Problem Statements

1. Healthcare and Mental Wellness

Focus: Build innovative solutions to improve healthcare access, mental wellness, and patient management.

Example Ideas:

- Mental health chatbots for providing initial support.
- Virtual health camps for rural areas using telemedicine.

2. Disaster Recovery Assistant

Focus: The Disaster Recovery Assistant (DRA) focuses on enhancing disaster response, coordination, and recovery efforts, real-time data analysis, and predictive modeling.

Example Ideas:

- Resource demand forecasting for better disaster preparation.
- Real-time logistics optimization for efficient resource distribution during crises.

3. Sustainability and Climate Change Focus:

Focus: The focus of initiatives addressing sustainability and climate change is to leverage technology, particularly artificial intelligence, to monitor, analyze, and optimize practices that mitigate climate change, enhance environmental protection, and promote sustainable living.

Example Ideas:

- Digital platforms for personalized learning paths based on student needs.
- Virtual reality (VR) or augmented reality (AR) tools for immersive learning experiences.
- Online tutoring platforms to connect teachers and students in remote areas.

Guidelines for Idea Documentation

The purpose of this documentation is to evaluate your thinking ability, creativity, and understanding of the real-world problem you have chosen. Please ensure that your submission is clear, concise, and well-structured. Use the following points as a guide to structure your document:

1. Team Name and Member Details
  - **Team Name:** Creative and unique name that represents your team.
  - **Member Details:** List the name, role, and skills of each team member (e.g., developer, designer, project manager).

2. Problem Statement
  - **Chosen Problem**: Clearly state the problem statement you are addressing from the provided list.
  - **Problem Analysis:** Briefly describe the real-world context of the problem and why it is important to solve it.
  - **Target Audience:** Identify the primary users or beneficiaries of your solution.

3. Solution Overview
  - **Brief Explanation** : Summarize your solution and how it addresses the problem.
  - **Approach:** Define your overall approach to solving the problem. Describe how your solution works and how it addresses specific pain points.
  - **Uniqueness**: Explain what makes your solution unique compared to existing solutions or approaches.

4. Frameworks/Technologies
  - **Tech Stack:** List the frameworks, libraries, and technologies you plan to use.
  - **Reasoning:** Explain why you have chosen these specific technologies (e.g., ease of use, scalability, cost-effectiveness).
  - **Assumptions & Constraints:** Highlight any assumptions you've made and constraints you anticipate (e.g., data availability, user access).

5. Feasibility and Implementation
  - **Implementation Ease**: Discuss how easily your solution can be developed and deployed.
  - **Effectiveness**: Describe how effective your solution will be in solving the problem. Mention any potential challenges in implementation.

6. UI/UX Mockup
  - **Screens Overview**: Include wireframes or mockups of your solution's interface. Show the key screens and interactions.

- **User Flow:** Describe the user journey through your solution, including key interactions and expected user behaviors.
- **Accessibility Considerations**: Mention any design decisions to make the solution accessible to a wider audience.

7. Business Scope and Use Case
- **Use Case Scenarios:** Provide at least one or two use case scenarios that describe how users will interact with your solution in real-world situations.
- **Market Need:** Explain the market potential or demand for your solution.
- **Revenue Model (Optional)**: If applicable, describe potential revenue models or monetization strategies.

8.System Design and Architecture
- **Technologies Overview**: Provide a brief description of the key technologies and tools.
- **Design Patterns**: Mention any design patterns (e.g., MVC, Microservices) that you plan to use and why.
- **Functional Flow:** Illustrate the workflow of your system with diagrams (e.g., flowcharts or system architecture diagrams).

9. Coding Approach
- **Development Strategy:** Describe your approach to coding, such as Agile development, modular design, or test-driven development.
- **Coding Standards:** Mention any coding standards or best practices you plan to follow (e.g., code reviews, unit testing).

10. Additional Supporting Documents (Optional)
- **Market Research:** Provide any research or data that supports the need for your solution.
- **Competitor Analysis:** Briefly compare your solution with existing solutions or competitors, highlighting your advantage.
- **References:** Include any links or references that you have used to inform your idea.

11. Presentation (Optional)
- **Summary Slides:** Prepare a presentation (5-7 slides) summarizing your idea. The slides should cover the problem, solution, technology stack, UI/UX design, and implementation strategy.
- **Pitch Focus:** Your presentation should be designed to engage the audience and highlight the key aspects of your solution.

General Tips
- **Clarity & Precision:** Be concise and clear in your explanations. Use diagrams, charts, or visuals wherever necessary.
- **Proofread:** Ensure there are no spelling or grammar errors in your document.
- **Originality:** Focus on original and creative ideas that have a real impact.