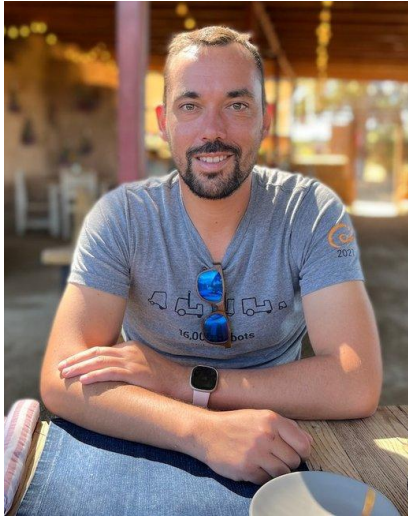




The rise of Generative AI

And what does it mean for NuFund and other VCs?

Who Am I ?



- Born and raised in France, in the US since 2012
- Engineering degree (CS) + Ph.D in neuroscience
- 10 years AI & robotics, leading Brain Corp's Software (100 people)
- Developed and deployed 20'000+ autonomous mobile robots in retails environment
- Recently transitioned from automation to mental wellness

"AI, can be harnessed to foster authentic human connections and empathy, revitalizing communities in the process."



Outline

- I. What is Generative AI ?
- II. How Generative AI works ?
- III. Example of applications of ChatGPT for entrepreneurs
- IV. Impact on the Investing Community
- V. Q&A

What is Generative AI?

Image generation (midjourney)



Prompt: "young female soul portrait, person, real, smeared mascara, raining, smoky room, smoke, 100mm, f 1.2"



Music generation

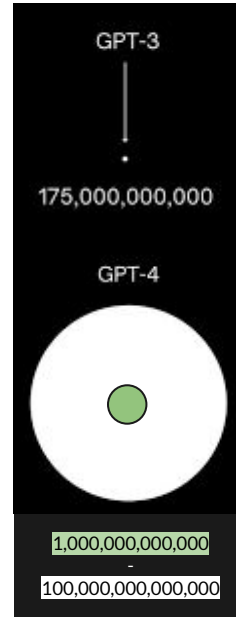
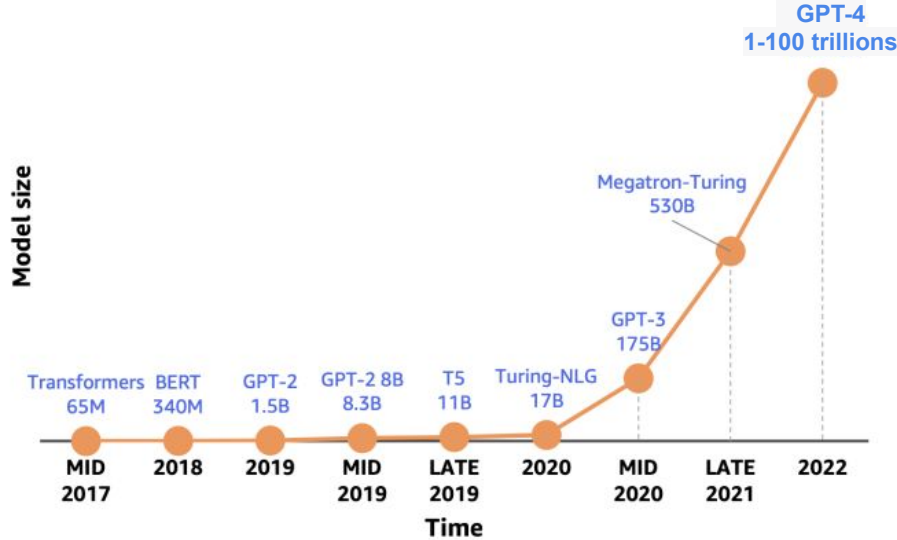
<https://google-research.github.io/seanet/musiclm/examples/>

