

week2

XMarksTheSpot

Geography Learning Game

PART A

Team: Gargi Tawde, Areebah Iqbal, Venkata Satya Swathi Mattaparthi, Fariha Ahmed

Current Team Lead: Gargi Tawde

Next Team Lead: Fariha Ahmed

Attendance

- ☒ Gargi Tawde
- ☒ Areebah Iqbal
- ☒ Venkata Satya Swathi Mattaparthi
- ☒ Fariha Ahmed

PART B

[GitHub Repo](#)

Project Overview

1. User Dashboard
 - User can get a token for each point milestone they achieve, which they can see in their collection (E.g. for every 100 points added to their overall player score, they get a flag to add to their wall)
 - Dashboard will display tokens the user has earned
 - Can see ranking number in comparison to existing users

2. Quiz Game

- Multiplayer game
- Users gain points based on answer accuracy, speed of answering the question, and question difficulty
- Bonuses awarded to game winner at the end
- Points earned during the game get added towards user's overall score (that earns them more tokens)
- Questions in set are randomly selected during game, so user does not face a redundant game with every replay
- Player can either start or join a game

PART C

Job Assignments (subject to change based on workload):

- Gargi: Frontend + User dashboard + User Auth
- Areebah: Backend + Database + Game Logic
- Fariha: Frontend + User Auth + Database
- Swathi: Backend + Game Logic + User dashboard

PART D

Semester Milestones (all milestones are moving parts and subject to refinement):

- 2/5 - 2/13: Finalize Design + Features
- 2/13 - 2/20: General UI/Page Setup
- 2/17 - 2/29: Initial Database Setup
- 2/17 - 2/29: Account Creation + Admin Account Setup
- 2/17 - 2/29: Log-In/Log-Out
- 3/1 - 3/30: Game Mechanics (i.e. logic and stats collection)
- 3/1 - 3/30: Implementing token collection
- 4/6 - 4/20: Finalize User dashboard
- 4/6 - 4/20: Join/Start Game functionality
- 4/6 - 4/20: Multiplayer functionality
- 4/20 - 4/25: Internal Testing

PART E

1. Frontend:

- Tailwind
- HTML
- CSS
- Node

2. Backend:

- MySQL
- Docker
- Flask
- Python

PART F: Algorithms/AI Schemes Used

Points earned per question based on: Correctness, Speed at which question is answered (can earn a maximum number of points when timer begins, which goes down as the timer goes on), and Question difficulty

PART G: Market Space

- "According to the Nation's Report Card, the largest continuing and nationally representative assessment of academic performance in the U.S., only 25 percent of American students in the eighth grade scored "at or above NAEP (National Assessment of Educational Progress) proficient" in geography."
[SOURCE](#)
- This tool can be used to help students refine material they're learning in school, and ensure they are performing at the appropriate level.
- Geared towards users who are interested in learning geography.
- The game will help users remember geography facts in a fun and interactive manner.
- Game and site is focused towards the type of content being learned.
- Multiplayer allows users to learn with others.
- Users can earn tokens as performance overall improves, which provides incentive to learning.

