Application name, 3-10 word app description

Fast and simple flashcard creation and use

## Team <CompEdu>

List of Team member names

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# Problem

In computing education, oftentimes we are presented with very complicated information which is hard to remember. As a result of such an informationally dense field, students often forget key pieces of work which can hinder the quality of their life and the quality of their grades, potentially leading them to drop out of their degree program. Sorting through a vast pile of notes just minutes before an exam is not a productive way to remember the information contained in those notes. Students do not review study material frequently enough to remember and comprehend it which leads to failure to learn earlier material. Text editors such as google docs offer great ways to record notes but do not offer the ability to quickly transcribe to notecards or study reviews. Study tools such as Quizlet require time-consuming creation of flashcards from scratch instead of using student’s notes in other applications. How can we help students remember material more effectively by lowering the cost of making study materials and reviewing them?

# Prior Solutions

## Quizlet

Quizlet is a flashcard making app which utilizes multiple features to improve students productivity when studying. From quick tests to searching other user created flashcard sets. Having an app with many diverse features may be overwhelming for students only looking to focus on the ability to only create and use flashcards. Also, requiring a subscription model in order to maximize the features of just making flashcards creates a barrier of entry for students who want to increase their productivity while studying. Our app will only focus on the features which students need without the implementation of unnecessary gimmicks and a pay to use platform.

<https://miro.com/app/board/uXjVPUs-04g=/>

## Solution 2: Ankidroid

Ankidroid is an open-source app available on Android, desktop, and browser. The app has users set up an account on which they can maintain a growing collection of flash cards. Some key features of the app are the ability to generate new flash cards, import your flash cards or other peoples’ cards using comma, semicolon, or tab delimited plain text files. You can organize flash cards into named decks which determine which cards you use for a given study session. Lastly, the app implements adaptive scheduling for card frequency, where based on how often you correctly remember the information the app will wait a longer time before testing you on that same card again.

Some issues with Ankidroid are its difficulty to use due to a confusing and outdated user interface. The hallmark feature of scheduling cards is supposed to be adjustable to change the parameters of how often cards are reshown, however the app offers limited or unclear methods of actually controlling this scheduling. Copying cards within your collections between decks or editing them can often be clunky, while generating new cards is slow as they’re generated card by card unless using the import feature. By contrast our app will focus on making it easy to navigate the user interface. One way we’ll achieve this is by pruning some of the more niche features and focusing the app on the core functionality so that users are better able to learn how to use the app to its fullest potential. We also will ensure that the interface for copying cards between sets will be quicker and more intuitive to accomplish. Lastly, as scheduling card re-use is an important feature for efficient learning, we will ensure that the user has greater control over how the scheduling is handled, while offering more transparent information about the effects of scheduling settings.

Task Flow Diagram:

<https://miro.com/app/board/uXjVPSu1L3c=/?share_link_id=907216648549>

## Notecard

Notecard is an online application that anyone can use to take notes in and convert those notes into flashcards. It uses dashes to indicate which side of a flashcard you wish to write on, before the dash being one side and after the dash being the other side. This allows you to make a lot of flashcards at once. Once you are done, it can quiz you on the flashcards with the app showing the user one side and allows the user to see the other side if they hover their mouse over the card. You can select "Got it" or "Had some trouble" buttons one you are done with that card. "Got it" moves on and removes the card from the quiz while "Had some trouble" puts the card back in the deck for the user to try again later on in the quiz.

The CompEdu App will be different because instead of having just one delimiter to allow the user to denote which side of the card you wish information to be on, the user can select several custom delimiters to produce cards. This allows the user to take notes in the style that they want and then import them into the app to produce notecards. CompEdu app will also give the user the option to save the cards to your computer in order to use them later if you wish. The CompEdu app will also have a more pleasing interface to use. The way in which the card flips over can be jarring to users and the buttons rather plain in Notecard. This will make the app more pleasant to use for the user.

Task Flow Diagram:

<https://miro.com/app/board/uXjVPTHznbA=/?share_link_id=196511393578>

# YourApp

Task flow diagram for our app: <https://miro.com/welcomeonboard/b21sWHg1cGp3RDhZeEVabnBqYzhBVGJnWE5uQ0dZRGhoMVZIT0hraUlRVXFmVW1UQk0wOWFPQjR3YlJ2anM3aHwzNDU4NzY0NTM0MDE3NzgxOTc2fDI=?share_link_id=292897791242>

Compedu is an app aiming to streamline the learning process for students: firstly, it will analyze a text document (such as a student’s lecture notes) to create terms and definitions. These terms shall be uploaded in a document using any basic text format to the compedu website. Using the terms/definitions found the app will ask what study tools the user wants to create: such as flashcards or quizzes. This addresses the issue of having to copy each term/definition to an existing study tool. Users will be able to access any study tools they’ve created later on.

Students often have difficulty retaining the information from previous classes as they simply don’t review often enough, usually because they lack the time and effort to do so. We aim to address that through our streamlined process: users can simply upload their notes to the app and it will create study material. Together with methods such as adaptive scheduling of how often the user is tested on each card, this will allow students to save time in making and studying their notes interactively.

Previous solutions such as Ankidroid allow for some form of scheduling flash cards based on user confidence scores or the frequency of correctly guessing the answer for the given card. Unfortunately, in the case of Ankidroid the settings to adjust how this scheduling operates is very opaque, and made more complicated by having cards shared between multiple decks. CompEdu will ensure that the user can finetune how the scheduling of flash card appearances is handled to best fit their own studying routine and abilities, with the app clearly conveying the impact of their changes to the settings. Additionally, we plan to give the user control over whether the scheduling of a card is linked across all decks in which it appears or not.

The CompEdu app will address the major issue of having too many features in an app such as Quizlet by focusing on just the one important feature users need: making efficient flashcards without a subscription based model. Having the focus just on flashcards makes the app a lot more user-friendly and purposeful. Meanwhile, eliminating the subscription based model in such apps which often comes with necessary features such as uploading photos or charts to flashcards makes it an easy access tool for all users who want to create more engaging flashcards.

Notecard while it is simple to use because of its barebones features, the level of simplicity can be a bit of a pitfall. Not having options for the type of delimiters to divide up the notes into flashcards is an example because it means that the user needs to take their notes in a very specific format. Compedu will have the option for custom delimiters to allow multiple formats to be parsed into cards. Another thing that Compedu will have is the ability to save your flashcards to your computer to allow the user to import them later, something that Notecard is lacking. We also want to make the CompEdu app more pleasing to the eye especially in the buttons and animation when going through the cards as Notecard can be very plain in its interface and ugly in its animation.