

## **Problem**

- The problem isn't too serious, but the most 'problematic' thing that I could say is that there needs to be more variation in the world of typing games.

## **Goals/objectives**

- The game NEEDS to be fun!
- Still needs to give the player a decent amount of typing practice, while maintaining the fun aspect.
- Think of any glitches or abusive mechanics the player can do.

## **3 key features the game will have**

- Leaderboard
- A practice page
- Different 'sections' for each increment of levels

## **Tech stack and tools**

- CSS
- JS
- HTML
- SQL (maybe) or SheetDB

## **Algorithm**

- Player enters main screen
- They can click start level, according to what level they are in
- They can also enter practice in which they can practice the words they're practicing at the moment
- Once the player presses start, several objects will fall from the top of the screen.
- They need to type a specific object in which they can hold that object. For example, if an apple is falling, they will type in 'bowl'. (In the practice, they'll see the word linked to the object.)

- After 6 or 7 levels, the player will have to memorize new objects. Every 10 levels, the objects from the past 2 cycles will all be included and will be a type of boss fight.
- After the 10 levels, the player will be rewarded with a congrats message!

## **Timeline**

- December
  - Basic HTML and CSS for start page and main page
- January
  - Add words the user will type and the solutions for them. (For like 20 levels)
- February
  - Add more levels
- March
  - Add practice range (add CSS as well)
- April
  - Add leaderboard/more levels if there's time
- May
  - Add a few more levels/add more css
- June
  - Add finishing touches

## **Risk mitigation**

- What happens if even the main features are too complicated to code?
  - That will be pretty bad... but this happened last year and what I did was I took the idea and made something similar to the original idea without mechanics that are beyond my level. How do I know if something is too complicated? If I don't even know what to do when I'm about to do it. Usually, I can kickstart it with AI, but sometimes, I'm completely lost.

### **Measures of success**

- If there are different words for each 6 to 7 levels
- If what the user types in is accurate to what the correct answer is
- If the practice section actually helps. (If it's not really helping, at least make it work haha)

### **Future considerations**

- One thing that needs to be maintained are the bugs. It's kinda obvious but because there are so many things that can go wrong, especially with my level of web development, I need to be testing even the smallest features for bugs.
- A future addition is just new levels, since the levels will be limited. If I don't have the time, then I can create a function that allows skilled players to go against each other? (Very complicated but a suggestion).

### **Brainstorm**

- Something with typing?
- Falling objects
- Catch the objects by typing something that can hold that falling object
- Different difficulties
- Database for a leaderboard function (maybe)

### **Profile**

- Should be interested in improving their typing skills/type for fun.
- Looking for a fun alternative to traditional typing games
- Friends/family who want to try it out

### **Checklist**

- Create a figma design
- Create a basic layout of the website with liminal css and no js
- Learn what I need to learn in order to code frontend/maybe backend.

- Make a database for a leaderboard
- Code basic functions in js
- Polish up css
- Ask for recommendations and add them if necessary
- Test all features
- DONE!

### **Purpose statement**

- Who
  - Friends who are interested in my work.
  - Them synchrony graders.
  - People who are genuinely interested in improving their typing.
- What
  - Use it for passing time casually
  - Use it for competitive use (leaderboards)
  - Use it to increase typing speed
- Why
  - Just for fun; I want to show it to my friends. (See what they think). Also because I have no other ideas hehe.
- **Purpose statement**
  - This website is for friends, family, people who just want to pass their free time, or improve their typing. I want to make this because I want to further increase my knowledge in backend and to also just make a fun project for my personal use as well as to other people I know.

### **Research**

- Different typing websites
  - <https://monkeytype.com/>
  - <https://www.nitrotype.com/>
  - <https://zty.pe/>
  - <https://www.typing.com/>
- Different advantages/disadvantages of each
  - Monkeytype is minimalistic and is used not for fun but mainly for increasing typing speed. [Typing.com](https://www.typing.com/) is also the same case here. However, [typing.com](https://www.typing.com/) has more of a

course-like structure built like an actual learning website. Ztype and nitrotype are made to grab the user's attention and act like a game. What I want to do is lean more towards the game aspect rather than the learning aspect of typing games.

## **Feedback**

Did not get much feedback, but from the info i got:

- People think the leaderboard function is a good idea
- Features should be minimal
- Modern and simplistic feel were mixed responses
- Yousuf had a really good response that said, "you could just spam earth for everything, since it could hold everything there is!"

## **What I can improve!**

- **ONE MAJOR ISSUE IS THE EARTH PARADOX**
  - In order to fix this, I can add only a few objects that drop, like maybe 10 items. The player will memorize every object it can fit in. The levels will get faster and faster, and the player will be able to type faster! But then it gets too easy... every 6 or 7 levels, the objects will change and the user will have to be accustomed to new objects. They will memorize new stuff. Every 10 levels, the player will have to go through a "boss" level which combines every word they have learned so far. Rapid fire typing, memorization!!!!
- **How do I use a leaderboard?**
  - I can use SQL or some other database thingy and import it into my project!
  - I can use the max level a person has reached and their highest wpm in the leaderboard to organize the system.
- **How should I make the game minimal?**

- Well all I should do is not add too many pointless features or overload it with effects. Make only useful additions to the game.