AI-Powered Blog Generation: Blog Generation Using LLaMA 2 and Streamlit

This presentation outlines the development of an innovative AI-powered blog generation tool, leveraging the capabilities of LLaMA 2 and Streamlit for efficient and high-quality content creation.

Made with Gamma

Team Name:Glichmaverics

Made with Gamma

Team Members:

V. Shashank

- M. Himanish Reddy
- Mohd Hadi
- Prabneet Singh
- S. Thanmai

Made with Gamma

Phase 1: Brainstorming & Ideation

Problem

Many users struggle with writer's block and finding the right structure for blog posts.

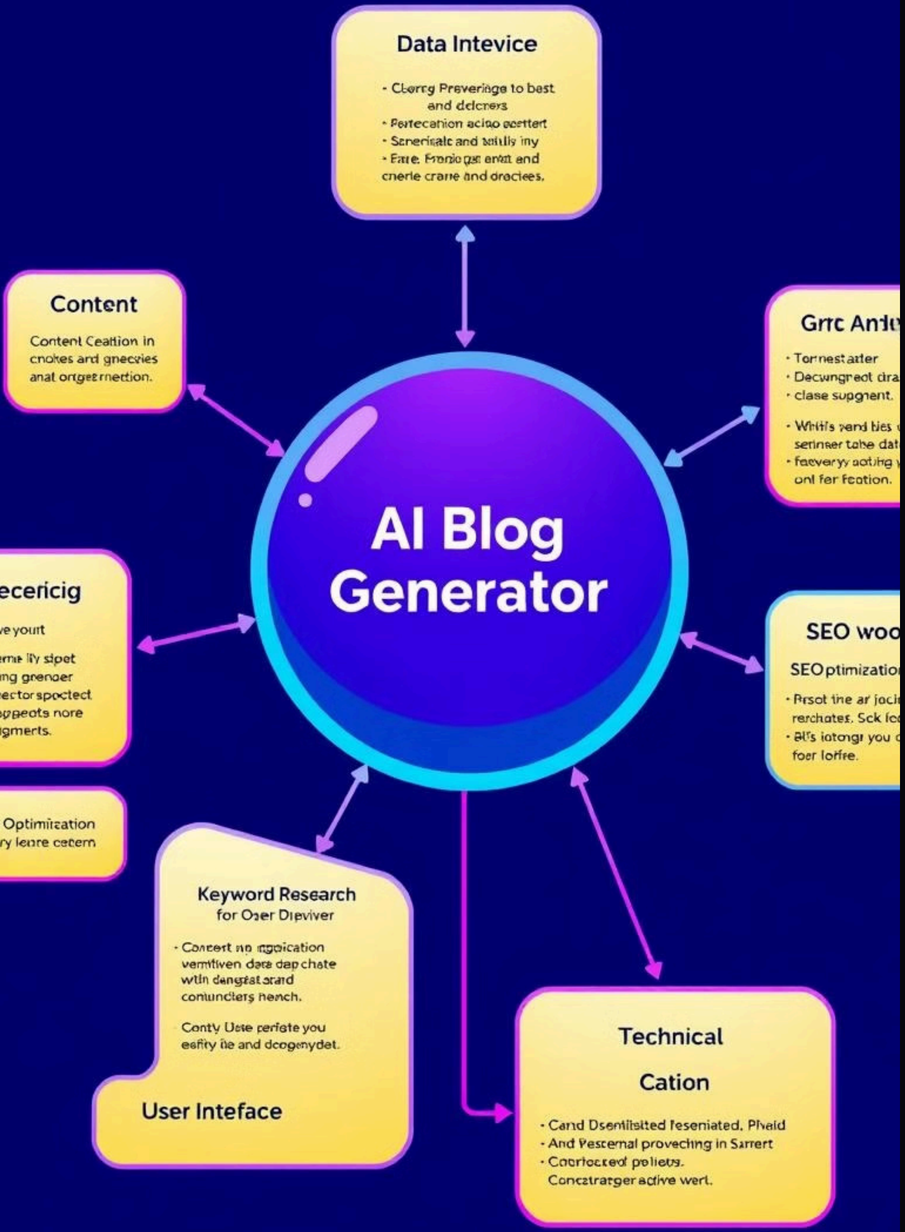
Solution

An AI-powered tool that generates coherent, contextually relevant blog content based on user input.

Target Users

Bloggers, content creators, businesses, students, researchers, and anyone seeking AI-assisted content generation.

Made with Gamma



Phase 2: Requirement Analysis

Technical Requirements

Python, LLaMA 2, Streamlit, Optional database.

