DAILY HOROSCOPE AUTOMATION BOT

Using Zapier, UChat and DivineAPI

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Project Objective:

Building an Automated Daily Horoscope Delivery System Using UChat, Zapier, and the DivineAPI

Objective:

The main objective of this project is to work across APIs and their integration into automation tools such as Zapier. We will build an automated system that sends a daily horoscope to users via UChat, using the DivineAPI for fetching horoscope data.

The Process of Building:

1. Understanding the APIs and Tools:

Three tools are involved in the project namely:

Zapier

Zapier is an automation service that allows end users to integrate the web applications they use and automate workflows. In this project, it will be used to automate a workflow every day which consists of fetching the horoscope data for the day from API known as DivineAPI, fetching user data from a chatbot service known as Uchat, formatting the received data into a presentable format, and sending the data to all the subscribed users according to their registered zodiac signs.

DivineAPI

DivineAPI is a horoscope API that delivers horoscope insights for all twelve zodiac signs and offers easily accessible horoscope data. In this project it is used to get all the horoscope data that is delivered to the users.

Uchat

UChat is a chatbot platform with features such as creating chatbots on various communication handles such as web chat, WhatsApp, Telegram etc; a visual flow builder and other helpful features. In this project, Uchat is used for setting up a chatbot which provides a subscription service where users can register their zodiac signs which is then stored for each individual user. Then this information is

used by the automation service to send the horoscope data to the subscribed users through the chatbot itself. The entire flow for that chatbot was designed through the flow builder which is tuned according to the user messages, responses, and choices

2. API Connection and Data Fetching:

The first crucial step for the project was to set up an account in DivineAPI and connecting it to the Zapier platform. This was done through a webhook in the Daily Horoscope zap which sent a POST request with all the necessary parameters in the body.



The parameters and the endpoint were available in the API documentation on the DivineAPI website which provided the correct format as well as the acceptable inputs.

API Endpoint

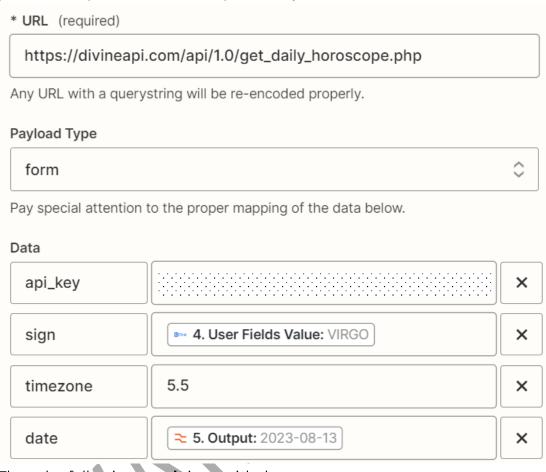
POST

https://divineapi.com/api/1.0/get_daily_horoscope.php 📮

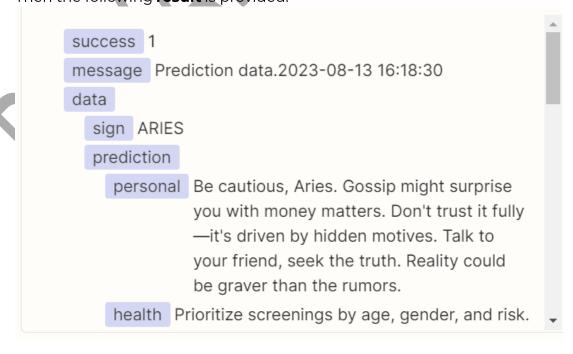
Query Parameters

Field	Туре	Description
date	Date	Current Date in Y-m-d Format (Ex: 2020-12-25)
sign	String	A zodiac sign.
api_key	String	Your API Key
timezone	Float	timezone, eg: 5.5 Timezone List

Using this information, the webhook was set-up and a test information retrieval is done which fetches the data from DivineAPI using the provided parameters provided in the request body.



Then the following **result** is provided.



3. Setting Up UChat:

Second step is to set up the UChat service that will provide the chatbot through which the communication between the users and the system will take place and which will act as the interface for the users through which the daily horoscope service can be subscribed and used.

In Uchat, we start by creating a new "omni – channel" bot which is can be implemented in various communication handles all at once. Therefore, the bot is available is to be used on all the leading communication channels and social media handles like WhatsApp, Telegram, Instagram, Facebook etc. using the same flow which is designed once.

