Slide 1: Title

Affordable Nutrition Planner: Empowering Zero Hunger in Kenya 🇰🇪

An AI-powered tool for affordable, nutrient-rich meals

- **By**: [Your Name]

- **Bootcamp Final Project**: September 2025

- **Mission**: Support SDG 2 by reducing malnutrition
  Kenyan Market

Slide 2: The Problem

Hunger & Malnutrition in Kenya 😔

- **Challenge**: 10M+ Kenyans face food insecurity; 26% of children under 5 malnourished (KNBS, 2025).
- **Barriers**:
  - Tight budgets (<KES 300/day for many).
  - Hard to plan nutritious meals with pantry foods.
  - Few accessible tools for low-income households.
- **Impact**: Poor nutrition harms health & growth.

Slide 3: The Solution

Affordable Nutrition Planner 🌟

- **What**: Web app using AI to optimize meal plans.
- **How**:
  - Users input owned foods & budget.
  - AI ensures key nutrients (calories, protein, etc.).
  - Suggests Kenyan recipes (e.g., *ugali na sukuma wiki*).
- **Why**: Free, mobile-friendly, hosted publicly.

App Interface

Slide 4: Features

What Makes It Unique ✨

- 🥕 **Custom Input**: Add owned foods (e.g., Maize Flour, 1 kg).
- 💰 **Dynamic Prices**: Scrapes Naivas.online prices.
- 🌿 **Preferences**: Vegetarian, allergy exclusions (e.g., peanuts).
- 📊 **Visualization**: Nutrient contribution chart.
- 🍲 **Recipes**: Kenyan dishes like *ugali na sukuma wiki*.

Slide 5: Technical Highlights

Built with Cutting-Edge Tech 💻

- **Python**: Scalable core logic.
- **PuLP**: AI-driven optimization (linear programming).
- **Streamlit**: User-friendly web UI.
- **Pandas**: Data processing for foods/nutrients.
- **APIs/Scraping**: Naivas for prices, USDA for nutrients.
- **Deployed**: Free on Streamlit Community Cloud.

Slide 6: SDG 2 Impact

Advancing Zero Hunger 🌍

- 💸 **Affordability**: Plans for budgets as low as KES 300/day.

- ♻️ **Sustainability**: Uses owned foods to reduce waste.

- 📱 **Accessibility**: Public app for community access.

- 🥗 **Nutrition**: Meets needs (2500 kcal, 50g protein).

- 🇰🇪 **Cultural Fit**: Features Kenyan staples & recipes.

Slide 7: Demo

See It in Action 🚀

- **Live URL**: [Insert your Streamlit URL, e.g., https://nutrition-app.streamlit.app]
- **Scenario**:
  - Input: Budget KES 300, owned **Maize Flour (1 kg)**, exclude peanuts.
  - Output: Diet plan, nutrient chart, *ugali na sukuma wiki* recipe.
- **Try It**: Add custom foods (e.g., Apples)!
  App Screenshot

Slide 8: Challenges & Learnings

My Bootcamp Journey 📚

- **Challenges Overcome**:
  - Mastered PuLP for optimization.
  - Handled scraping errors with fallbacks.
  - Debugged Streamlit deployment (`requirements.txt`).
- **Skills Gained**: Python, APIs, web dev, git.
- **Impact**: Built a real-world tool in weeks!

Slide 9: Future Enhancements

Scaling the Vision 🔮

- 🍲 **More Recipes**: Add *githeri*, *ndengu* curry.
- 📱 **Mobile UX**: Optimize for rural smartphone users.
- 🌱 **Sustainability**: Add carbon footprint metrics.
- 📊 **Local Data**: Partner with Kenyan markets for accuracy.
- 🤝 **Outreach**: Deploy in schools & clinics via QR codes.

Slide 10: Call to Action

Join the Fight Against Hunger 🙌

- **For Bootcamp**: Showcases my coding & impact passion.

- **For Communities**: Free tool for Kenyan households—share it!

- **Feedback**: Try the app, suggest features.

- **Next Steps**: Expand to health & sustainability SDGs.

- **Contact**: [Your Email or GitHub]

- **Live Demo**: [Your Streamlit URL]
  Kenyan Market