1.Team Number: 1
2.Team Name: Coding Baddies
3.Team Members:
- Jack Toenjes Github: Ponippp Email: jato9234@colorado.edu
- Calvin Wagner, Github: CalvinWagner05, email: cawa9142@colorado.edu
- Wyatt Lyda, email: wyly3647@colorado.edu, github: wyatt-lyda
- Christina Fernandez, Github: chfe8281 email: chfe8281@colorado.edu
- Benjamin Willcutt, Github: benwillcutt, email: bewi8864@colorado.edu
- Kaitlyn Brown, Github: TenorPanther, email: kabr3253@colorado.edu

4. Application Name: Coding Buddy

5. Application Description:

We want to create a website where users can log on to study CS topics in various coding languages with a friend or alone. We think it would be interesting to build an application that combines the ideas of the structures of Quizlet and Leetcode applications so that students can become familiar with CS terminology and gain practical coding experience.

There will be coding problems with starter code, problem description, and test cases. The user can choose to code in different languages. For each problem they get correct, they earn points. For these coding problems, users are able to work together in pairs to solve the problem. They also have the option to time themselves by clicking a button up top to set a timer. Then they'll show up on the leaderboard in the homepage (if they score well enough) and their user profile. There will be multiple choice quizzes for CS concepts. Depending on the user's answers and score, they get personalized flashcards to review what they got wrong. Flashcards will contain CS definitions and syntax and are available for users to practice with. Users can also make their own flashcards. If working alone on code isn't enough, users can also practice coding with other people as our website gives an easy to use group coding environment that updates in real time.

Our website covers different CS topics and allows users to practice coding while also learning CS conceptually. It ideally has questions for different coding languages. You can also challenge what you have learned through coding challenges that all users can compete in and receive awards for participating in.

Key Features Summary:
- Group coding (paired session)
- Use external API for coding problems/test cases
- Starting code
- Timed coding competitions
- Different programming languages
- Tracking how problems many done
- Reward system
- Badges earned
- Add a dashboard
- Multiple Choice quiz
- Review flashcards

6. Audience:

        The specific audience we are targeting is aspiring computer science students and software developers. The age group would primarily be high school and college students. The project encourages the audience to study and understand core principles of computer science through flashcards and hands-on problems in an easy and fun way.

7. Vision Statement:

        For students who are struggling to learn how to code, Coding Buddy is an online tool that makes learning to code SO FUN. Unlike Quizlet or LeetCode, our product is collaborative, encouraging users to interact and compete with other students.