Then we move onto the flow builder to build the framework. Here we ascertain the flow of automated messages i.e., the responses to user messages, the actions performed based on the choices provided to the user etc. Here is the custom flow designed for the project (attached on the next page).

The flow starts from determining whether the user is subscribed or not and then is roughly divided into 2 sub-flows:

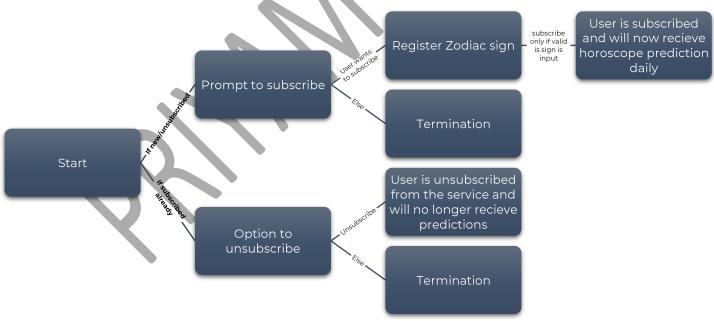


Figure - Flow Tree

Whenever a user subscribes to the service, he/she is tagged with a subscriber tag which is then used to differentiate between subscribers and non-subscribers and hence it dictates the starting flow.

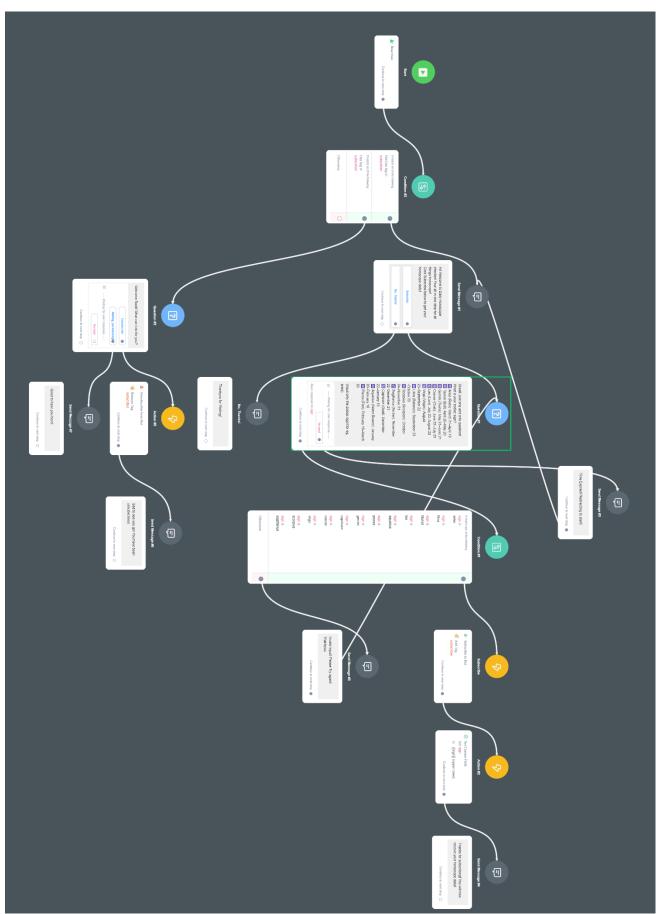


Figure – UChat Flow

New User/Unsubscribed User:

The flow starts with a prompt to subscribe and if the user chooses to do so then the user is asked for a text input for their zodiac sign. The input by the user is then validated against correct inputs which have been already programmed and hence a subscription takes place only when a correct input is given. The user is then tagged with the subscriber tag and the zodiac sign is saved.

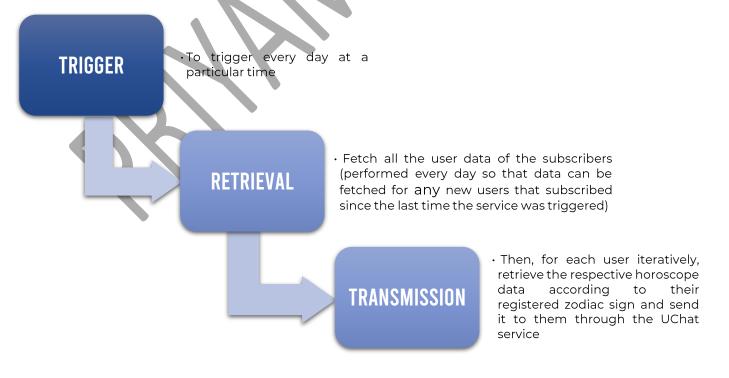
Subscribed User:

In case of a subscribed user, when a conversation is started, the user is given the option to unsubscribe from the service. If this option is chosen by the user, the user is unsubscribed i.e., the subscriber tag is removed from the user following which the user does not receive any horoscope information any more.

