

Generative AI and its Applications

Hands On -1 Unit -1

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Class: 6F

Date: 27-01-2026

Problem Statement: Daily Horoscope Generator

Goal: Input a zodiac sign and generate a vague but convincing fortune.

Tech: GPT-2

ABSTRACT

This project creates a Daily Horoscope Generator using GPT-2 text generation model from Hugging Face. The system generates personalized predictions for all 12 zodiac signs across four categories: general, love, career, and health. Each zodiac sign has stored data like ruling planet, element, traits, and lucky numbers. The generator combines these details with prompt templates and feeds them to GPT-2, which completes the text to create unique horoscopes. Generation parameters like temperature and top_p control the creativity and randomness of outputs. The system demonstrates how pre-trained language models can generate creative, convincing content without needing additional training.

DOCUMENTATION

What I Understood:

The task was to build a program that generates daily horoscopes for zodiac signs. Horoscopes should sound realistic and personalized but stay vague enough to apply to anyone. This needs combining real astrological information with AI text generation. I learned that Hugging Face provides ready-to-use models like GPT-2 for text generation. The model works by completing prompts we give it. The quality depends on how we write the prompts and set generation parameters. Temperature controls randomness (higher means more creative), and max_length limits how long the output is.

What I Built:

1. A database storing information for all 12 zodiac signs including their element, ruling planet, personality traits, and lucky numbers.

2. Prompt templates for four life areas: general outlook, love, career, and health. These give starting phrases for the AI to complete.
3. A generation function that picks a zodiac sign's traits and builds a prompt like "Today brings cosmic influences toward [trait] energy and [planet]'s influence." GPT-2 then completes this into full horoscope text.
4. A class that generates all four horoscope types, adds lucky numbers and colors, and displays everything in a clean format.

The system successfully creates different horoscopes each time while keeping them relevant to each zodiac sign's characteristics.

How It Works

When you input a zodiac sign, the generator creates four types of predictions:

- General outlook for the day
- Love and relationships
- Career and professional life
- Health and wellness

The generation process combines structured prompts with the sign's traits and ruling planet. For example, for Virgo (Earth sign ruled by Mercury with "practical" traits), it builds prompts like "Today brings cosmic influences that guide you toward hardworking energy and Mercury's influence."

GPT-2 then completes these prompts to create unique horoscope text each time.

SAMPLE OUTPUT

Import Dependencies

```
import os
os.environ['TF_CPP_MIN_LOG_LEVEL'] = '3'

from transformers import pipeline, set_seed, logging
import random
from datetime import datetime
import warnings

warnings.filterwarnings('ignore')
logging.set_verbosity_error()
```

132s

```
c:\Users\Monish\ApnData\local\Programs\Python\Python313\Lib\site-packages\tqdm\auto.py:21: TqdmWarning: IPython not found. Please update jupyter and ipywidgets. See https://ipywidgets.readthedocs.io/en/stable/user\_install.html
from .autonotebook import tqdm as notebook_tqdm
```

Hugging Face Pipelines

```
generator = pipeline('text-generation', model='gpt2', max_new_tokens=80)
```

3.6s

```
... Loading weights: 100%|██████████| 148/148 [00:00<00:00, 338.79it/s, Materializing param=transformer.wte.weight]
```

Zodiac Sign Data and Templates

```
# Zodiac sign characteristics and keywords
ZODIAC_DATA = {
    'aries': {
        'element': 'Fire',
        'traits': ['bold', 'ambitious', 'confident', 'enthusiastic', 'dynamic'],
        'lucky_numbers': [1, 9, 15, 24],
        'planet': 'Mars'
    },
    ...
}
```

0.05

```
0.05
```

0.05

```
# Complete demonstration with all features
demo_sign = "Virgo"

print("DAILY HOROSCOPE GENERATOR - TEXT GENERATION DEMO")
print("-*70 + "\n")

print("Generating [demo_sign.upper()] horoscope...")
demo_horoscope = horoscope_gen.generate_full_horoscope(demo_sign)
horoscope_gen.display_horoscope(demo_horoscope)
print("Summary: [demo_horoscope['summary']]")\n

print("-*70)
print("\nText Generation Demo Complete!")

18.3s
```

DAILY HOROSCOPE GENERATOR - TEXT GENERATION DEMO

```
[Generating VIRGO horoscope...]
```

⌚ VIRGO - January 29, 2026
Element: Earth | Planet: Mercury
Lucky: #F4 | Color: white

General: Today brings cosmic influences that guide you toward hardworking energy and Mercury's influence. This is why I want to show you how you can improve your energy level while staying on track. For more information on how to make your own Mercury light, check out this book called Mercury Light and Your Energy. I'd also like to show you how to get the highest quality Mercury light to you, and to help you with your energy level. Here are some of my favorite.

Love: Deep connection and passion are supported by practical energy and Mercury's influence. The world's oceans are covered in bright, bright sunlight, and the planet has an average temperature of 70 degrees Fahrenheit.

Career: Workplace opportunities arise when you practical energy and Mercury's influence. This is the second major component of the "B" component of Mercury's cycle.

Health: Healing energy surrounds your journey with practical energy and Mercury's influence. Mercury is not an electromagnetic source but rather a source of heat and energy.

Summary: Today brings cosmic influences that guide you toward hardworking energy and Mercury's influence. This is why I want to show you how you can improve yo

Text Generation Demo Complete!

Sign: Virgo

DAILY HOROSCOPE GENERATOR - TEXT GENERATION DEMO

[Generating VIRGO horoscope...]



VIRGO - January 29, 2026

Element: Earth | Planet: Mercury

Lucky: #14 | Color: white

General: Today brings cosmic influences that guide you toward hardworking energy and Mercury's influence. This is why I want to show you how you can improve your energy level while staying on track.

For more information on how to make your own Mercury light, check out this book called *Mercury Light and Your Energy*.

I'd also like to show you how to get the highest quality Mercury light to you, and to help you with your energy level.

Here are some of my favorite.

Love: Deep connection and passion are supported by practical energy and Mercury's influence. The world's oceans are covered in bright, bright sunlight, and the planet has an average temperature of 70 degrees Fahrenheit.

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