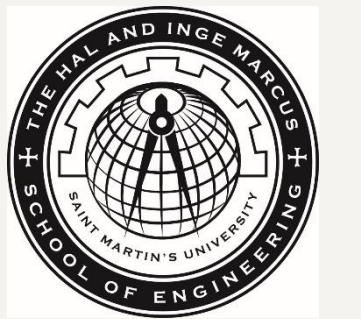


Saint Martin's University: Senior Project 2021-2022

Hal and Inge Marcus School of Engineering: Department of Computer Science

Flash Clash-Flashcard Study Application

Team Members: Ishi Agrawal (Client Point of Contact/Lead Software Developer), Tedy Barber (Project Manager/Software Developer), Dominique Bornilla (Lead Game Developer)
Advisor: Dr. Nelson



Project Summary:

The objective of the project is to create a web application that helps students study with flashcards created by their teachers. Students will not have to create the flashcards, and can study more efficiently with multiple, but concise study options for a better and more efficient learning experience.

Features:

- Create classes
- Create, edit, and delete flashcards for a class
- Register users via their school information only
- Individual study options with color-coded difficulty levels
- Study game feature

Tools:

- Heroku Postgres
- HTML/Bootstrap CSS/JS/PHP

Sponsor/Client: Timothy Koontz , Timberline High School

Fig. 1: Flow Chart Of Application

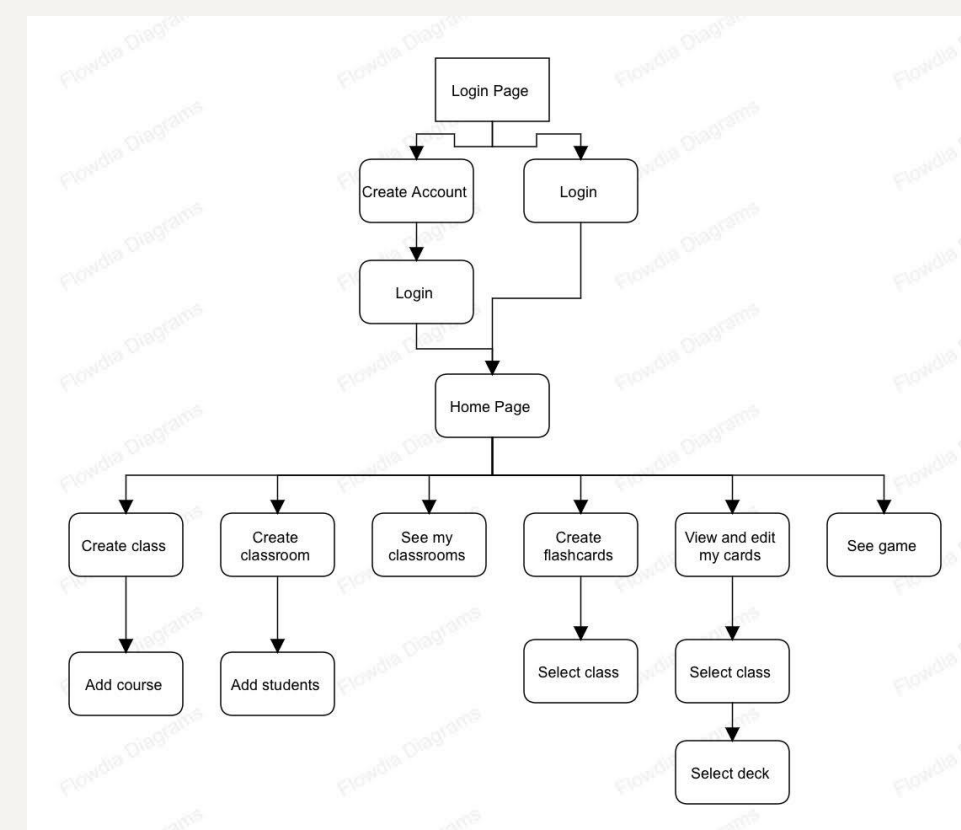
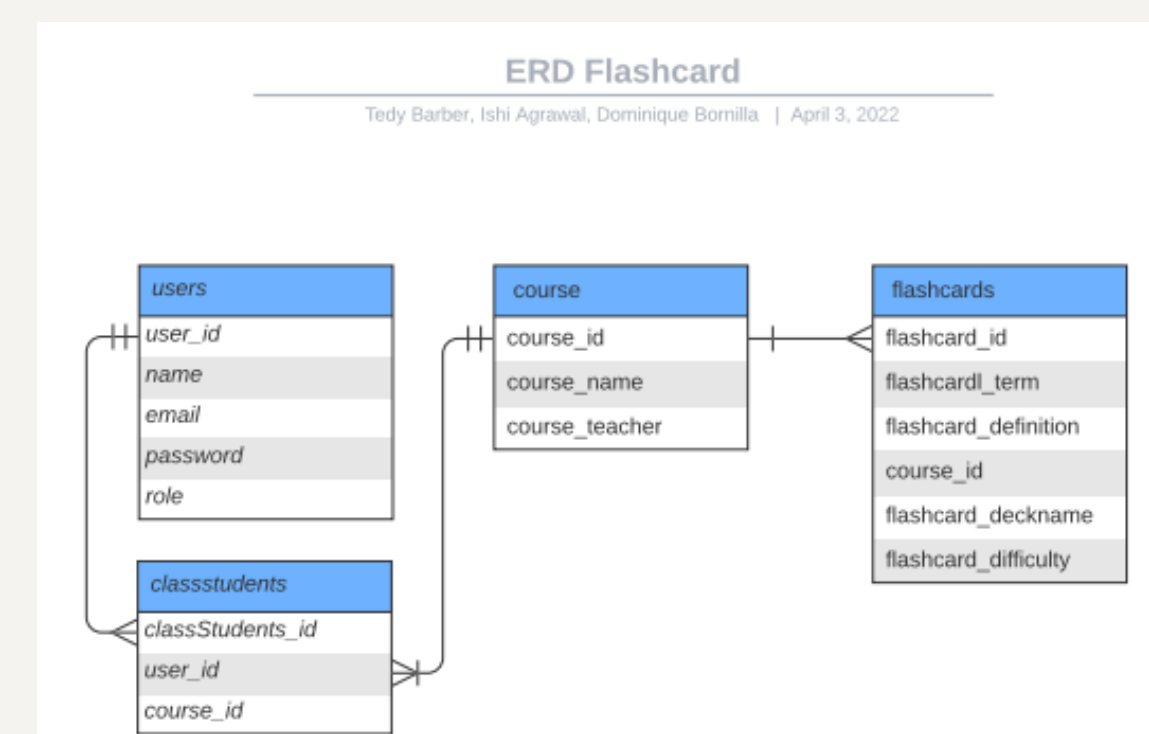


