

# AI-Powered Email Generator for Personalized Marketing

## 1. Project Overview

### Problem:

Many small business owners, freelancers, and creators struggle to write professional, effective email campaigns. They either don't have the time, marketing skills, or tools to do it efficiently.

### Goal:

Create a web application that uses AI to help users quickly generate personalized email campaigns based on a short text description of their product or service.

### Core Features:

- A single input box where users describe what they want to promote (such as: "I sell candles made with essential oils").
- AI generates a 3-part email sequence (subject line, body, call to action).
- Users can fill in names manually (or with sample names via the Faker library) to personalize emails.
- Preview emails before downloading or copying them.
- Everything happens on one landing page. No extra pages or complex interface.

## 2. Use Case and Audience

### Target Users:

- Small business owners and solopreneurs
- Creators and freelancers
- People with little to no marketing or writing experience

### Example Scenario:

A candle maker types a short sentence into the app. The AI generates a mini-campaign (3 emails) with personalized content like:

- Email 1: Introduction and product story

- Email 2: Benefits and testimonials
- Email 3: Discount offer and call to action

### 3. Data and Tools

#### Data:

- Sample marketing email datasets from Hugging Face such as [email-generation-dataset](#)
- Open email templates from sources like HubSpot, Mailchimp blogs, or Kaggle marketing datasets
- Faker library for generating sample contact names and emails (to show personalization)

#### Libraries & APIs:

- OpenAI GPT-3.5 for text generation
- Faker.js or Python Faker for sample names
- Backend with FastAPI or Express

### 4. Timeline & Milestones (6 Weeks)

Week 1	Finalize scope, set up basic webpage layout
Week 2	Implement input form + connect to AI API
Week 3	Generate email sequences (3 parts) from text prompt
Week 4	Add personalization using sample names
Week 5	Create email preview UI + copy/download function
Week 6	Testing, bug fixing, deploy on Azure

## 5. Evaluation & Testing

### Testing:

- Manual testing with sample business types (candles, tutoring, art prints, etc.)
- Tests for text generation function
- Feedback form on the page for user reactions

### Deployment:

- One-page site hosted on Vercel, Netlify, or GitHub Pages

## 6. Ethical & Responsible AI

- **Privacy:** No user data stored; everything runs client-side or in-memory
- **Bias:** Diverse examples used in prompts and dataset to reduce bias
- **Sustainability:** Using existing pre-trained models like GPT-3.5 to avoid heavy training

## 7. Project Outcomes & Future Ideas

### Expected Outcomes:

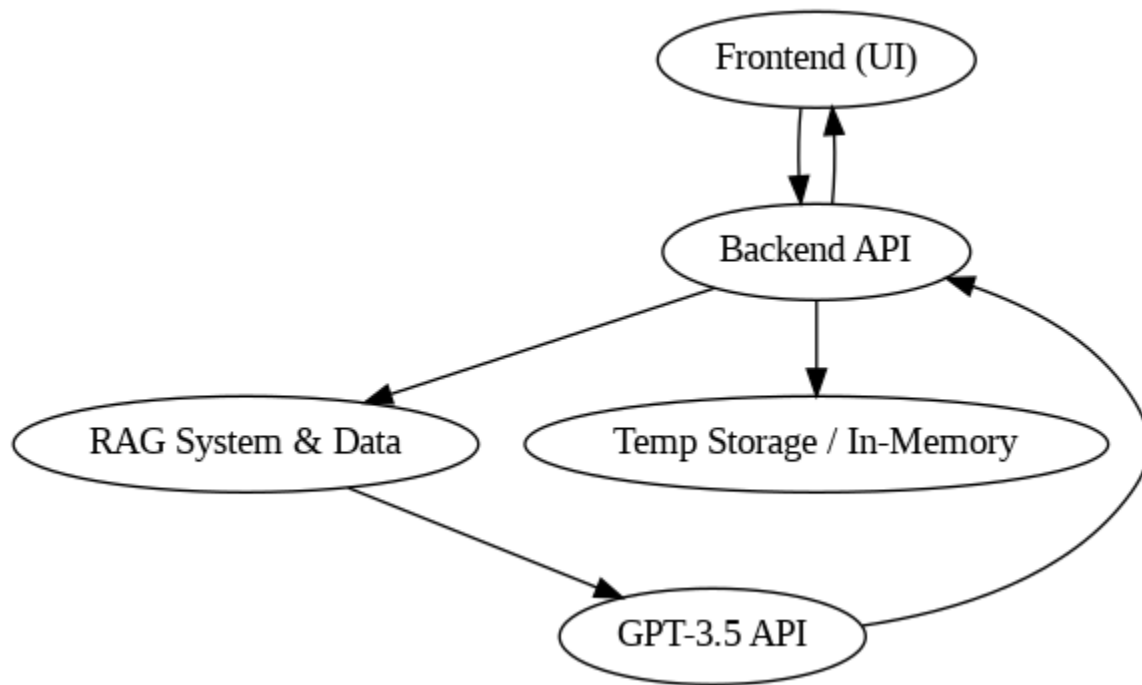
- A working tool that helps users generate effective email campaigns
- Great portfolio piece showing frontend + AI integration

### Future Features:

- A/B testing of generated emails
- Industry-specific templates such as fitness, coaching, etc.
- Campaign scheduler and analytics
- Multilingual support

## 8. References

- [Hugging Face Email Generation Dataset](#)
- [Faker Library](#)
- [GPT API Documentation](#)
- [Mailchimp Blog](#)
- [HubSpot Email Marketing Templates](#)



## AI Email Generator

Describe your product or service:

[Generate Emails]

### Email 1:

Subject: ...

Body: ...

CTA: ...

[Personalize]

[Copy]

[Download]

### Email 2:

Subject: ...

Body: ...

CTA: ...

[Personalize]

[Copy]

[Download]

### Email 3:

Subject: ...

Body: ...

CTA: ...

[Personalize]

[Copy]

[Download]

