

# Project Name

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# Description

A web application that lets users create custom flashcards and quizzes for studying.



# Features

- Dynamic HTML forms for quiz and flashcard creation that allow flashcard decks and quizzes to be as long or short as needed.
- Interactive flashcards with realistic flip animation.
- Categories to keep flashcard decks and quizzes organized.
- Search page to find specific flashcard decks, quizzes, or categories.



# Planning - User Stories

- It was inspired by a call center I worked in. Employee learning would often stagnate. This was an issue because the job was very technical.
- This app allows the information to be held in one easily accessed place for employees to learn from.



# Planning - Database

- Main Tables: `card_deck`, `flash_card`, `quiz`, `question`, `category`
- Relational tables: `category_quizes`, `category_card_decks`
- `Card_deck` and `quiz` have unidirectional one-to-many relationships with `flash_card` and `question` (respectively) so they can track which questions and flash cards they own.
- `Category` has bilateral many-to-many relationships with `flash_card_deck` and `quiz` to allow flexibility and deck and quiz reuse in the categories.



# Technology Stack

- Java, Javascript, CSS, HTML
- Spring, Bootstrap
- Thymeleaf
- MySQL
- Published on Heroku (<https://study-time-app.herokuapp.com/>)



# Demo



# What I Learned

- I learned Bootstrap in depth including: the grid system, nav bars, carousels, and cards
- Better techniques for connecting many-to-many relationships to make additions and deletions more efficient (and also bilateral) in hibernate
- CSS animations





# What's Next

- Future versions will include adding to/editing database being an admin privilege and ability to set goals for users. (Through Spring Security)
- User profile pages to hold progress towards goals.
- More CSS animations for successful quiz attempts or reaching a goal.
- Notifications via email and in-app for users and admins about goal completion.