Fig. 2: ER Diagram of Application



Student Work:

Fig. 3: Registration/Login Page

Register:
Name: John Doe
School Email: DoeJohn@nthurston.k12.wa.us
Password: JD_12345
Confirm Password: JD_12345
Create my Account | Click here to Login

Login:
School Email: JohnDoe@nthurston.k12.wa.us
Password: JD_12345
Login | Don't have an account? Click here to Register

Fig. 4: Home Page (Course Creation)

Welcome

View and Edit my Cards | See Game | Log me out

Add Course:
To: Biology
Add Course

Fig. 5: Class Selection/Create Cards

Welcome

FlashCard: Create a class | Create flashcards | View and Edit my Cards | See Game | Log me out

Select the class you want to make cards for: deckcard

Card

Term: Definition: Easy (Default) ✓

Card

Term: Definition: Easy (Default) ✓

Select my Cards | Add another card | Remove the last card

Fig. 6: View/Edit/Delete Cards

Select a Class

Select a Deck

Term: def1
Definition: term1
Difficulty: easy
Edit Delete

Term: def2
Definition: term2
Difficulty: medium
Edit Delete

Term: def3
Definition: term3
Difficulty: hard
Edit Delete

Editing Mode

Term: Definition: Difficulty: Easy

Save my Changes

Fig. 7: Flashcard Review/Study Page

Select a Class

Select a Deck

Optional: Sort By Difficulty...

Easy Medium Hard Reload my selection *To sort again, click reload first

def1

Type in your answer here

Show Term Show Definition I got this

def2

Type in your answer here

Show Term Show Definition I got this

def3

Type in your answer here

Show Term Show Definition I got this

Fig. 8: Game Home Page/ Flashcard Obstacles

Learning Flashcards

key term

definition

Flash Clash

UP

LEFT RIGHT

DOWN