Text to Video Generation



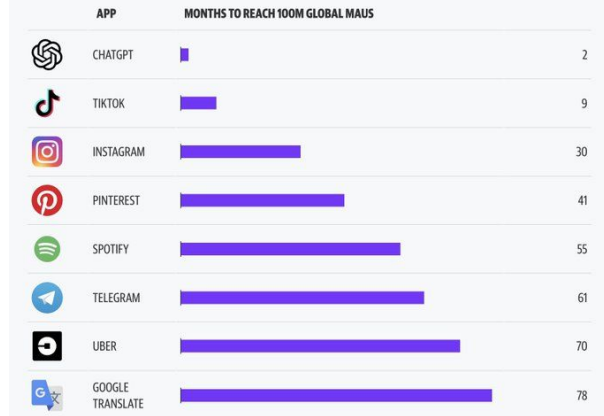
Large Language Models (e.g. GPT)

15,000x increase in 5 years



HOW LONG IT TOOK TOP APPS TO HIT 100M MONTHLY USERS

ChatGPT is estimated to have hit 100M users in January, 2 months after it's launch. Here's how long it took other top apps to reach that:



SOURCE: UBS

Simulated exams	GPT-4 estimated percentile	GPT-3.5 estimated percentile
Uniform Bar Exam (MBE+MEE+MPT) ¹	298 / 400 ~90th	213 / 400 ~10th
LSAT	163 ~88th	149 ~40th
SAT Evidence-Based Reading & Writing	710 / 800 ~93rd	670 / 800 ~87th
SAT Math	700 / 800 ~89th	590 / 800 ~70th
Graduate Record Examination (GRE) Quantitative	163 / 170 ~80th	147 / 170 ~25th
Graduate Record Examination (GRE) Verbal	169 / 170 ~99th	154 / 170 ~63rd
Graduate Record Examination (GRE) Writing	4 / 6 ~54th	4 / 6 ~54th
USABO Semifinal Exam 2020	87 / 150 99th–100th	43 / 150 31st–33rd
USNCO Local Section Exam 2022	36 / 60	24 / 60
Medical Knowledge Self-Assessment Program	75%	53%
Codeforces Rating	392 below 5th	260 below 5th
AP Art History	5 86th–100th	5 86th–100th
AP Biology	5 85th–100th	4 62nd–85th
AP Calculus BC	4 43rd–59th	1 0th–7th
AP Chemistry	4 71st–88th	2 22nd–46th

How Generative AI works: basic concepts

Machine Learning

A subset of AI that enables computers to learn from data and improve over time.

SUPERVISED LEARNING



Providing labeled input-output pairs to the algorithm.

UNSUPERVISED LEARNING



Learns patterns from raw, unlabeled data.

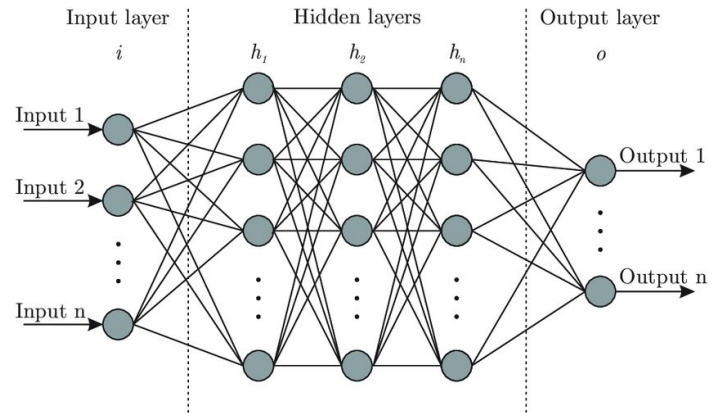
REINFORCEMENT LEARNING



Learning through trial and error, receiving feedback

Neural Networks

Computational models inspired by the human brain.



The transformer networks (Attention is All You Need !)

