# Google (Gemini1.5) Chain of Thoughts Instruction Method

#### Instructions:

You are an experienced and highly creative Industrial Designer participating in an intensive brainstorming session. Your goal is to generate an extensive array of innovative, unique, and thoughtful ideas for solving the user's stated problem.

Follow this process to maximize the quantity and diversity of ideas generated:

- 1. Restate the user's problem clearly and concisely. Identify the core needs and pain points that must be addressed.
- 2. Conduct a rapid-fire ideation sprint. Without filtering yourself, write down every idea that comes to mind, no matter how unconventional or unfeasible it may seem. Embrace wild, out-of-the-box thinking. Aim to generate at least 100 distinct ideas.
- 3. Once you have at least 100 ideas, take a step back and analyze them. Group similar ideas together into high-level categories or themes.
- 4. Within each category, expand on the most promising ideas with additional details, variations, and potential implementation approaches. Consider materials, technologies, aesthetics, functionality, user experience, etc.
- 5. Select the top 3-5 ideas within each category that seem to have the most potential. Flesh them out with a short description of how they would solve the user's problem in a novel way.
- 6. Present the full list of 100+ ideas, the high-level categories, and the most promising ideas within each category. Use bullet points and clear headings to organize the ideas.

Be sure to generate ideas that approach the problem from many different angles. Consider emotional, functional, social, aesthetic, and experiential dimensions. Don't be afraid to propose unconventional, futuristic, or even provocative ideas. Quantity, diversity and originality are key.

# Model Setting:

Max\_Token=4000 , Temperature=1.0

#### User:

Many people smoke cigarettes every day in a specific green space and the cigarette smoke bothers the employees of the ground floor in the adjacent building. How can this problem be solved?

#### AI:

#### **Restated User Problem:**

Cigarette smoke from smokers in a nearby green space is causing discomfort to employees working on the ground floor of an adjacent building.

# **Ideation Sprint:**

- Install air purifiers with smoke filters in the affected areas.
- Create a physical barrier between the smoking area and the building, such as a wall or fence.
- Provide designated smoking areas in a different location away from the building.
- Implement a smoke-free zone in the green space during specific hours when employees are working.
- Use air conditioning or ventilation systems to circulate clean air and reduce smoke levels.
- Develop a wearable device that purifies the air around the user.
- Employ a team of "smoke monitors" to enforce smoke-free zones and encourage smokers to move away from the building.
- Design stylish outdoor furniture and seating areas that discourage smoking by providing comfortable alternatives.
- Create a mobile app that tracks and displays smoke levels in real-time, alerting users to avoid areas with high concentrations.
- Offer educational programs and incentives to discourage smoking near the building.
- Introduce a social media campaign to raise awareness about the issue and encourage smokers to be more considerate.
- Develop biodegradable filter tips that neutralize cigarette smoke before it enters the environment.
- Implement a smoke evacuation system that uses fans and filters to remove smoke from the affected areas.
- Create a "smoke garden" or designated smoking area that is designed to minimize smoke dispersal towards the building.
- Design a portable air filtration system that can be placed near workstations to reduce smoke exposure.
- Develop an artificial "tree" that absorbs and neutralizes cigarette smoke in the surrounding air.
- Implement a system that detects and tracks cigarette smoke in real-time, providing alerts and automated responses to mitigate exposure.

- Create a self-cleaning surface material that repels and breaks down cigarette smoke.
- Develop a smoke-absorbing coating for the building's exterior walls that traps cigarette smoke before it enters the indoor environment.
- Design a mobile app that connects smokers with designated smoking areas and encourages them to avoid areas near the building.
- Create a smoke-free zone enforcement app that allows users to report and track smoking violations.
- Develop a portable smoke filter that can be attached to cigarette packs to reduce secondhand smoke emissions.
- Implement a loyalty program that rewards smokers for using designated smoking areas and reducing their smoking near the building.
- Create a "smoke etiquette" campaign that educates smokers about the impact of secondhand smoke and encourages respectful smoking practices.
- Develop a wearable device that monitors smoke exposure and provides personalized recommendations to reduce exposure.
- Design an innovative smoking device that eliminates or significantly reduces smoke production.
- Implement a virtual reality experience that transports smokers to a smoke-free environment, allowing them to enjoy their cigarettes without harming others.

# **High-Level Categories:**

- Physical Barriers and Zone Management
- Air Purification and Ventilation
- Enforcement and Education
- Innovative Technologies
- Alternative Smoking Solutions

#### **Promising Ideas:**

# **Physical Barriers and Zone Management:**

- Implement a designated smoke-free zone in the green space during business hours
- Create a physical barrier, such as a wall or fence, between the smoking area and the building.

#### **Air Purification and Ventilation:**

- Install air purifiers with specialized smoke filters in the affected areas.
- Implement a ventilation system that circulates clean air and reduces smoke levels.

#### **Enforcement and Education:**

- Implement smoke etiquette programs to educate smokers about the impact of secondhand smoke and encourage respectful practices.
- Develop a smoke-free zone enforcement app that allows users to report and track smoking violations.

#### **Innovative Technologies:**

 Develop a smoke-absorbing coating for the building's exterior walls to trap cigarette smoke. • Design a portable smoke filter that can be attached to cigarette packs to reduce secondhand smoke emissions.

# **Alternative Smoking Solutions:**

- Implement a smoking cessation program to encourage employees to quit smoking.
- Create designated smoking areas in a different location away from the building.

# Links:

https://makersuite.google.com/app/prompts? state=%7B%22ids%22%3A%5B%221Tx1F3PAY\_S87y2iuYhZ31I0Wcp\_djF1h%22%5D%2C %22action%22%3A%22open%22%2C%22userId%22%3A%22110640208940257660572%2 2%2C%22resourceKeys%22%3A%7B%7D%7D&usp=sharing