information. We will use real scenarios, as well as small quizzes to test the user's knowledge, and if they are paying attention to the lesson. We want to make these lessons rewarding by making use of achievements and streaks, as well as notifications that tell you you're doing well once you've reached certain milestones.

One of the features of the app would be an integrated AR system designed not only to assist students in practice sessions but also to conduct realistic, simulated exams. By providing an AR-based environment, we could significantly improve the passing rates for the exams by providing more practice experience in a vehicle. That makes students aware of what the exams are like, thus making them prepared and less anxious.

Potential sitemap idea for the app



Conclusion

Creating a central study and practice app could help students with boosting their confidence by having clear expectations and a progress tracking system to know how far in the learning process you are. Gamifying the process will make the app more likeable and more likely to be opened. By making use of students' scorecards, they will improve on the key parts they need to work on, making the personalized study more effective.

Appendix

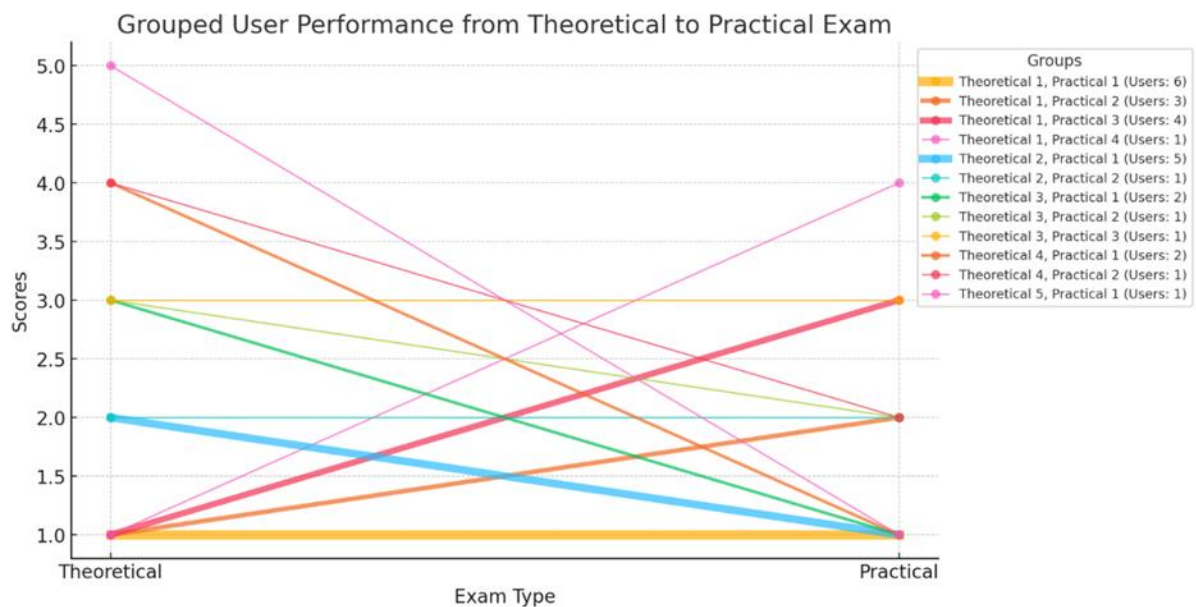
Survey Research document

To identify potential problems with long waiting lines due to low pass rates, we needed to determine where in the process of obtaining a driver's license these issues might occur.

Therefore, we conducted a simple two-question survey that asked participants how many attempts they needed to pass their theoretical exam and their practical exam. By doing so, we aimed to discover if there is a relationship between failing or passing the theoretical exam and how that affects the practical exam. This survey was sent primarily to individuals in our target group (ages 16-19), though some responses extended up to the age of 30.

Survey Results and Analysis

From the graph, we can see the following results:



- Among the people who passed their theoretical exam on the first attempt, 6 managed to pass their practical exam on the first attempt as well. However, 8 people in this group needed more than one attempt to pass their practical exam. This suggests that, even if you pass your theoretical exam on the first try, it is more likely that you will need more than one attempt to pass the practical exam.
- Looking at those who required multiple attempts to pass the theoretical exam, we see a trend where they needed fewer attempts to pass the practical exam than the theoretical.

Conclusion

What does this all mean? We could say that there may be a relationship between taking multiple attempts to pass the theoretical exam and an increased familiarity with the rules and theory of driving, which could improve the chances of passing the practical exam. Therefore, it could prove beneficial to focus on the period between those two exams to ensure students pass their final exam.

