

# Unorganized Stuff

# **DAE Project 25-26**

Project: Designing and creating a website that teaches basic financial literacy to teens

Needs: Website designed in a way and financial literacy explained in a way to teens that'll allow them to engage with, understand and absorb the content

This project will serve as an extension of my Passion Project for school

## **Profile (User Demographics)**

- They should have a minimal knowledge of financial literacy
  - Directed towards teenagers 13-18
  - Clients should be interested in learning about financial literacy
  - Lower-middle class people
- 

## **Questions**

1. What do you already know about money, budgeting, or saving?
2. When you need to learn something new, like how to save money, where do you usually go or what do you do?
3. What kinds of websites or apps do you enjoy using, and what makes them fun or easy to use?
4. What would make learning about money feel interesting or less boring for you?
5. Have you ever tried to manage your own money (like saving, earning, or spending)? What was that like?
6. What kind of tools or features would help you understand money better on a website?

## **Answers**

### **Manvitha (Middle class, 15)**

1. Have a savings account, has a checking account, how to spend money, but not much else
2. Ask ChatGPT for advice or ask friends or parents
3. Tiktok entertainment because contents engaging, chatgpt for help bc it gives u a straightforward answer, google for advice
4. Having games and interactive things and well edited videos
5. Yes. She tried to save money and it worked very well, she saved a lot of money
6. Videos, games, other peoples experiences, the internet, food

### **Ida (Middle class, (15)**

1. Minimal knowledge of financial literacy (not much)
2. Google it
3. Instagram, Duolingo, YT, Google
4. Making little challenges (like goals; save \$40 a week etc) and checkpoints
5. Tried to save money and it's going well
6. Games, analogies, short videos

### **Abi (Middle class, 14)**

1. Know that you should save money, spending money, not much else
  2. Go to youtube, tiktok
  3. Pinterest bc it gives inspiration, tiktok to scroll and bc it gives a quick answer to problems, youtube to burn time
  4. Relating it to something in their life and interesting
  5. I tried to manage money. Spends more than she saves.
  6. Games, aesthetics
- 

### **User Profile**

<https://docs.google.com/presentation/d/11CPvy7SJY5HX2MpGXU8jCMOBhRrzCiQ-t4-h1JL0ji0/edit?slide=id.p#slide=id.p>

---

### **Purpose Statement**

The purpose of my project is to create a fun, educational product that teaches teens between the ages of 13 and 18 the fundamentals of financial literacy.

Additional: (With a focus on students who have little experience with finance, the website will cover basic financial subjects like banking, budgeting, saving, and wise spending in an approachable and simple manner, as well as advancing into more financial concepts in depth. The website seeks to equip users with useful financial skills they can use in their everyday lives and carry into adulthood through interactive design, understandable explanations, and teen-focused content.)

---

## Ideas

- People working in the bank track your spending and print documents that you can use to review your money decisions at the end of each day

## Absurd Ideas Brainstorming

- Have a giant eye following everyone around tracking their transactions. By the end of the day, the eye will have produced a 'bank statement' of sorts that'll showcase the user's financial transactions done that day
- Government - owned time machines where people can go back in time to fix their financial errors they may have made in the past
- People can also go in the future to see where they'll stand financially and to see what mistakes they're making right now
- Wizard follows people around and judges their financial choices

---

## High-level description of prototype

I want to create a website that will teach teenagers ages 13-18 with a minimal knowledge of financial literacy, financial literacy.

The website will have a home page and be broken up into sections (e.g. saving/spending, budgeting, debt management, investing, financial planning, etc). In these sections, I will record myself talking about these topics and upload them onto the website under each section, almost like mini lessons.

The videos will be created and edited in a way that's engaging and appeals to users, so they actually enjoy learning about notoriously boring financial literacy, and so they feel motivated to learn about it.

My website will include a budgeting tracker where you can insert your weekly or monthly budget.

I will also implement a goal setter, where you can write and keep any weekly or monthly financial goals, and you can review them at the end of the period to see how you did with the goal(s).

I will also create an AI chatbot called Bill and include it on my website in its own section. It will help answer questions users may have about financial literacy that my website's content covered by me didn't cover.

