AI-POWERED GENDER-BASED VIOLENCE SUPPORT & REFERRAL SYSTEM.

2. SDG Focus

Goal:

- **SDG 3:** Good Health and Well-being
- **SDG 5:** Gender Equality

Problem:

There are limited routes through which survivors of gender-based violence (GBV) can openly report and receive care in terms of abuse-related matters. Conventional ways may be intimidating, stigmatizing, or may lack accessibility, particularly in places in the country or deprived regions.

3. AI Approach

Software Engineering Skills Applied:

- **Automation:** Automatically route survivor reports, reminders, and self-help materials.
- **Testing:** Validate SMS/email automation and reporting workflows.
- **Scalability:** Modular design using reusable components (e.g., contact forms, survivor handbooks, support center chat).

Technical Solution:

Use AI-assisted systems (e.g., form classification, alert systems, SMS automation) to enable:

- Anonymous reporting of GBV cases
- Access to downloadable survivor resources
- Timely connection to local counselors and Safe Nest volunteers
- Data insights for community response

4. Tools & Frameworks

AI/ML:

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- GPT for content generation
- Rule-based routing for GBV reports
- Optional NLP for categorizing cases (future phase)

Software Engineering:

- Git + GitHub for version control
- Web frontend (React/HTML) + printable PDFs (via Python & LaTeX/PDFKit)
- Deployment on Vercel or Netlify

Data Sources:

- Information materials targeted at the public by UN Women, WHO, and Kenyan GBV help lines
- Anonymized community-created Safe Nest cases

5. Deliverables

- ✓ **Code**: Encode contact forms, auto email/report addressing
- ✓ **Deployment**: Online support hub of survivors and comrades
- ✓ **Report:** SDG alignment, Ethical review, and Scalability model summary
- ✓ **Resources:** Survivor handbook, Self-Care Guide, Reporting instructions; all of them are PDFs and can be printed

6. **Ethical & Sustainability Checks**

i. **Bias Mitigation**: Show control in all words and phrases used by respecting the survivor's identity and anonymity and cultural sensitiveness

ii. **Green:** The architecture in HTML/CSS does not require weighty AI computation.

iii. **Scalability:** The downloads are offline compatible; easily deployed architecture, local CBOs

7. **Sample Project Outline**

Phase	Tasks
Ideation	Define GBV support gaps in Kenya; consult survivors and local NGOs
Development	Build forms, survivor handbooks, contact flows, and Safe Nest web hub.
Testing	Usability testing with volunteers; audit ethical risks
Deployment	Host site; distribute handbooks; share with CBO networks
Monitoring	Track usage/downloads; gather feedback; adjust handbook content regularly

How AI for Software Engineering Concepts Apply

Key Concept	Application to SDGs
Automated Testing	Ensure reporting forms work under stress (e.g., high traffic days)
Version Control (Git)	Collaborate on survivor materials and maintain updates
Ethical AI Design	Prevent harm by enforcing data privacy and consent-driven reporting.
Modular Code	Enable replication of Safe Nest centers in other Kenyan counties.

Reflection Questions

- ✓ **SDG Alignment:** How can the handbooks, anonymous reporting, and outreach, designed by Safe Nest with the help of AI, help empower health, safety, and gender equality?
- ✓ **Ethical Risks**: How do we avoid misusing data on survivors or re-traumatization?
- ✓ **Sustainability:** Can our materials be accessed without being online and consumed by a low-bandwidth user?

Why This Project?

- **Relevance:** GBV response and survivor support are major humanitarian and public health issues. Scalable, accessible, and confidential applications provided by AI-powered platforms such as Safe Nest Kenya fill in the existing reporting, referral, and

available resources gaps (SDG 3 (Good Health and Well-being) and SDG 5 (Gender Equality)).

- **Skill Development**: Ethical system design and form handling, user authentication, automated workflows, and web deployment experience will be acquired in a practical manner by the learners. The project further develops competencies in civic technology and trauma-informed UX on vulnerable users.
- **Portfolio:** The project is also able to be displayed in a portfolio to indicate professional skill in AI ethics, inclusive design, safe software development, and real-life software to do well.

Acknowledgment

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