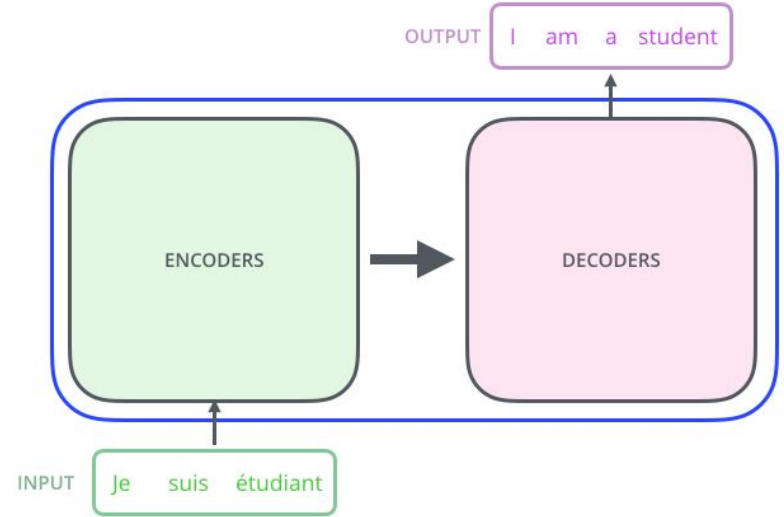
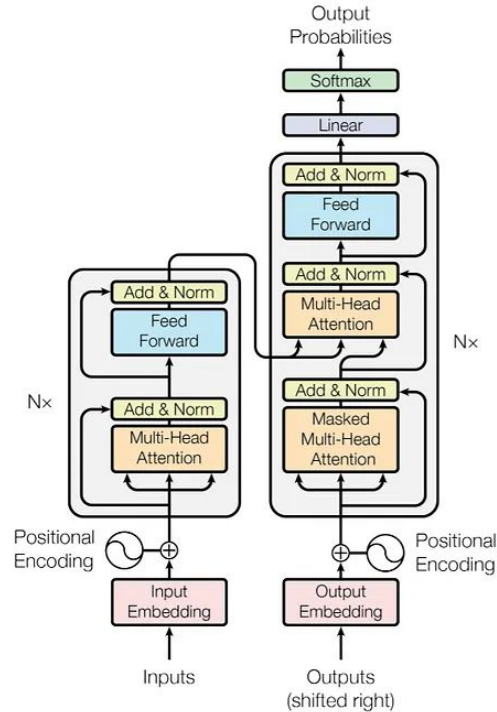
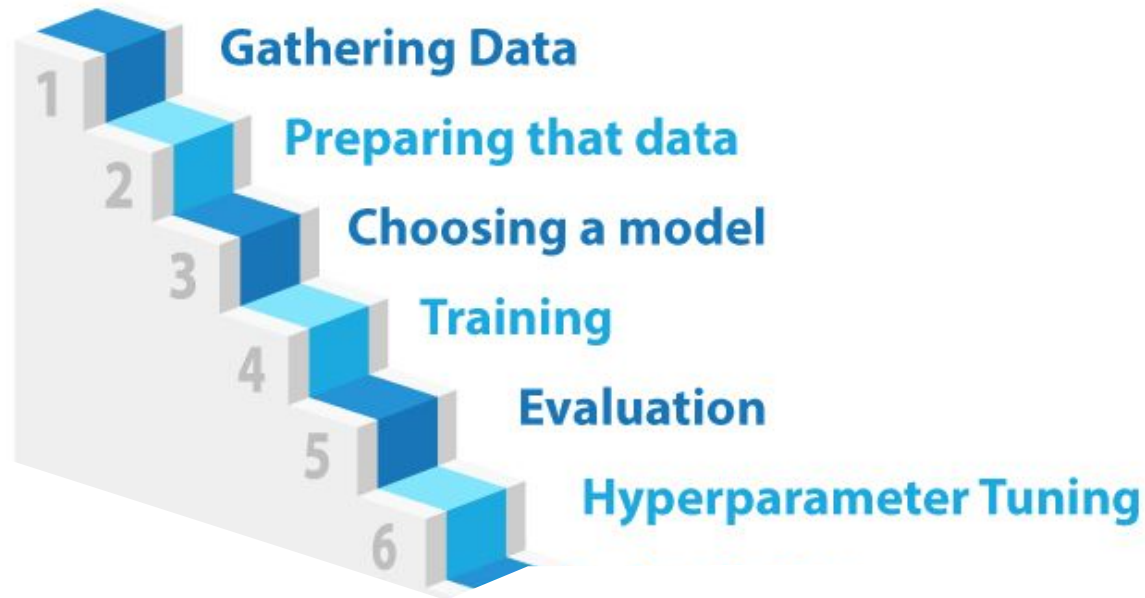