---

## Collecting Feedback

- Google forms
- Voice recording → direct transcript
- Have post-its + pens on the table to write immediate feedback (optional)

Feedback Form



---

## Major Topics \*\*UNFINISHED

### Earning and Investing

- Ways for Teens to make Income
  - Part time jobs
  - Selling old stuff
  - Making stuff and selling
  - Freelancing
  - Allowance
- Understanding Income
  - Gross vs Net income
  - Basic taxes
- What is Investing / Simple investing concepts
- How to Invest; Beginner investing platforms
- Thinking about investing long term
  - how it pays off
- Avoiding “get rich quick” schemes and scams

## Credit and Debt

- What is credit?
  - Credit score
  - Credit report
  - Why do they matter?
- Types of Credit
  - Credit cards
  - Loans
  - Buy now, pay later
- Build credit early
- How credit cards work
- Debt 101
- Interest; how debt adds up

## Saving / Spending

### Budgeting

#### Feedback

- Like the idea
- It's a lot for a prototype
- Well made
- Shows teens how to use their money wisely

---

#### Prisha Jilhewar - DAE Feedback

I didn't get much detailed feedback, but common themes I found in my feedback were

- My clarity and confidence when presenting my prototype and explaining exactly how it'll work
    - This is positive feedback so I won't change this up
  - improving the UI and general user experience
    - I'll do this by adding more aspects to my website so it's not as boring.
- Ideas include
- I might change the color scheme so it's brighter
  - Create a rewards system
  - Add a budget tracker

- Add an interactive of a person's financial life (carousel format)
- Add a progress tracker
- Integrate calculators / configurers
  - Like a college cost estimator, etc, the idea is for users to be able to input
- Adding more features to keep users hooked such as games
  - To incorporate this into my feedback, I will add more games to my product relating to money. Ideas include
    - having users estimate the price of items, kind of like The Price Is Right
    - Stock market simulator
    - "Spent" game simulation
    - Loan shark game
- I will also add more features such as an input box at the bottom for users to submit their own feedback on how to keep improving my app
- I will also include an About Me / Contact Me box
- I will also include a box at the bottom discussing why I chose to pursue this project
- Another important aspect I'll probably add is creating an AI chatbot on my own called Bill that will answer additional questions and provide solutions to queries users had that I didn't answer in the existing content on my website

# Design 2

# DAE Project 25-26 - Design 2

Project: Designing and creating a website that teaches basic financial literacy to teens

Needs: Website designed in a way and financial literacy explained in a way to teens that'll allow them to engage with, understand and absorb the content

This project will serve as an extension of my Passion Project for school

## User Demographics

- Age group: Teens; ages 13-18
  - Finance knowledge level: Minimum
  - Interest level: Very interested in learning about (basic) financial literacy concepts
  - Socioeconomic status: Lower-middle class
- 

## Develop User Persona

- Name: Chloe
- Demographics
  - Age: 15
  - Gender: Female
  - Profession: Student
  - Device: Mostly computer, also mobile
  - Location: CT, United States
- Needs
  - Engaging and interactive content (games, videos, challenges)
  - Quick and straightforward answers to financial questions
  - Visual appeal and good aesthetics
  - Practical budgeting tools to manage income and save toward specific goals
  - Clear identification of spending patterns to recognize where money is being wasted
  - Actionable, applicable knowledge, that can be used in real-world contexts
  - Accessible learning format that fits into busy schedules Shareable content that's simple enough to explain to younger siblings or peers
  - Integration with tools she already uses, e.g. Google Sheets
  - Practical budgeting tools to manage income and save toward specific goals
  - Goal-setting tools with checkpoints
- How the product meets user needs
  - Budget tracker helps the user manage paychecks and track spending categories
  - Goal setter allows user to set and monitor progress towards their goals
  - Educational videos provide quick lessons they can watch weekly when they have time

- Engaging content format that keeps attention and keeps them coming back
  - Clear, teen-friendly explanations AI chatbot "Bill" answers specific questions about financial situations they encounter
  - Interactive tools and calculators help them visualize spending patterns and make informed decisions
  - Content applicable to school projects
- 
- Story / backstory
    - Chloe, 16, is a high school junior in West Hartford, CT. She works part-time at a coffee shop and is saving for her first car. She enjoys playing guitar, singing covers, going thrift shopping, and math and learning new things. She didn't really know how to budget and manage her money before. She found my site through a TikTok and now uses it weekly to learn about financial literacy and budget her paychecks.
    - My website helped her realize she was overspending on shopping, and now she tracks everything using a Google Sheet. She uses the information learned from my worksheet for a class project and shares tips with her younger brother.
- 

## **Value Proposition**

- How does the product solve a real user problem or address a pain point?
  - My product solves a real world problem because many teenagers today have minimal to no knowledge of financial literacy, and in a world where finance is a hot topic, having just minimal knowledge of it from an early age is concerning, and also solves the problem that teens find learning about financial literacy unengaging and boring, by creating videos that are created and edited in a way that's engaging and appeals to users so they actually enjoy learning about it and feel motivated while doing so.
  
