

# **Comprehensive Documentation for Marketing Content Generation App**

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## Introduction

This document provides comprehensive guidance on how to use the application, including API usage, authentication, input processing, response generation, and deployment instructions.

We used Streamlit for simple user interface for generating marketing content for social media posts. Users can access the application through a web browser and interact with it.

Local URL: <http://localhost:8501>

Network URL: <http://192.168.1.40:8501>



The screenshot shows a web application titled "Generate Marketing Content" on a dark background. Below the title is a subtitle: "Create compelling marketing content effortlessly! Simply fill in the details below and let our AI generate engaging posts for you." The form consists of several input fields and a button:

- Format of the Post (e.g., Twitter, LinkedIn, etc.):** A text input field.
- Topic of the Post(e.g., Usage of AI in dailylife etc.):** A text input field.
- Emotion of the Post:** A dropdown menu with "Positive" selected.
- Target Audience for this Post(e.g., Students, Senior Citizens etc.):** A text input field.
- Desired Word Count for the Post (e.g., 150):** A text input field.
- Generate Content**: A button at the bottom of the form.

*User interface of the app*

## Input Parameters

format\_type: Format of the post (e.g., Twitter, LinkedIn, etc.)

topic: Topic of the post

emotion: Emotion of the post (Positive, Negative, Neutral)

target\_audience: Target audience for the post

word\_length: Desired word count for the post

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http://localhost:8501/

## Generate Marketing Content

Create compelling marketing content effortlessly! Simply fill in the details below and let our AI generate engaging posts for you.

Format of the Post (e.g., Twitter, LinkedIn, etc.):

Twitter

Topic of the Post(e.g., Usage of AI in daily life etc.):

Driverless cars

Emotion of the Post:

Positive

Target Audience for this Post(e.g., Students, Senior Citizens etc.):

senior citizens

Desired Word Count for the Post (e.g., 150):

280

Generate Content

### Generated Content:

1 of 2

07-05-2024, 12:50 am

*This is a sample input given to the application.*

The application processes user input to generate marketing content based on the provided parameters.

**Validation:** The input parameters are validated to ensure completeness and correctness.

**Formatting:** The input parameters are formatted into a prompt template for AI content generation.

## Response Generation

The application uses Ollama from the LangChain Community. We used llama3 as the model for content generation.

**Content Generation:** The input parameters are passed to the AI model, which generates marketing content based on the provided topic, emotion, target audience, and word count.

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Here's a potential Twitter post:

"Rev up your independence! Driverless cars are changing the game for seniors like you! No more worrying about parking or navigating unfamiliar streets. Just hop in and enjoy the ride! With self-driving tech, you can focus on what matters most - spending time with loved ones, pursuing hobbies, or simply enjoying the view. And don't worry about safety - these cars are designed with your well-being in mind. Imagine having more freedom to do what you love, without the hassle of driving. The future is bright, and it's just around the corner! #DriverlessCars #SeniorFreedom #TechnologyForGood"

This post aims to create a positive emotional response by emphasizing the benefits of driverless cars for senior citizens, such as increased independence, reduced stress, and more time for enjoyable activities. The tone is upbeat and encouraging, using words like "rev up," "changing the game," and "bright" to convey a sense of excitement and possibility. The hashtags #SeniorFreedom and #TechnologyForGood are also included to help reach a wider audience interested in senior-focused technology. Overall, this post aims to inspire and inform senior citizens about the potential benefits of driverless cars, while also showcasing the company's commitment to using technology for good.

Sample output generated by the model.

## Authentication

This app requires authentication to access the Langchain API. Follow these steps to authenticate:

- **Create a Langchain Account:** Visit the Langchain website and create an account if you haven't already.
- **Generate API Key:** After creating an account, navigate to the settings section where you can find the option to generate an API Key. Click on it to create a new API Key.
- **Store API Key:** Once the API Key is generated, store it securely. We recommend storing it in a dotenv file as an environment variable.
- **Load API Key:** In the main file of the application, use `os.getenv` to load the API Key from the dotenv file into a variable.

## Deployment Instructions

Deploying the Marketing Content Generation App locally is a straightforward process.

### Prerequisites

- Python 3.x installed on your system
- Access to the source code of the application
- Environment variables configured (API key)
- OLLAMA installed on your system

### Steps

1. Clone the repository containing the application source code.
2. Install the required dependencies using `pip install -r requirements.txt`.
3. Set up the environment variables:
4. Run the application using `streamlit run app.py`.
5. Access the application through the provided URL (e.g., `http://localhost:8501`).
6. Fill in the input fields with the desired parameters.
7. Click on the "Generate Content" button to generate marketing content.
8. The generated content will be displayed on the interface.