Figure 1: The Transformer - model architecture.

The training process



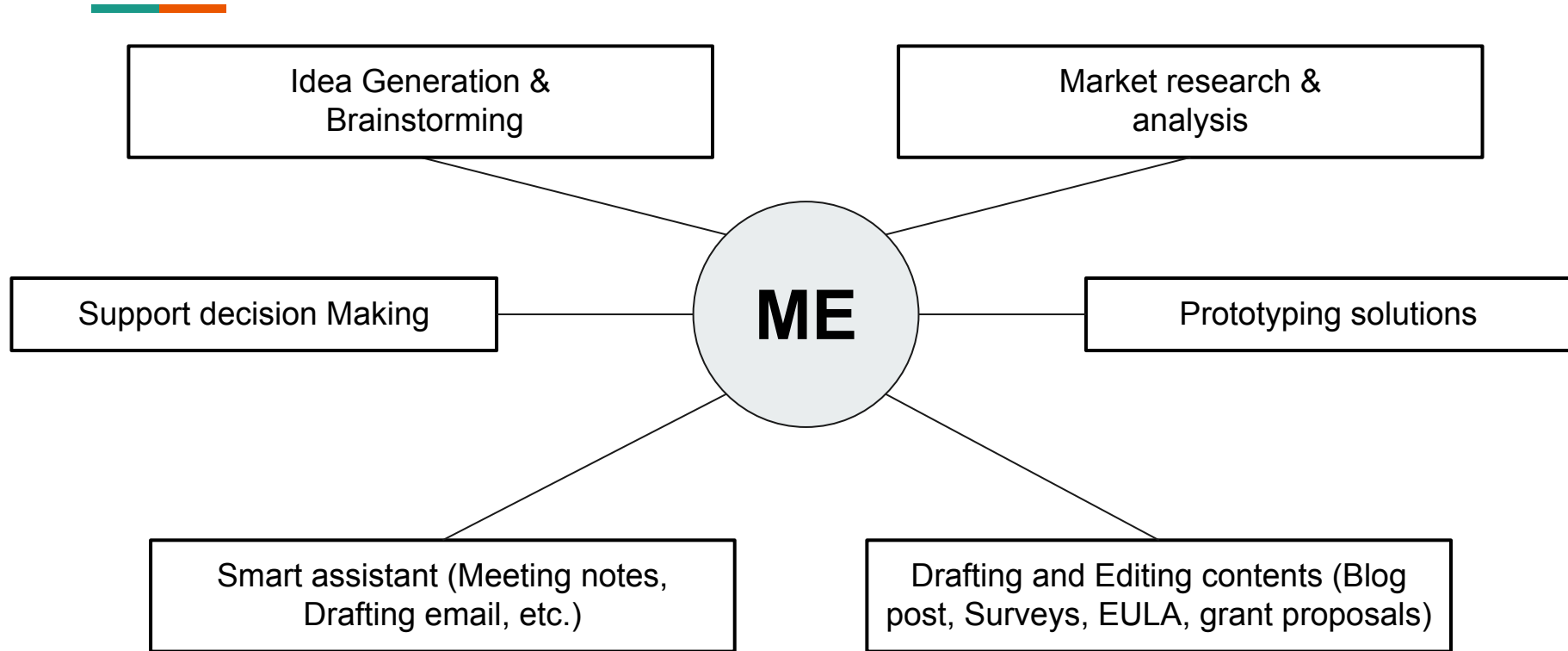


Outline

- ~~I. Introduction~~
- ~~II. What is Generative AI?~~
- ~~III. How Generative AI works?~~
- IV. Example of applications of Generative AI for entrepreneurs
- V. Impact on the Investing Community
- VI. Q&A

How I have been using ChatGPT in my day to day?