- What kinds of specific benefits it brings to a potential user
  - Benefits my product brings to potential users include learning the fundamentals about different key aspects of financial literacy, playing simple financial games to deepen understanding, and allowing teens to budget and save money themselves by using tools on my website.

- How the idea is unique when compared to its competition
    - My idea is unique because it uses social media-style, engaging, short-form videos and various interactive challenges to explain financial literacy, specifically designed for Gen Z, rather than traditional resources which use outdated examples and resources that use dense text.
- 

## Prototype

On my Figma

---

## Feedback Gathering

### Questions

1. What do you already know about money, budgeting, or saving?
2. When you need to learn something new, like how to save money, where do you usually go or what do you do?
3. What kinds of websites or apps do you enjoy using, and what makes them fun or easy to use?
4. What would make learning about money feel interesting or less boring for you?
5. Have you ever tried to manage your own money (like saving, earning, or spending)?  
What was that like?
6. What kind of tools or features would help you understand money better on a website?

## Answers

### Manvitha (Middle class, 15)

1. Have a savings account, has a checking account, how to spend money, but not much else
2. Ask ChatGPT for advice or ask friends or parents
3. Tiktok entertainment because contents engaging, chatgpt for help bc it gives u a straightforward answer, google for advice
4. Having games and interactive things and well edited videos
5. Yes. She tried to save money and it worked very well, she saved a lot of money
6. Videos, games, other peoples experiences, the internet, food

### Ida (Middle class, 15)

1. Minimal knowledge of financial literacy (not much)
2. Google it
3. Instagram, Duolingo, YT, Google

4. Making little challenges (like goals; save \$40 a week etc) and checkpoints
5. Tried to save money and it's going well
6. Games, analogies, short videos

### **Abi (Middle class, 14)**

1. Know that you should save money, spending money, not much else
  2. Go to youtube, tiktok
  3. Pinterest bc it gives inspiration, tiktok to scroll and bc it gives a quick answer to problems, youtube to burn time
  4. Relating it to something in their life and interesting
  5. I tried to manage money. Spends more than she saves.
  6. Games, aesthetics
- 

## **Feedback Integration**

Patterns in feedback responses

1. Need for a better UI and visual improvements
  - "The intro image" clear suggested improvement
  - "Make me know that it was a video and not a picture" confusion about video vs static image"
  - "The general improvement, and a better UI" a direct request for UI enhancement
  - "The way you showed it and how the aesthetic presents it well" some positive feedback on presentation indicates visual design is important to users
  - Also, the average appeal rating of 4.55/6 suggests room for visual improvement
2. More complete / functional / additional content on website
  - "Maybe having more videos" they want more educational content
  - "Add the videos" the videos not fully implemented in prototype
  - "That it's not a prototypes" signals desire for fully functional product
  - "An financial games" users want interactive game features added
  - "Interest rates and what are banks, credit unions and online banks" is request for additional educational topics
  - The average features rating of 4.60/6 indicates that the features are relevant, but could be expanded

Plan for feedback integration

- Add real video content (a given)
- Expand the modules of education (add subtopics)
- Add interactive games / more interactive activities to keep users engaged

- Create and implement fully functioning features
- 

**Refined Prototype - On Figma**

# Design Documentation 1

# DAE Project 25-26 - Design Documentation 1

---

## Project Summary

This project creates an interactive financial literacy website designed specifically for teenagers aged 13-18 who have minimal prior knowledge of personal finance. The product matters because it transforms traditionally boring financial education into engaging, accessible content through video lessons, interactive tools like budget trackers and goal setters, and an AI chatbot named Bill, empowering young people with essential money management skills they can use in their everyday lives and carry into adulthood.

---

## Problem Statement

Teenagers lack accessible, engaging financial literacy education, leaving them unprepared to manage money, budget effectively, or make informed financial decisions despite needing these skills for part-time jobs, saving for major purchases, and preparing for adult financial responsibilities.

---

## Use Case

Teenagers aged 13-18 from lower-middle class backgrounds with minimal financial knowledge will use this product to learn money management fundamentals in an engaging way. They will visit the website weekly to watch short educational videos on topics like budgeting and saving, use the budget tracker to monitor their spending from part-time jobs or allowances, set financial goals like saving for a car, and ask the AI chatbot Bill specific questions about financial situations they encounter in daily life.

---

## Goals and Objectives

**Goal 1:** Teach at least 100 teenagers the fundamentals of financial literacy including budgeting, saving, spending, credit, debt, and investing within the first six months of launch.