Functional Requirements

Context-aware blog generation, customizable prompts, interactive content refinement.

Challenges

Ensuring high-quality output, optimizing performance, managing model computational requirements.

Made with Gamma

Phase 3: Project Design

1. **User Input**
   Users provide topic and key points.
2. **Model Processing**
   LLaMA 2 generates text based on user input.
3. **Output Display**
   Streamlit renders the generated blog content.

Made with Gamma

Phase 4: Project Planning (Agile)

1. Set up environment & dependencies.
2. Integrate LLaMA 2 model.
3. Implement basic UI with input fields.
4. Implement AI blog generation.
5. Debug and optimize outputs.
6. Test AI-generated content and refine UI.
7. Prepare final demo and deployment.

Made with Gamma

Phase 5: Project Development

Model Inference

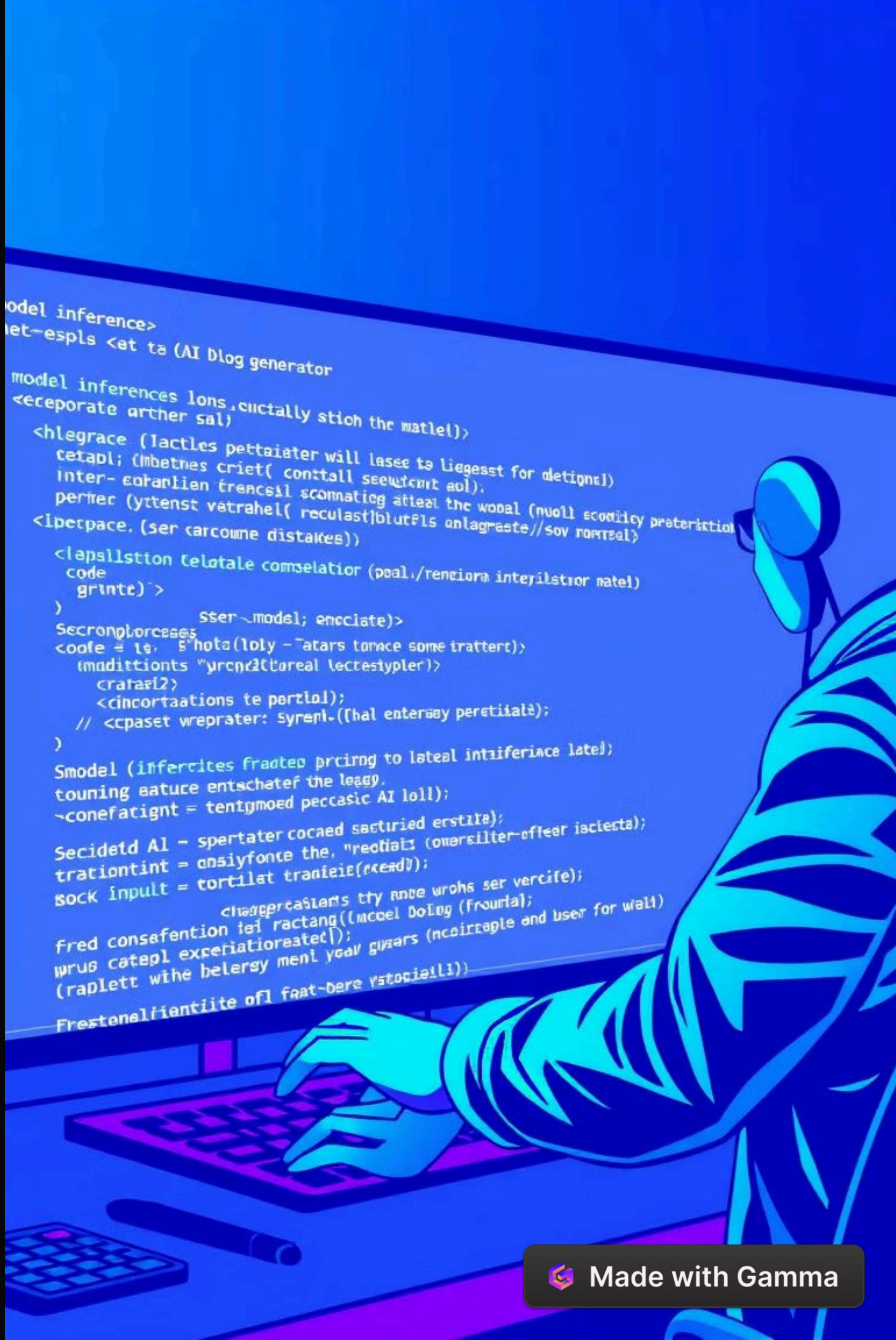
Implement model inference for text generation.