Sub-question research

How can we make CBR seem like a companion on the road for teenagers between the ages of 16-19?

To make CBR feel more like a supportive companion on the road, digital tools can be useful. A technique like gamification can be more engaging for teenagers to help them with learning. Gamification helps keep the students motivated by having rewarded the progress and turning the learning into a fun experience. Stress relief tools to help students with anxiety. Creating a social learning platform where students can learn from each other. Updating the visual branding to a more youthful and friendly design to make it feel more welcoming.

Gamified Learning App

Introducing a gamified app where students earn points and badges for completing tasks can motivate them to practice more regularly, making the CBR seem like a fun and supportive partner in their learning journey. These apps¹ create a game-like experience where students can earn points and unlock new features as they progress, which not only makes learning more fun but also encourages consistent study habits. Gamification has been shown to help learners stay engaged and reduce anxiety by turning the practice process into a more enjoyable activity.

Stress-Relief Tools:

Mindfulness exercises and stress management techniques into the learning app can help students with their anxiety, this way the role of CBR will be supportive during the learning process.

Create a Social Learning Platform:

Building an online community where students can share their experiences, tips, and encouragement with each other can make the journey feel more like a collective effort, with CBR as the guiding companion.

Visual Branding:

Update the visual branding of the CBR to be more youth-friendly and less formal. A more vibrant, relatable design can make the organization feel more welcoming and less intimidating to young drivers

Conclusion

Combining everything into one app could make CBR more like a supportive companion. An application with gamification learning tools, stress relief tools,

social community and a youth friendly visual branding can enhance the CBR's role for young people. Gamified learning elements like points and badges for completing task can motivate students to engage more with their studies. Also having the option to mindfulness exercises and stress managements techniques can help with their anxiety. Adding an online community which allows students to share experience and tips so they can learn from other experiences. Having the app a youth friendly design can make the CBR feel more welcoming and less intimidating to the youth. Combining these elements, the CBR can create a digital tool that not only educates but also supports and engages young learners throughout their driving journey.

Sub-question research 3

How can we help exam takers pass their exams on the first try?

To make sure that test takers manage to pass their exams on the first try, we have to think about the obstacles and challenges that prevent them from doing so. Anxiety is one of the main reasons many fail their tests. Being stressed dulls your awareness and impairs your ability to make quick, confident decisions, both of which are crucial for passing a driving test. Anxiety can cause test-takers to second-guess themselves, overlook important details like checking blind spots or mirrors, or make rushed decisions.

So how can we make the exam testers feel confident and comfortable to pass the test on the first try?

- **Mock exams:** Hold regular mock exams to simulate both the written theory exam and the practical driving test. This familiarizes students with the format and pressure they will encounter on the actual test. (Roediger & Butler, 2011)
- **Immediate reflection:** After each test ask students to self-reflect on their experiences. What did they find easy? What was hard? What was the scariest part of the driving test? Based on that self-feedback both students and teachers would know what parts of the learning to focus on.
- **Logbooks:** Implement the use of driving logbooks both for students and instructors, in which both would write their feedback, driver's progress and key points to focus on in the future.
- **Adaptive driving tests:** During next driving sessions, teachers should open up the Logbook and ask students to perform tasks that they are bad at. By constantly improving the weak points of a driver, we elevate their confidence drastically.
- **Test Day Simulation:** Organize a "test day" session a few days before the test, where students go through the entire exam process, from checking into the exam center to driving with an examiner. People are scared of the unknown. The more you know about the process the less anxiety they will have.

- **Study Groups:** Create study groups or online forums where students can ask questions, share experiences, and help each other with tips and advice.
- **Calm Down Before The Driving Test:** Encourage students to arrive early, listen to their favorite music before the exam. Get them some sweets or some bubble gum, which all help with dealing with stress and improving focus. (rijsschoolomw, 2021)

Roediger, H. L., & Butler, A. C. (2011). The critical role of retrieval practice in long-term retention. *Trends in Cognitive Sciences*, 15(1), 20–27.

<https://doi.org/10.1016/j.tics.2010.09.003>

Rijschoolomw. (2021, January 7). 10 Tips to Pass your Driving Test With A Driving School. Rijschool Omw. <https://rijsschoolomw.nl/10-tips-to-pass-your-driving-test/>