**Goal 2:** Enable users to successfully create and maintain a personal budget using the website's budget tracker, with at least 70% of active users reporting improved awareness of their spending habits within three months of regular use.

---

## **Key Features and Functions**

**Feature 1: Educational Video Library** - The website contains organized sections (saving/spending, budgeting, debt management, investing, financial planning, credit and debt) with self-recorded video lessons that explain financial concepts in an engaging, teen-friendly manner with appealing editing.

**Feature 2: Budget Tracker** - Users can input their weekly or monthly income and expenses to track spending patterns, identify areas of overspending, and maintain awareness of their financial situation.

**Feature 3: Goal Setter** - Users can write and save weekly or monthly financial goals, then review their progress at the end of each period to see whether they achieved their targets and adjust their strategies accordingly.

**Feature 4: AI Chatbot "Bill"** - An integrated chatbot that answers user questions about financial literacy topics not fully covered in the video content, providing personalized guidance and clarification on demand.

**Feature 5: Interactive Games** - Financial literacy games including price estimation challenges, stock market simulator, "Spent" game simulation, and loan shark game that make learning fun and reinforce concepts through practice.

---

## **Tech Stack and Tools**

**Frontend:** HTML5, CSS3, JavaScript for website structure and interactivity

**Design:** Figma for UI/UX design and prototyping, Canva for graphics and visual elements

**Video:** Video recording equipment (camera/phone), video editing software (iMovie, CapCut, or Adobe Premiere Pro) for creating and editing educational content

**AI Chatbot:** Claude API or ChatGPT API for building the "Bill" chatbot functionality

**Backend/Database:** Google Sheets API or Firebase for storing user data (budgets, goals, progress)

**Hosting:** GitHub Pages, Netlify, or Vercel for website deployment

**Development Tools:** VS Code or similar code editor, Git for version control

**Testing:** Browser developer tools, user testing with target demographic

---

## **Algorithm**

**Step 1:** User visits website homepage and is presented with navigation options for different financial literacy topics.

**Step 2:** User selects a topic section (such as budgeting, saving, or credit) and the system loads the corresponding educational video content.

**Step 3:** User watches video lesson; system tracks completion status and updates progress tracker.

**Step 4:** If user accesses budget tracker, system prompts for income and expense inputs, stores data, and calculates spending patterns to display visual summaries.

**Step 5:** If user accesses goal setter, system allows input of financial goals with target amounts and deadlines, saves goals to user profile, and provides end-of-period review functionality.

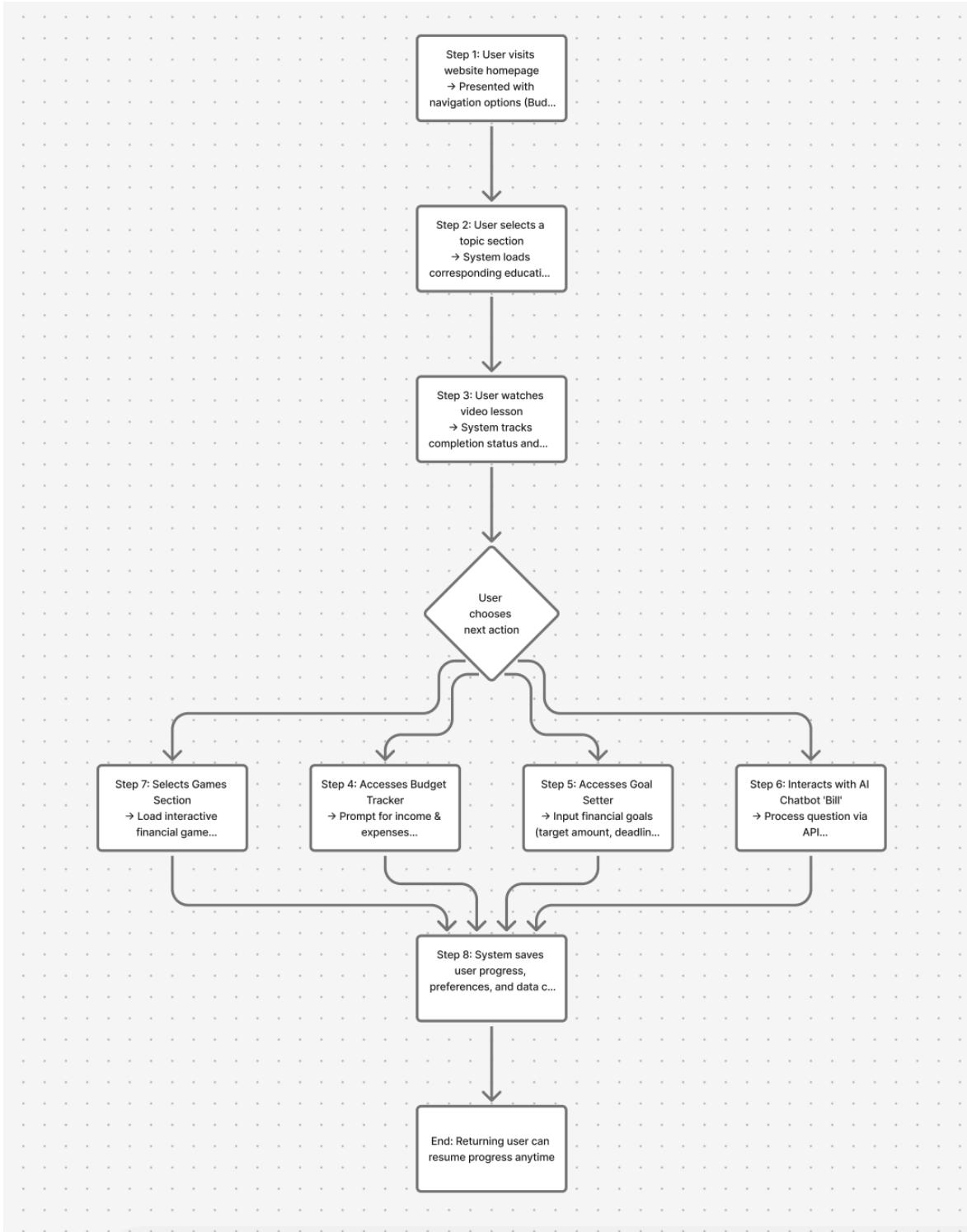
**Step 6:** If user interacts with AI chatbot Bill, system processes user question through API, generates personalized financial literacy response, and displays answer in chat interface.