Input Processing

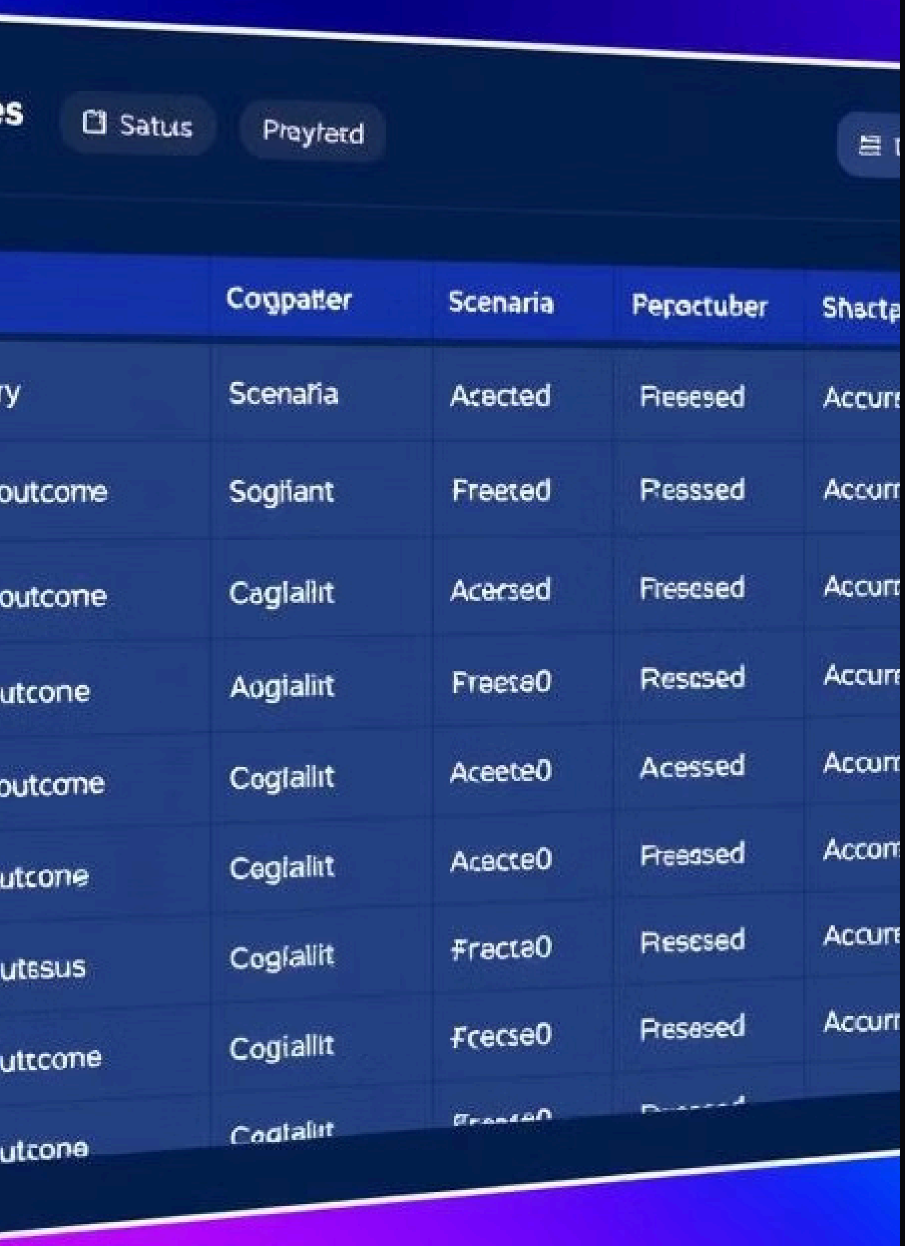
Develop user input processing logic.

Output Optimization

Optimize AI responses for coherence and readability.



Made with Gamma



Phase 6: Functional & Performance Testing

Test Case ID	Category	Test Scenario	Expected Outcome	Status
TC-001	Functional Testing	Input a topic, generate blog	Blog should be generated	Passed
TC-002	Functional Testing	Modify AI-generated content	User should edit content	Passed
TC-003	Performance Testing	Response time under 2s	AI should generate within time limit	Needs Optimization
TC-004	Bug Fixes & Improvements	Fix content coherence issues	AI should generate structured content	Fixed
TC-005	Final Validation	Ensure UI works on all devices	UI should be responsive	Failed - UI issues on mobile
TC-006	Deployment Testing	Host the app using Streamlit Sharing	App should be accessible online	Deployed

Made with Gamma