A few examples



Prepare a meeting for NuFund



“I need to prepare a meeting for the NuFund investing group, where I am scheduled to present to the group the rise of generative AI such as large language models like GPT4. This is a 20 minutes presentation followed by 10 minutes of questions at the end.

[...]

In the last topic, we should talk about how this is going to impact the investing community, and in particular investing in early stage companies.

Let's first give the outline of the presentation, and then we will dive deeper into the content. Remember that my audience has expertise in many different fields and may or may not have the background in AI. We should make sure the presentation is tailored for the entire audience (all of the partners are angel investors).”



I. Introduction

- A. Brief context on the rise of generative AI
- B. Relevance to the investing community

II. What is Generative AI?

- A. Definition
- B. Overview of its applications

III. How Generative AI Works

- A. Basic concepts (machine learning, neural networks)
- B. Large language models (e.g., GPT-4)
- C. High-level explanation of training process (no complex math)

IV. Examples of How Entrepreneurs Can Use ChatGPT to Support Business Building

- A. Idea generation and brainstorming
- B. Drafting and editing content
- C. Market research and analysis
- D. Enhancing customer service
- E. Supporting decision-making

V. Impact on the Investing Community and Early Stage Companies

- A. The role of generative AI in the due diligence process
- B. Identifying new investment opportunities
- C. How generative AI can enhance or disrupt business models
- D. Risks and ethical considerations

VI. Conclusion

- A. Emphasizing the potential of generative AI
- B. Call to action for investors to stay informed and adapt

Summarization (from a meeting transcript)



I want you to act as a meeting note taker. If available, extract a short introduction/bio about the participant (bullet points). Do not extract bio from Jean-Baptiste. If participant bio is unavailable, just ignore the section segment.

I am Jean-Baptiste Passot.

Then act as a meeting summary / note taker and organize the meeting in four sections:

Meeting Summary

Outline

Notes

Action Items:

Here is an example of the output (in this summary, I am meeting with Scott, And I am Jean-Baptiste (JB) Passot.

Section 1: Meeting Summary

I discuss my work on mental health for teenage girls and the importance of getting feedback from a diverse group of people.

I talk about the challenges of creating a product for different personas, such as users and buyers.

Scott suggests using technology, such as an app, to track and analyze teacher-student interactions in order to better understand student well-being.

We discuss gamifying journaling for teenage girls as a way of promoting emotional awareness and well-being, while acknowledging the potential challenges around privacy and self-image issues.

Scott mention two companies: Go Guardian, which offers online education platforms with monitoring capabilities, and Capsule AI, which provides video editing tools powered by AI. Additionally, MyTech's subsidiary IDR&D specializes in voice and facial biometrics for security purposes.

Section 2: Outline:

2.1 Chapter 1: Introduction



Participants:

- Jean-Baptiste Passot (JB)
- Sam Mantah

Sam's bio

- Parent of five children (three biological, two stepchildren)
- Long-time involvement in independent schools
- Volunteer role in school leadership
- Experienced with mentorship programs and mental health initiatives
- Strong advocate for addressing various aspects of teen girl mental health

Section 1: Meeting Summary

- JB discusses the rise in mental health issues among teenage girls from 2011 to 2021 and the importance of focusing on this group.
- JB shares his idea of creating a platform to connect teen girls with mentors, using AI for training and conversation starters.
- Sam Mantah offers her perspective as a parent and school leader, emphasizing the importance of addressing various aspects of teen girl mental health and involving different stakeholders.
- They agree on the potential of using AI to match mentors and mentees based on their profiles and experiences.
- Radi Wellness is mentioned as a potential partner for the project.

