Team name: Underdoge
Our team consists of 4 members:

- Bryan Lim Cheng Yee (Year 1 Computer Science student)
- Manika Hennedige (Year 1 Business and Computer Science student)
- Jovan Huang (Year 1 Computer Science student)
- Zhang Shi Ting (Year 1 Business student)
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Write-up for Cue

Cue is a peer sharing flashcards webpage app designed by us for university level students. Our platform allows users to contribute and share their answers to exam questions, which will be saved as flash cards. These deck of flash cards will be made available to the public and anyone will be able to access them. The aim of our service is to help students study better by applying efficient flash card study methods on past year exam questions.

For those learning through our platform, they can choose decks of flashcards specific to their domain of study. For instance, if they are studying Computer Science, they can take a set of flashcards on “Introduction to Computational Thinking”. The questions in this set of flashcards will be adapted from past year exam papers. The solutions to these problems will be tagged to each problem on the flashcard. When the user is ready to see the answer, there is a function to reveal the solution which had been vetted by our quality control team. Once the user understands the solution, he can proceed to the next question in the deck by pressing “Next”.

One of the best selling points of our platform is the sharing function of the cue cards. As we are in the preliminary stage of development, solution materials can be sent in to us by users via emails for now. In the future, we plan to automate the process, such that solutions can be added to our platform directly by users and be subjected to quality control checks. There is also a function in our program that allows peers to rate and review the materials available. Hence, the solutions will be subjected to peer review and feedback can be provided. Furthermore, the solutions that are contributed will be subjected to checks by our quality control team. Our quality control team will be made up of academic experts. This ensures that only high quality solutions are made available to the users.

There are many aspects of our platform that can be developed further in the future. One of which is the algorithm which displays the questions. In the future, we can display the flash cards with algorithms adapted from the Leitner system (Figure A), a widely used method of efficient memorisation. Also, we could also use Artificial Intelligence (supervised learning) to accurately identify questions in the exam papers using our database of past year papers which can be obtained from NTU online library, so that all users have to do is to attempt our questions on “Cue” without the need to spot questions themselves. Additionally, we can add in a function that allows students to upload their solutions on “Cue” webpage app. Once uploaded, the solution will go through a quality check by our quality control team before being shared on “Cue”.

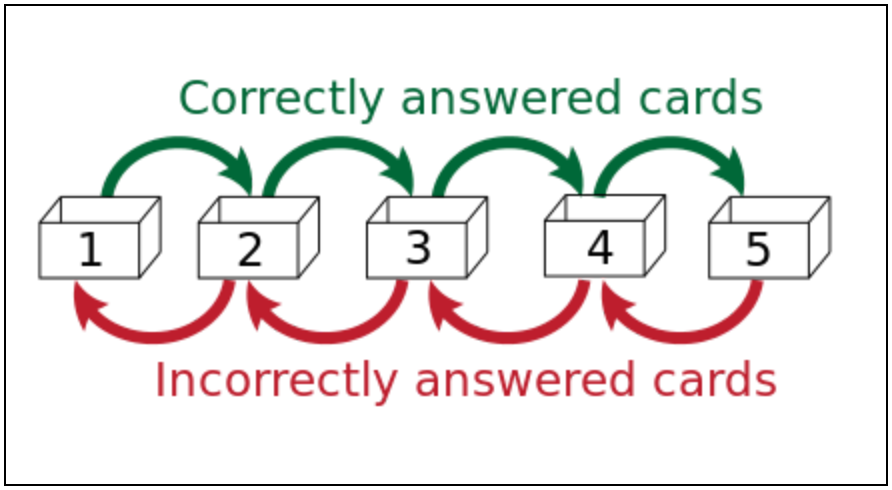

Figure A: Mechanism behind Leitner system (picture adapted from https://www.wikiwand.com/en/Leitner_system)

To round up, our idea is innovative as there is currently no platform for sharing of exam based flash cards at the university level. Furthermore, university students normally do not have access to solutions for past year papers. Through the peer-review of different solutions on our platform, better quality answers can be shared with the student community, hence helping other students to understand various subjects better.