4. Creating the Automated Workflow in Zapier:

The automation that will handle the retrieval of horoscope data and its delivery to users every day is created through a "Zap", a name for the automated workflows that are created in the automation service known as Zapier.

The aim for the automation will be:



This is achieved by creating the following **zap** in Zapier:

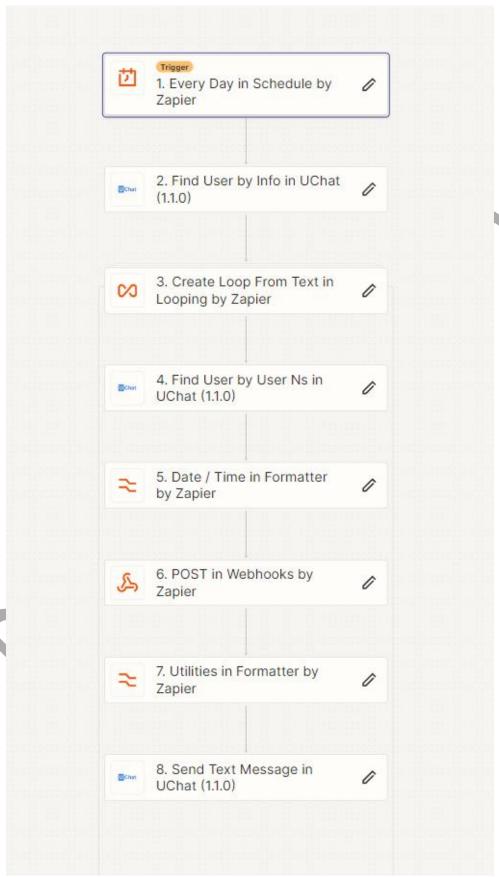
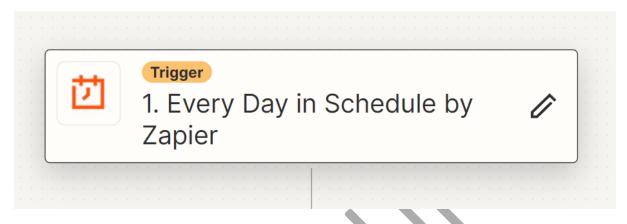


Figure - Zapier Automation Workflow

Step-by-step explanation of the flow:

Step-1

The flow starts with the trigger which triggers the zap/automation every day. It is responsible for the start of the service every day at a particular given time and provides the data for current date which is used later.

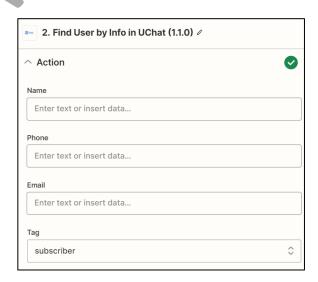


Step-2

All the user data is fetched from the UChat service using a connection to the UChat service and a link to our Horoscope chatbot.



Parameters like fetching the data of users who are tagged with the subscriber tag helps segregate the user data and only the information for subscribers is retrieved.



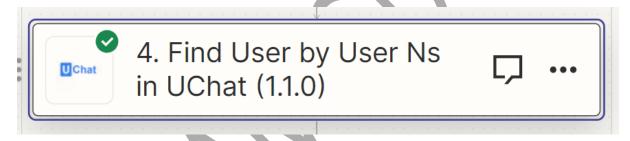
Step-3

The user information retrieved in the previous step is now used to iterate over all users individually and then performs the steps that follow for each user.



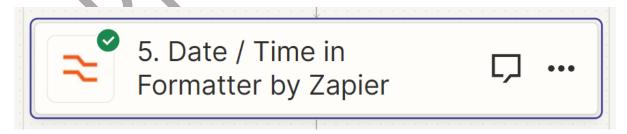
Step-3.1

For each user, the user data is segregated and only the data for one user is used at a time.



Step-3.2

The current date information received from step 1 is formatted for use for the API request in the next step. It simply formats the date into a YYYY-MM-DD format which is supported by the request body.



