# Student Companion — Final Presentation

#### **Chaotic Programmers**

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## Motivation and Problem Statement

#### Motivation

Motivation and Problem Statement

Flash cards are used as a self-testing technique and the efficacy is determined by the amount and timings of practice. [1] The pandemic has affected academic delivery and collaborative learning. A tool for revision and sharing flashcards can enhance the learning process and a leaderboard provides a virtual competitive environment and enhances learner's motivation.[2]



## Motivation and Problem Statement

#### Motivation

Flash cards are used as a self-testing technique and the efficacy is determined by the amount and timings of practice. [1] The pandemic has affected academic delivery and collaborative learning. A tool for revision and sharing flashcards can enhance the learning process and a leaderboard provides a virtual competitive environment and enhances learner's motivation.[2]

### Problem Statement

Building a website to create a study tool which uses flashcards and timed revisions for learners and help them cope up with online education by providing a competitive feel with their friends along with sharing their flashcards to give them feel of a virtual group study environment.



### Deliverables

- Login page for user to login
- Facility to create, edit and delete flashcards ✓
- Spaced Repetition of flashcards ✓
- Adding friends and sharing cards among friends ✓
- A leaderboard among friends ✓
- Decks to organize cards ✓
- Creating a custom decks from existing cards for custom revision ✓
- An internal timer to keep cards in front next time during revision if recalling too longer ✓
- Show current progress of cards for the user and user's friends ✓



# 

Sharing

**Sharing Module** 

**Authenticated** 

User 1

Authenticated User 2

Leaderboard

**Revision Module** 

## Work Distribution

- Database Design and Readme.md Bhavana Gautam
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- 6 A leaderboard among friends Abisek R K
- Decks to organize cards Abisek R K
- Creating a custom decks from existing cards for custom revision -Sakharam
- An internal timer to keep cards in front next time during revision if recalling too longer - Sakharam
- 10 Show current progress of cards for the user and user's friends -Sakharam
- Documentation Abisek R K and Sakharam



References





Effect of flashcards: https://dl.acm.org/doi/10.1145/3178158.3178206



Effect of leaderboard: https://pubmed.ncbi.nlm.nih.gov/33877049



Django: https://www.djangoproject.com/



Django API: https://www.django-rest-framework.org/



AngularJS: https://angularjs.org/



Resource Consumption: https://github.com/mgonto/restangular