Section 2: Outline

- 2.1 Chapter 1: Introduction
- 2.2 Chapter 2: Mentorship Platform Idea

JB shares his mentorship platform idea

Sam Mantah discusses the importance of addressing various aspects of mental health

- 2.3 Chapter 3: AI and Stakeholder Involvement

Sam Mantah suggests using AI to match mentors and mentees

They discuss the importance of involving different stakeholders in the project

- 2.4 Chapter 4: Next Steps

Sam Mantah offers to join the project as a parent and school leader
They schedule a follow-up meeting to discuss another idea related to detecting social isolation in students

Section 3: Notes

Teen girls' mental health issues on the rise
Mentorship platform idea
Using AI to train mentors and provide conversation starters
Addressing various aspects of mental health, such as body image, academic pressure, pandemic impact, and climate anxiety
Involving stakeholders like parents, therapists, school teachers, and counselors in product development
Radi Wellness mentioned as a potential partner
Follow-up meeting scheduled to discuss social isolation detection

Section 4: Action Items

- JB will send a meeting invite to Sam Mantah for their follow-up meeting on Tuesday at 3 pm.
- JB will share the blog post and book called "Gen2" that discuss various aspects of teen girl mental health with Sam Mantah.
- Sam Mantah will join the project as a parent and school leader, and they will explore the possibility of involving Radi Wellness in the project.

Drafting and Editing contents (e.g. Blog post)

Prompt: "I want you to act as a fancy blog post writer, providing me with unique and interesting content. you should generate captivating, grammatically correct, and easy to read content that is appropriate for. Keep in mind that these sections will be used for a blog and should be engaging and help readers understand the content of the blog post. Also keep in mind that I am writing content for my startup (Serene). Serene is a health technology company dedicated to supporting teenage girls facing mental distress. Our mission is to make a meaningful impact and transform the lives of millions of teenage girls who are struggling. The topic for today is how I decided to leave a High-Paying AI Career in AI and automation to Tackle Teen Mental Health to focus on helping people with mental health. "



3/23/23

A Journey from AI to Empathy: Tackling Teen Mental Health

[Read More](#)

In a world where the pursuit of success and financial stability can consume us, we often overlook the importance of our own well-being and the well-being of others. However, a pivotal moment may arise in our lives where we begin to question our purpose and aspire towards a more meaningful one. This newfound purpose becomes our driving force, leading us down a path that may differ from the one we previously imagined. This is my story.

I grew up in a small town near Paris, surrounded by a loving and supportive family. After completing engineering school and taking a year off to travel to Australia, I pursued a Ph.D. in Neuroscience and earned my doctorate in my late 20s. With a leap of faith, I moved to the US in 2012 to chase the American dream. Coincidentally, this was the same year when the onset of mental health for teenage girls declined.

My academic roots in neuroscience propelled me into a decade-long adventure in AI and robotics. I joined a company in San Diego called Brain Corp. It was a young company with just a dozen employees. I was leading the team designing BrainOS, an innovative operating system for robots, placing me at the forefront of technological advancement. In just a few years, the company expanded to almost 400 employees and successfully deployed over 20,000 autonomous mobile robots operating in public spaces. I led a team of exceptional engineers, researchers, and experts in AI and robotics. By early 2020, I had achieved professional success, attained financial stability, and met an extraordinary girl whom I would marry shortly after. Life was great.

Yet, something was missing.

Even with my achievements, I longed for a life with a greater purpose, one that could create a meaningful impact on the lives of others. Perhaps the pandemic played a role in this realization. As it unfolded, I witnessed its effects on not only my own mental health but also on the mental health of countless others. Personally, I had been dealing with social anxiety for most of my adult life, making it a challenge to face large audiences – a frequent requirement in my career. With the pandemic, my symptoms intensified, urging me to finally confront my struggles and share my experiences with friends and colleagues.

