**Problem definition 1)**

People use passwords that are too short and/or are too simple, which leads to those passwords being able to be brute-forced or guessed. 46% of Americans report having their password stolen over the last year. Web browsers offer to save passwords, there are several password manager type applications available (LastPass, BitWarden, etc), and passkeys (and other password alternatives) can replace the need for a password. Web browsers and password managers require a master password, creating a single point of failure without educating the user on creating strong passwords. Passkeys are not a universal feature of websites/accounts because it is something that has to be implemented or enabled by each site. A strong password uses symbols and numbers, and includes both lowercase and uppercase characters. Since most users will need to have at least one password memorized (either to login to their password manager or for a website that does not offer an alternative), how can we help them create and use strong passwords that are not too short and/or too simple?

**Problem definition 2)**

Students with learning disabilities such as dyslexia and ADHD can suffer in reading comprehension causing them to struggle in classes or work. The article Reading Comprehension and Executive Function put it best by stating that, “when a student loses comprehension during a reading—misreads a sentence, for example—they will abandon the attempt to understand the text. As they continue to read, they pay less attention to accuracy. It’s as if once they fall off the rails, they don’t recover” (Debbie Tracht - <https://chadd.org/adhd-news/adhd-news-educators/reading-comprehension-and-executive-function/>). Readers can help remedy this issue with tools such as Google's built in text to speech as it forces the reader to slow down and follow along, reducing the possibility of a reader with dyslexia to lose their place or a reader with ADHD to read too fast. However, these solutions may not account for those with additional disabilities such as deafness or hard of hearing, or the reader could be in a situation where they can’t listen without disturbing others in public. Since a big issue with readers that have ADHD and dyslexia is reading comprehension, how can we keep readers engaged, reading at their own pace, and following along with the text accurately and attentively?

* 3 points for a clear, concise, logically sound problem statement that defines:
* the problem being solved
  + can suffer in reading comprehension
* its consequences in the world
  + struggle in classes or work
* the things that cause the problem
  + Dyslexia and ADHD
  + It’s a little unclear what those specifically do to cause a loss of comprehension while reading. It is probably different for dyslexia vs. ADHD
* and why existing solutions don't resolve the problem
  + To try and remedy this issue in the past we’ve tried a couple options such as text to speech, and options for font size and color.
    - It sounds like these might solve the problem?
      * But not for deaf people
      * But “not be applicable for most websites” I think it means most websites don’t support those features - team should look into existing solutions, like browser extensions, which may help with
* Points will be deducted for problem statements that are unclear, verbose, logically flawed, or present a solution.

*Related problems that could be interesting to your team to switch to:*

1. *Focusing on retention e.g. see* [*https://quantum.country/qcvc*](https://quantum.country/qcvc) *which I believe is effectively open source*
2. *AI tools to pull out the most important information from a reading, to grasp a summary, then learn the details, then check your understanding*
3. *Taking action based on what you read (incorporating it into habits, checking you remembered or applied what you have read)*