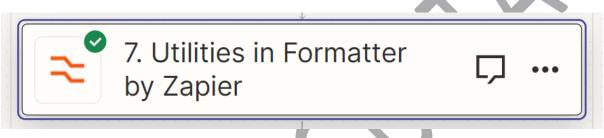
<u>Step-3.3</u>

As configured earlier in API connection and data fetching, the webhook is set up which takes the current iteration's user data i.e., the registered zodiac sign, combines it with the other necessary parameters and sends a POST request to DivineAPI for the horoscope data for the current sign. Then, the respective horoscope predictions are received.



Step-3.4

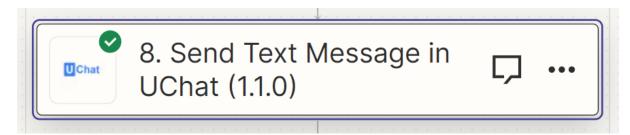
The data is formatted for beautification purposes.



Step-3.5

The formatted message is then sent to the respective user through the UChat service.



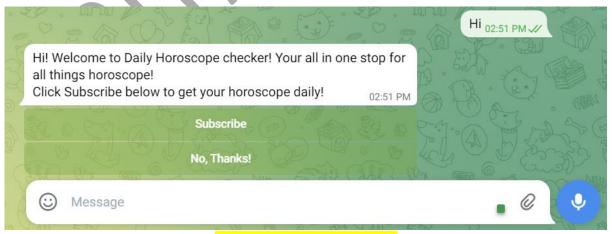


The workflow is then complete. This workflow leads to the automation of data retrieval and transmission daily and completes the entire process of building the daily horoscope service

5. Testing:

- Conducted exhaustive testing to make certain that the workflow operates without any hiccups and that the horoscopes are sent to the appropriate people.
- -Implemented data validation techniques so that only correct data is registered and fed to the internal requests to the API
- -Implemented quality of life changes and features like tags that make user segregation more accessible and visible as well as communication quips so to make the bot look friendly and more fun to interact during usage
- -Implemented an option for unsubscribing from the service for user accessibility and utility
- Carried out debugging and repairs on any problems that were discovered during testing.

Demo for NEW User/Unsubscribed User



OPTION FOR SUBSCRIBING -



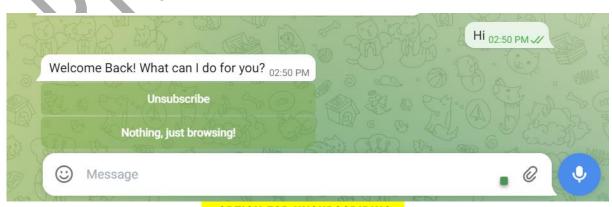
- CLICKING ON SUBSCRIBE ASKS FOR A ZODIAC SIGN TO BE REGISTERED -

-> INPUTTING A ZODIAC SIGN <-



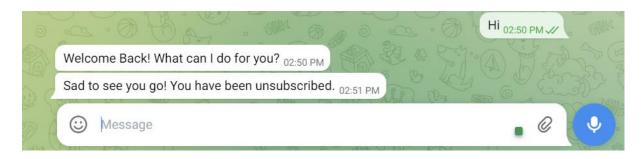
- SUBSCRIPTION SUCCESSFUL AND RESPONSE FROM THE BOT-

Demo for Subscribed User



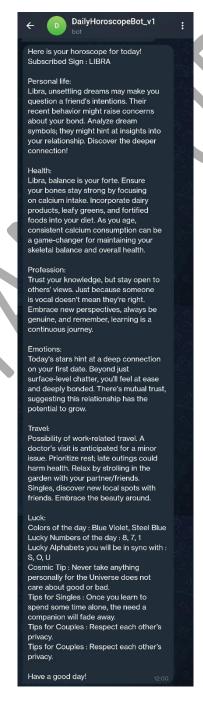
OPTION FOR UNSUBSCRIBING -

-> CLICKING ON UNSUBSCRIBE <-



- THE USER IS UNSUBSCRIBED -

Horoscope prediction which is received by the subscribed users



Challenges faced during the project:

- Learning all about the tools which were involved being a first-time user. Overcome by diving into the documentation, help articles and the community discussions on similar topics. Comprehensive testing and trial & error also became key factors in overcoming the same.
- Building comprehensive flows to cater to all possibilities of user flow was another challenge. Dealt by understanding the user/audience's perspective which led to making a user-friendly workflow.

Accessing the bot

The Bot was tested through webchat and telegram and is compatible with many other communication handles as well.

Link for Telegram for Demo purpose:

https://t.me/Horoscopev1bot

Note: Since the bot requires premium features, the entire project is built using trial accounts which will soon close and hence the bot will shut down.

THANKYOU

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