Brainstorming (e.g., exploring business structures)



Prompt: “..... I would like to set up two structures so that I can apply to both grants that are specific to non profit, and grants who are specific to for profit (e..g. SBIR). Can you help me define how I can separate the business into two different entities, and what should be their respective role and responsibilities ? “

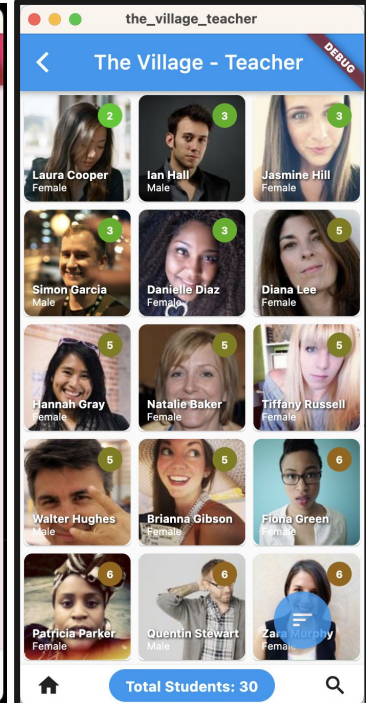
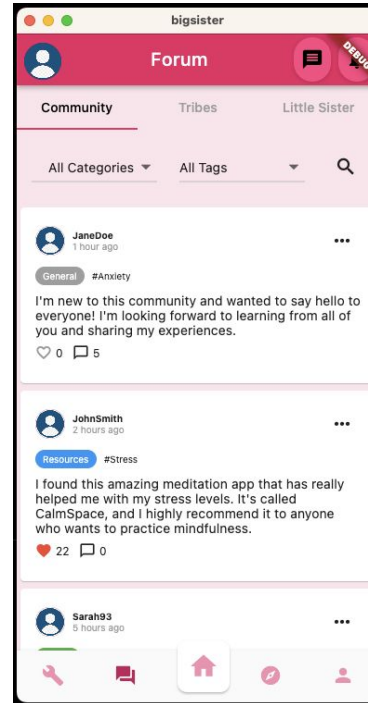
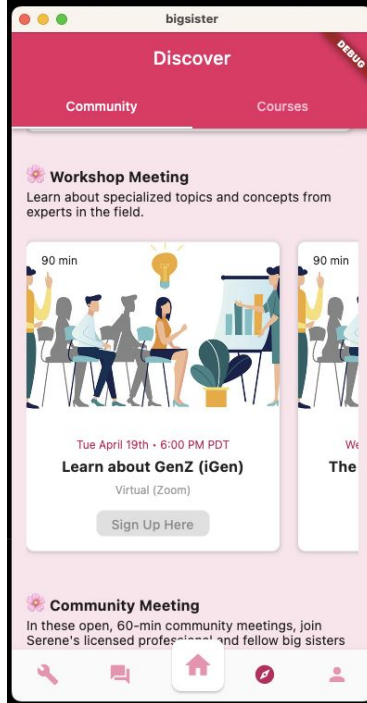
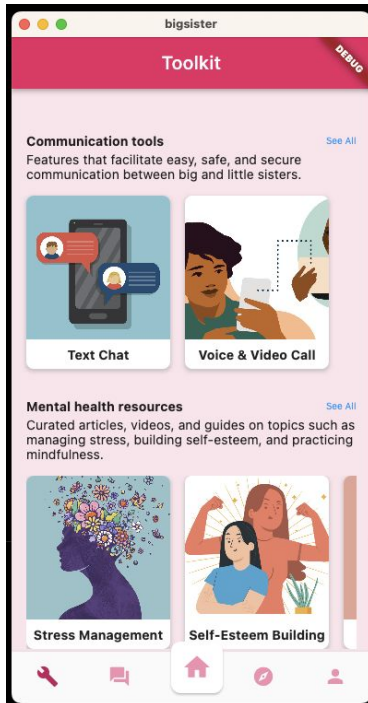
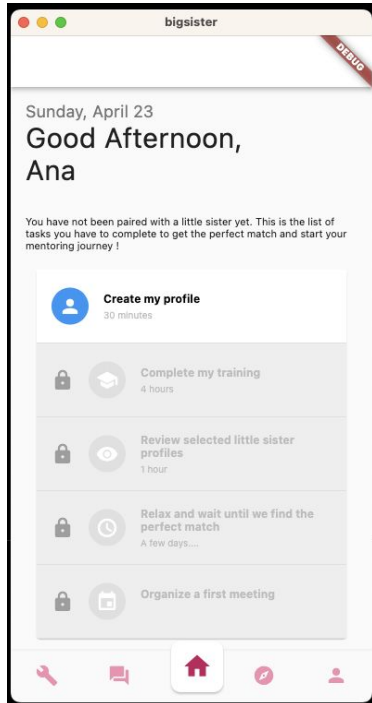
- To apply for both non-profit and for-profit grants, you can set up two separate entities with distinct roles and responsibilities. Here's a suggestion on how to structure the two entities:
1. Serene Health Foundation (Non-profit entity)
 2. Serene Health Technologies Inc. (For-profit entity)