8. Version Control:

Github Repository Link: https://github.com/chfe8281/Coding-Buddy

9. Development Methodology:

        ==We can use Scrum meetings and Kanban boards. We have a project board made in our Github repo.==
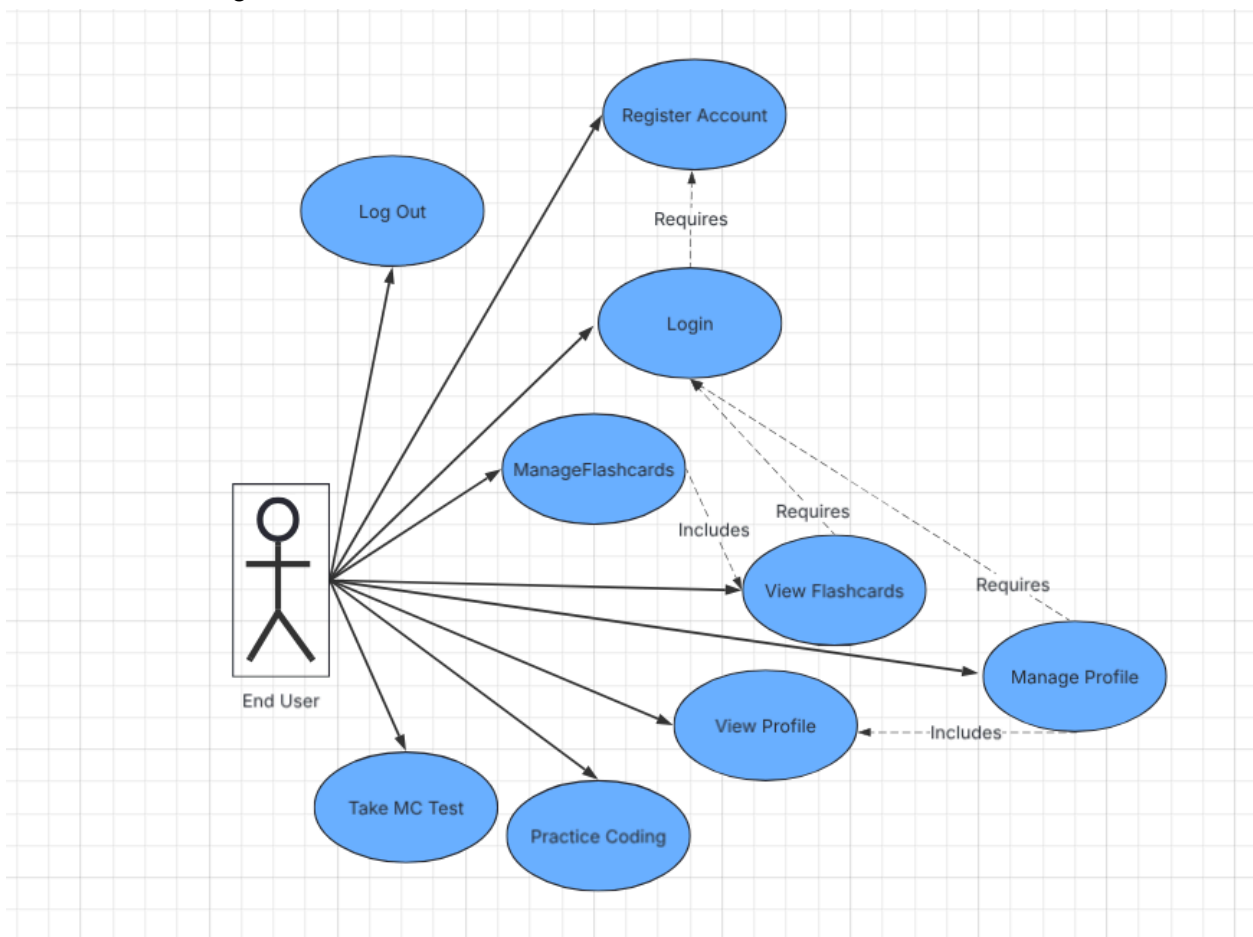
10. Communication Plan:

        We are using a Discord group chat for team communication.

11. Meeting Plan:

- Meetings with TA: Mondays at 3:00pm over video chat
- Group meetings: Mondays at 2:00pm in-person at Norlin Library

12. Use Case Diagram

13. Wireframes:

Login/Register

Login Page — nav bar to get to diff. pages

Home QUIZ Practice Profile

LOGIN
username
password
☐ remember me
forgot password?
LOGIN
Don't have an account? Register

→ Login HTML Form
→ authenticate input, messages for wrong pass. or username or not all fields filled
→ press login to submit form data
→ takes you to register page

Register Page — nav bar to get to diff. pages

Home QUIZ Practice Profile

Sign Up
username
email
name
password

Register
Already have an account? Return to login

→ Signup HTML form
→ authenticate input, all fields must be filled. or a message appears
→ press register to submit form data
→ takes you to login

Home Page:

General Home Page — Nav Bar

Home Mc Test Practice Code Flash Cards ← Tap element to go to page

Profile
- displays username
- on-click dropdown modem with info/ stats

Coding Buddies ← Title
Slogan?

Description of mission/how it works   image

image   How Mc Test Works:
         Title of description has link embedded to Mc Test Page

How Practice Code Works
Title of description has link embedded to PC Page   image

image   How flash Cards work
         Title of description has link embedded to FC page

Coding Buddies? © 2025   ← footer

Profile:

Profile picture here??

FirstName LastName

Username

email@example.com

You are on a

3

day streak!

You have earned **67** points from coding problems!

This puts you in the top **32%** of learners!

