# Personalized AI Email Generator

## Team Details

Team Name: Team Alpha

Team Members:

- Krithika  
- Theekshana  
- Rishitha

## Phase-1: Brainstorming & Ideation

### Objective:

To develop an AI-powered tool that generates personalized emails based on user preferences, context, and writing tone, saving time and improving communication efficiency.

### Problem Statement:

Many individuals and businesses struggle with writing personalized, professional, and engaging emails. The process is often time-consuming, and crafting the right tone and structure can be challenging, especially for non-native speakers.

### Proposed Solution:

An AI-powered email generator that:  
- Understands user intent and context  
- Generates personalized email drafts in different tones (formal, casual, persuasive, etc.)  
- Suggests improvements based on best practices  
- Integrates with email platforms for seamless usage

### Target Users:

- Business professionals  
- Customer service teams  
- Sales and marketing teams  
- Freelancers and job seekers  
- Students and academicians

### Expected Outcome:

A fully functional AI-powered email generator that can create personalized emails with minimal user input while ensuring professionalism and clarity.

## Phase-2: Requirement Analysis

### Technical Requirements:

|  |  |
| --- | --- |
| Component | Technology |
| Programming Language | Python, JavaScript |
| AI Model | OpenAI GPT, BERT, or custom NLP model |
| Backend | Flask/Django, Node.js |
| Frontend | React.js / Streamlit |
| Database | Firebase / PostgreSQL |
| API Integration | Gmail API, Outlook API |

### Functional Requirements:

- Ability to input email context, recipient details, and tone preferences  
- AI-powered email generation with customization options  
- Grammar and spell check integration  
- Template-based email generation  
- Email scheduling and API integration

## Phase-3: Project Design

### System Architecture:

1. User enters email context and preferences.  
2. AI model processes inputs and generates email content.  
3. User reviews, edits, and customizes the email.  
4. Email is sent or scheduled via API integration.

## Phase-4: Project Planning

### Sprint Planning:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sprint | Task | Priority | Duration | Deadline | Assigned To | Expected Outcome |
| Sprint 1 | Environment Setup & AI Model Selection | High | 6 hours | End of Day 1 | Member 1 | AI Model Selected |
| Sprint 1 | Frontend UI Design | Medium | 4 hours | End of Day 1 | Member 2 | Basic UI Layout |
| Sprint 2 | AI-based Email Generation | High | 6 hours | Mid-Day 2 | Member 3 | AI-generated emails |

## Phase-5: Project Development

Technology Stack Used:  
- Frontend: React.js, Streamlit  
- Backend: Flask, Django  
- AI Model: OpenAI GPT, BERT  
- Database: PostgreSQL, Firebase  
- Deployment: AWS, Heroku

## Phase-6: Testing

Ensuring the Personalized AI Email Generator meets functionality and performance requirements.