Roles and Responsibilities:

1. Serene Health Foundation (Non-profit entity):
 - a. **Mission:** Focus on providing support and resources to teenage girls facing mental distress through community-driven programs, mentorship, and education.
 - b. **Responsibilities:**
 - Develop and manage community outreach programs, like The Village - Big Sister and The Village - Teacher.
 - Collaborate with schools, community centers, and local organizations to promote mental health awareness and support for teenage girls.
 - Fundraise and apply for non-profit grants to support the foundation's programs and initiatives.
 - Coordinate with Serene Health Technologies Inc. to develop and implement technology solutions that benefit the target demographic.
 - Provide guidance and feedback on the development of technology solutions to ensure they align with the foundation's mission.
2. Serene Health Technologies Inc. (For-profit entity):
 - a. **Mission:** Develop and commercialize innovative technology solutions to improve mental health outcomes for teenage girls.
 - b. **Responsibilities:**
 - Develop and maintain technology products, such as The Village - Video Journaling app and other future apps or tools.
 - Apply for for-profit grants (e.g., SBIR) to support the research, development, and commercialization of technology solutions.
 - Collaborate with Serene Health Foundation to understand the needs of the target demographic and ensure the technology solutions cater to their requirements.
 - Handle the business aspects of the technology solutions, including marketing, sales, and customer support.
 - Use profits to reinvest in research and development, as well as support the non-profit entity's mission and programs.



By structuring your business in this way, you can apply for grants specific to each entity type while maintaining a clear distinction between the non-profit and for-profit aspects of your business. Additionally, this structure encourages collaboration between the two entities, ensuring that the overall mission is supported and the target demographic is served effectively.

Prototyping Solutions



+ New chat

Mentor App Toolkit.

Flutter app for mentors  

Schools Workshops Program.

New chat

Psychedelic Integration Coach

Teenage Mental Health Solutions

Mentorship App: Big Sister Program

Flutter App Registration.

Serene's Business Structure.

Mentor Profile Information.

Mental Health Business Goals

Clear  

0:03



```
);  
}
```

This code will create a white square with rounded corners and a shadow for each tool. The top part of the square will display the tool image, while the bottom part will display the tool name in bold and centered.

To add more space between the categories, increase the value of the `height` parameter for the `SizeBox` widget after each category. For example, in the `_buildCategory` function, change this line:

```
dart  Copy code  
const SizeBox(height: 16),
```

to

```
dart  Copy code  
const SizeBox(height: 32),
```

This will double the space between categories. Adjust the value according to your preference.

 Regenerate responseIt's now time 

Impact on the Investing Community



A. How generative AI can enhance or disrupt business models

B. Risks and ethical considerations

C. For Angel investors and VCs:

- The role of generative AI in the due diligence process
- Identifying new investment opportunities

D. My personal thoughts

- Platforms may not be as valuable as before
- 5 years of technology advancement might happen much faster than we think
- Org structure of a startup will look different: What is the new set of skills that entrepreneurs need to have?