**Step 7:** If user selects games section, system loads interactive financial game and tracks user performance to reinforce learning concepts.

**Step 8:** System continuously saves user progress, preferences, and data to allow returning users to pick up where they left off.

---

## **Flowchart - Next page**



## **Timeline**

End of Semester 1 - Project planned out in full  
End of Semester 2 - Start creating website; website progress and progress on all subtopics and scripts for videos  
End of Semester 3 - Website finished and progress on filming videos  
End of Semester 4 - Finish filming videos and start / finish editing them  
End of Semester 5 - Add videos to website and create and integrate AI chatbot  
End of Semester 6 - Integrate interactive games onto website and finalize whole project

---

## **Risk Mitigation**

**Risk:** Users may not find the video content engaging enough and abandon the website after viewing only one or two videos, resulting in low retention and failure to achieve learning objectives.

**Mitigation Plan:** Before full launch, conduct user testing sessions with at least ten teenagers from the target demographic to gather specific feedback on video engagement, pacing, editing style, and content relevance. Based on feedback patterns, iterate on video format by incorporating more visual effects, shorter segment lengths, interactive questions within videos, and real-life teen scenarios. Additionally, implement the rewards system and progress tracker early to create gamification elements that incentivize continued engagement, and use analytics to identify exactly where users drop off so those specific videos can be re-edited or improved.

---

## **Evaluation Criteria**

**Success Measure 1:** At least 100 unique users visit and engage with the website within the first three months of launch, with "engagement" defined as watching at least one complete video and using at least one interactive tool (budget tracker, goal setter, or chatbot).

**Success Measure 2:** At least 70% of surveyed users report feeling more confident about managing their personal finances and can demonstrate understanding by successfully creating a personal budget using the tracker within their first month of use.

**Success Measure 3:** Users return to the website an average of at least twice per month, indicating that the content and tools provide ongoing value rather than being a one-time resource, and the average session duration is at least 8-10 minutes showing meaningful engagement with content.

---

## **Future Considerations**

**Maintenance Need:** The website will require quarterly content updates to keep financial information current with changing laws, tax regulations, interest rates, and new financial products available to teens. Additionally, the AI chatbot will need regular monitoring to ensure it provides accurate and appropriate financial advice, with prompt refinements based on common user questions that reveal gaps in the existing video content.

**Future Functionality:** Add a community forum or peer discussion section where teens can share their financial success stories, ask questions to each other, and build accountability partnerships for their savings goals. This social feature would create a supportive learning environment and increase user retention by fostering a sense of community around financial literacy, while also providing real-world examples and peer experiences that current users indicated they wanted in initial research feedback.