Edit Profile

Edit Profile:

Profile picture here??

Update Profile Picture

FirstName LastName

Edit Name

Username

Edit Username

email@example.com

Edit Email

Save

Multiple Choice Test:

MC test wire frame

Question 1: ~~~~~~~~~~~~~~~~~~~~~~~~
Select one.
O Option 1

O Option 2

O Option 3

O Option 4

Question 2: ~~~~~~~~~~~~~~~~~~~~~~~~
Select all that apply.
☐ Option 1

☐ Option 2

☐ Option 3

☐ Option 4

Flashcards Overview and Modals:
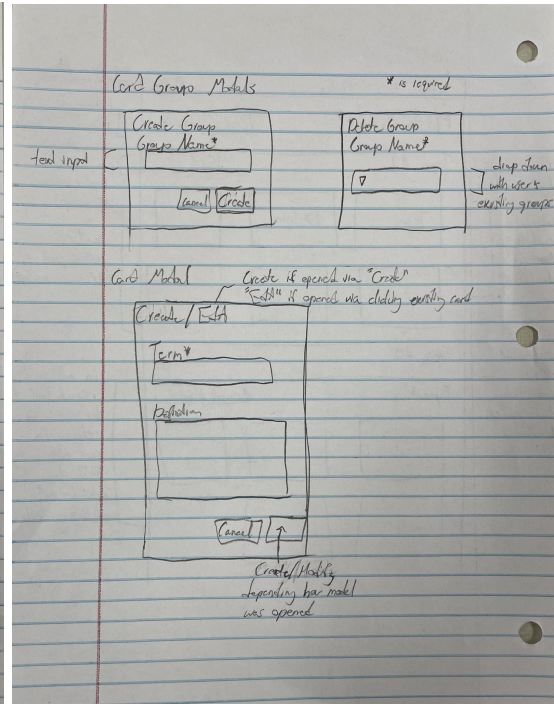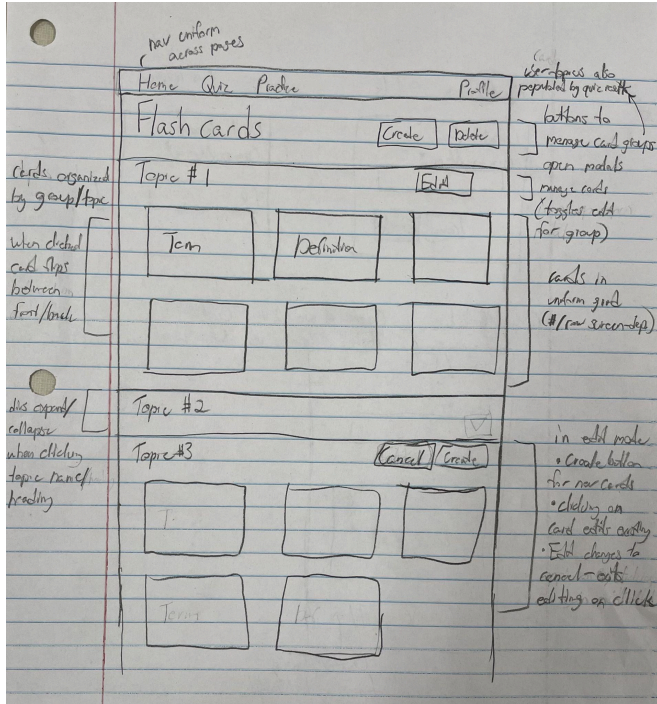
Coding Exercise:

| Home | Quiz | Coding Practice | | Profile |

Timer 1:00:00

Coding Example:
Definition, return values,
description.

**Example with values and
return**

Starting code here…

Submit

Coding Exercise w/ message (Note: only one message appears at a time and spans page):

| Home | Quiz | Coding Practice | | Profile |

Timer 1:00:00

Coding Example:
Definition, return values,
description.

Example with values and
return

Starting code here…

Submit

Error message:
 This appears if the solution is incorrect
Could have something showing what line
was incorrect or just a general message.

Success Message:
Appears if the solution passed all tests