GWC AI4FinancialGood Challenge
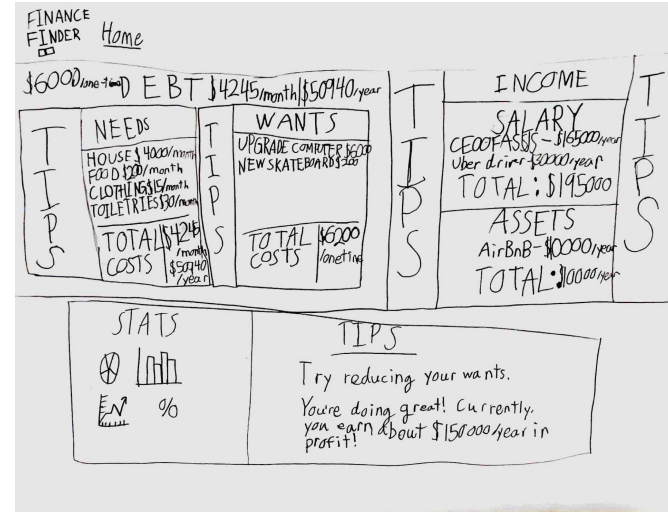# Finance Finder

By Madelyn H

Research

I researched about this topic. According to the [Google Cloud blog](#), AI in finance can help in five general areas: **personalize services and products**, **create opportunities**, **manage risk and fraud**, **enable transparency and compliance**, and **automate operations and reduce costs**. AI is cool. But it has some limitations - it is just a computer program. It doesn't think the way we humans do. So let's go to [Jatinder Palaha](#). One of the limitations is **Lack of Emotional and Social Understanding**. AI falls short in understanding human emotions, cultural norms, and social cues.
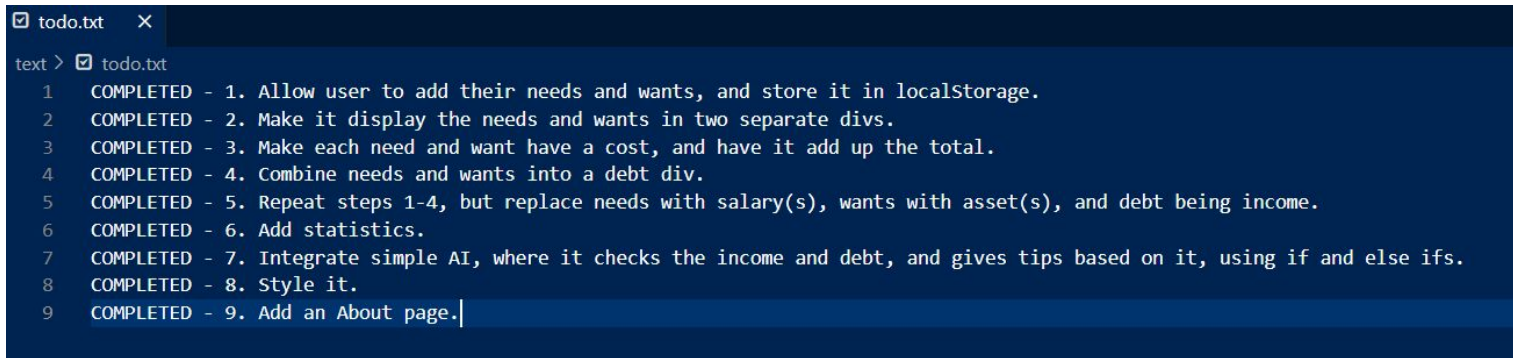
Planning

Once I decided to participate in the challenge, I thought about the project. My idea was to have a money sorter, where you can organize your needs, wants, savings, profit, income, etc. Then I created a model drawing (on the right). I decided to make it a website so it can be accessed by all people. It is also completely free for the same reason!

Building

I built the website using HTML, CSS, and JavaScript. These are three text-based programming languages that are primarily designed for the web. HTML is for the elements, like "button". CSS is for styling, like changing the color. JavaScript is probably the main part of my website - I used JavaScript to make it interactive. I also made myself a to-do list so I could manage my time.

```
☑ todo.txt    ✕

text > ☑ todo.txt
    1    COMPLETED - 1. Allow user to add their needs and wants, and store it in localStorage.
    2    COMPLETED - 2. Make it display the needs and wants in two separate divs.
    3    COMPLETED - 3. Make each need and want have a cost, and have it add up the total.
    4    COMPLETED - 4. Combine needs and wants into a debt div.
    5    COMPLETED - 5. Repeat steps 1-4, but replace needs with salary(s), wants with asset(s), and debt being income.
    6    COMPLETED - 6. Add statistics.
    7    COMPLETED - 7. Integrate simple AI, where it checks the income and debt, and gives tips based on it, using if and else ifs.
    8    COMPLETED - 8. Style it.
    9    COMPLETED - 9. Add an About page.
```

Website

My website is a tool that helps people manage their money. They can input their debt: needs and wants, and their income: jobs and assets. It calculates helpful information, like the annual profit. It also gives you tips based on your annual profit. The website is [here](#).

Reflection Questions

How does your project use AI to help people with their finances in a way that hasn't been done before?

My project is a interactive tool. It is unique for its **design and customizability**. It allows the user to input their data. Then it **calculates it and gives tips** - that's the AI part!

Describe a challenge you faced. How did you overcome it? How did you reach out for help?

Trial and error are how people learn. If we didn't make mistakes, we wouldn't learn anything! One of the challenges I faced was getting it to do the **calculating** part. The calculating itself wasn't extremely hard, but getting the values from **localStorage** was a big challenge. There was so much drama because of **object types**.

What did you learn from this process that will impact the way you interact with technology in the future?

I don't think I ever used the JavaScript localStorage object before this. When I was deciding what to use to **store the data** so it remembers, I couldn't think of a way to accomplish this so it **saves it forever**. Then I remembered a coding book that talked about localStorage. I Googled "how long does localStorage last", and I learned that it lasts forever, unless you call the localStorage.clear() function. Now I have a new method in my toolbox!

Why did you choose this format for your project?

I chose to do a **free website** because I want it to be accessible to everyone in the world. I also have more experience with websites than other coding formats.

The End
Thank you so much!

$ + AI