Product Design Specification

Team TreeHouse
Project: Whos-That-Pokemon
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Application Description

The making of the application is based on the game Kahoot. Our market space is targeted towards Pokemon fans and web development enthusiasts.

Feature List

Our game has two main modes: singleplayer and multiplayer.

Singleplayer
In this mode, the player has to accumulate as many points as possible by making as many guesses correctly before the time runs out. Each round could be 60 or 90 seconds. Users are provided four hints per round. Using the hints will deduct a percentage of the total points achievable for the current guess. The longer the user takes to guess, the less points the user could obtain if guessed correctly. As the round completes, the final score is showcased and user can start a new round or exit the game. The flow of the game can be found in the UML diagram attached below.

Multiplayer
In this mode, the same objective applies as seen in the Singleplayer mode, but this time the player is competing against other players as well. Each players will receive the same question and hints. The flow of the game is still the same, but in the end the winner is determined by the one who accumulated the most points.

Additional Features
We have made plans to display a live view for the multiplayer mode. The live view will show the players who are currently playing and leading the scoreboard.

We may also implement different loading screens and hint variety to improve the interactivity and dynamics of the game, but this is only possible if we can finish our milestones early.

Testing Plans

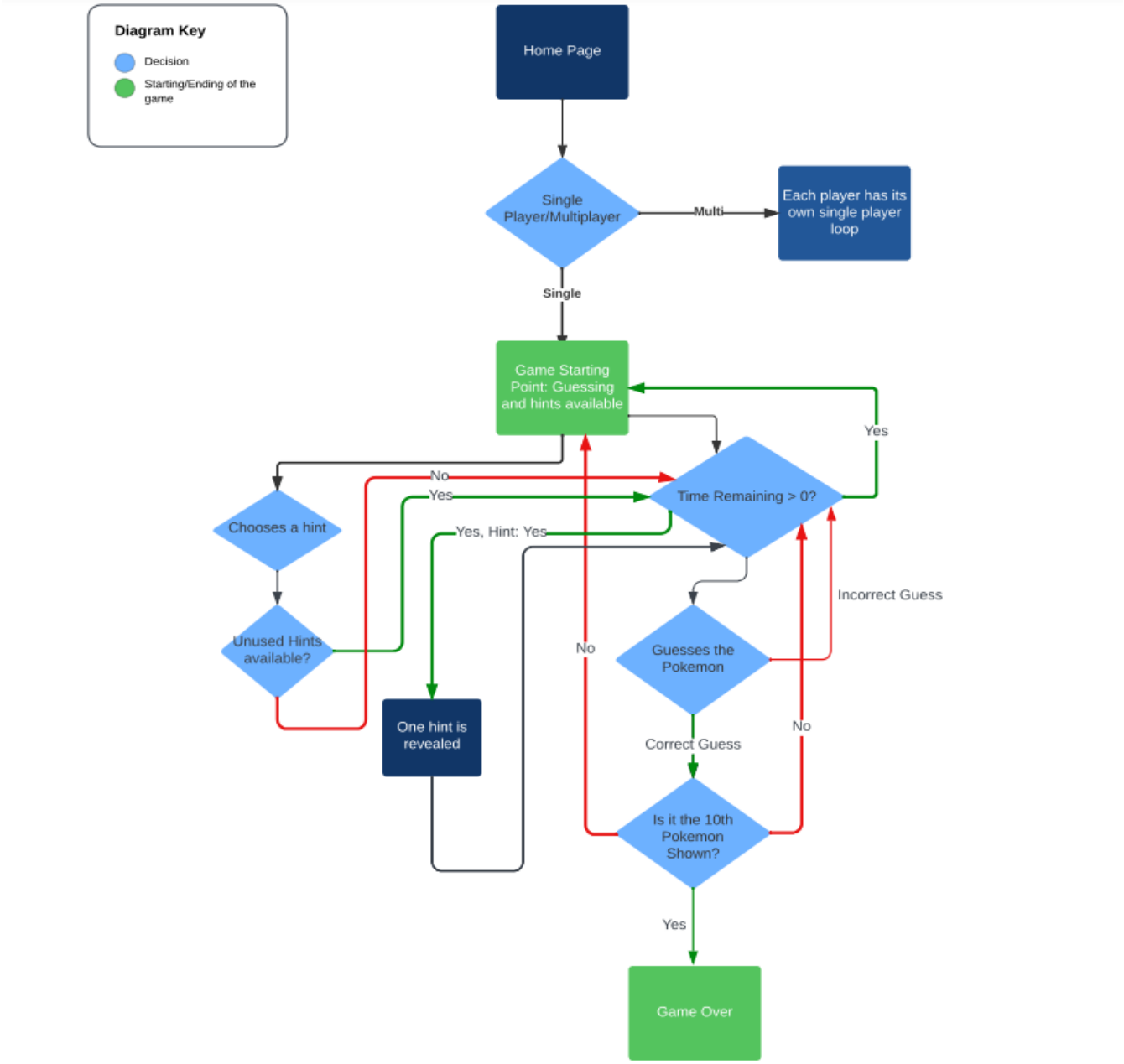
These are the plans we will run to test our game. We expect to add more test plans to the list as the project grows to accommodate any unforeseen changes.

- [ ] SinglePlayer - Complete a gameplay loop as a single player
- [ ] Multiplayer - Complete gameplay with at least two players
- [ ] Home Page - able to load homepage
- [ ] Start Game Page- Gameplay starts once this is clicked
- [ ] Game Over page - Complete gameplay as a single player, and observe a players score

- [ ] Scoring System - Complete a gameplay loop in a certain manner so that the observed score is expected to match the score we calculate. Will use various hints in various rounds to include variation
- [ ] Gameplay page - Test to see if we can play a random pokemon's audio, present 4 random options with one correct one, and present 4 hints for the pokemon (information retrieved from the database). Testing will also include if we can hide the information from the players until they ask for the hint.

UML Diagram

source: lucidchart (must create/login with an account)



Milestones

1. 2/12 (Completed): Finalize tech stack, setting up development environment, and wireframe for front-end UI.
2. 2/26 (Completed): Complete basic CRUD database operations,Starting home page UI, and begin single player functionality
3. 3/12 (Completed): Continue working on single player functionality, and finalize frontend design.
4. 3/26 (Completed): Continue single player functionality, continue developing frontend
5. 4/9 (Completed): Finish single player functionality, start multiplayer functionality
6. 4/23 (Completed): Completed working prototype
7. 5/15 (Completed): Completed documentation for final submission