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Code Crusaders

**Project Proposal**

* Our goal as the code crusaders is to make an application where everyone has a chance to showcase their vocabulary skills.
* High-level, and low-level everyone is welcome
* We plan on using the python APIs to create the basis for the game, as well as having already created the user interface using Figma.
* Our main programming language we will be using is python
* We plan on evenly distributing the parts of the project amongst each other, while also offering contributions to all parts of the project whenever needed, or desired.
* Scrabble dictionaries
* How the game works:

Words will be based on different categories such as weather and nature, history and geography, colors, animals, plants, countries and cities, astronomy, and mathematics. The user interface will feature only a guess mode for now, with the same mode for all users allowing for difficulty to increase as the words are guessed correctly. The screen will feature a table-like structure with 6 empty boxes per the 3-4 rows provided. The user will click into the game and a small box will pop up at the bottom of the screen above the keyboard with the hint of what category the words are apart from the dictionary. The user will start with 3 available attempts, if the user gets an attempt correct, they keep the 3 attempts. As the user loses an attempt per letter guessed incorrectly. After the user clears 3 full boards of words, the game gets progressively increased in difficulty. And this process continues until the user exits the screen. There will be a local leaderboard to start off with, so you can continue your game where you left off. Our potential stakeholders would include

-Casual and competitive players

-Accessibility-focused players ensuring their accommodation is met as well

- Schools and educators as this game can be used to help improve vocabulary

**Future add-ons**

* Implement a server-based dashboard, where users can make their own account through their email and country they are playing from.
* World-wide leaderboard if server-based dashboard made.
* Online head-to-head more where a user gets to play against another user.

**Estimated Timeline**

* Last week we finished the user interface on Figma and finished our brainstorming.
* By the end of next week, we would like to have our basis programming for the game completed
* Then we want to ensure that all our components of the game cooperate with each other by optimizing test cases and testing in general.
* By the end of the first week after spring break we want to try running trial runs of our game by using it ourselves and keep track of what faults we run into, or whatever glitches or crashes of the game occur.

**Potential Issues**

Some potential issues we see arising is if we want to increase the number of letters, which also would increase the range of categories. We would have to address both in our programming. Also, the implementation of the multiplayer serve and details as we would most likely have to increase the capability of our program to accommodate the large servers. We also anticipate issues when creating the logic of when users save their game and being able to save their stats. Also, issues relating to display and visualization for our accessibility accommodated users.