# Bots Mastery: Getting Started with Bot Development (Python)

# About Me

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Python and Golang Developer

Technical Writer

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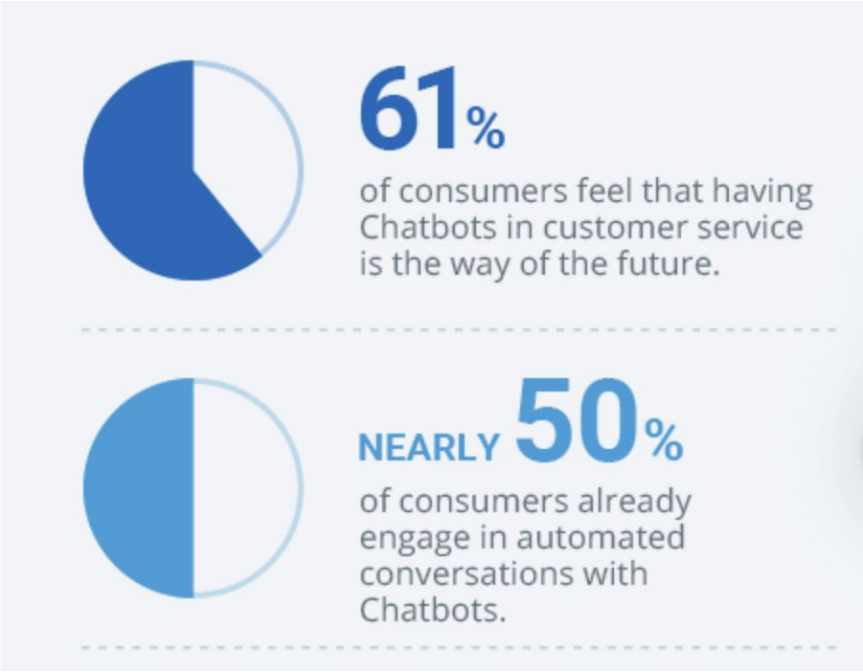
# What is a Bot?

A bot is a software application that is programmed to do specific tasks. They run according to their instructions without a human user needing to start them up every time manually.

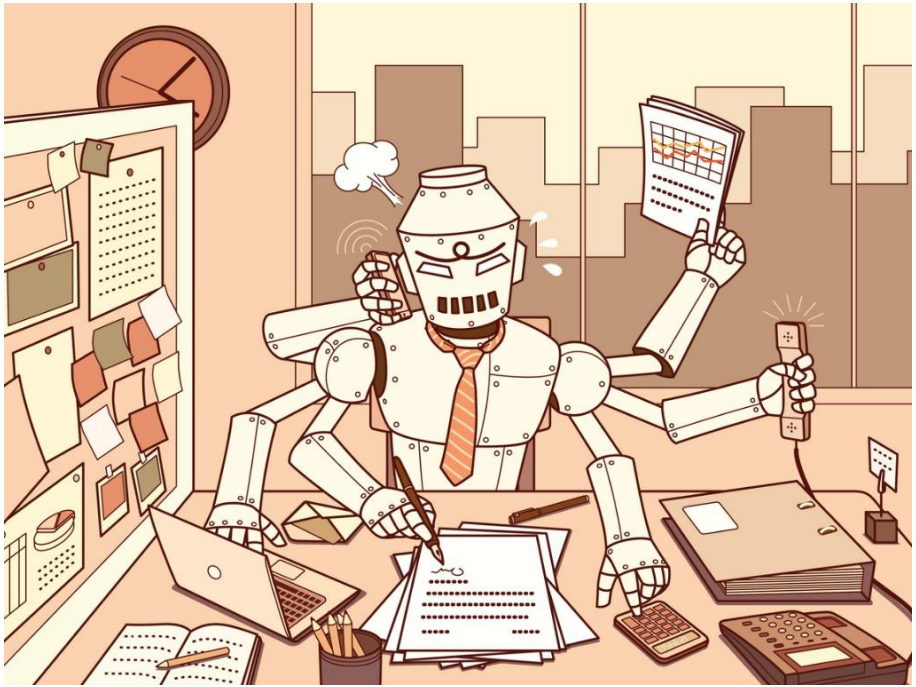
# Some Facts About Bots





## Bots Drive Almost 40% of Internet Traffic

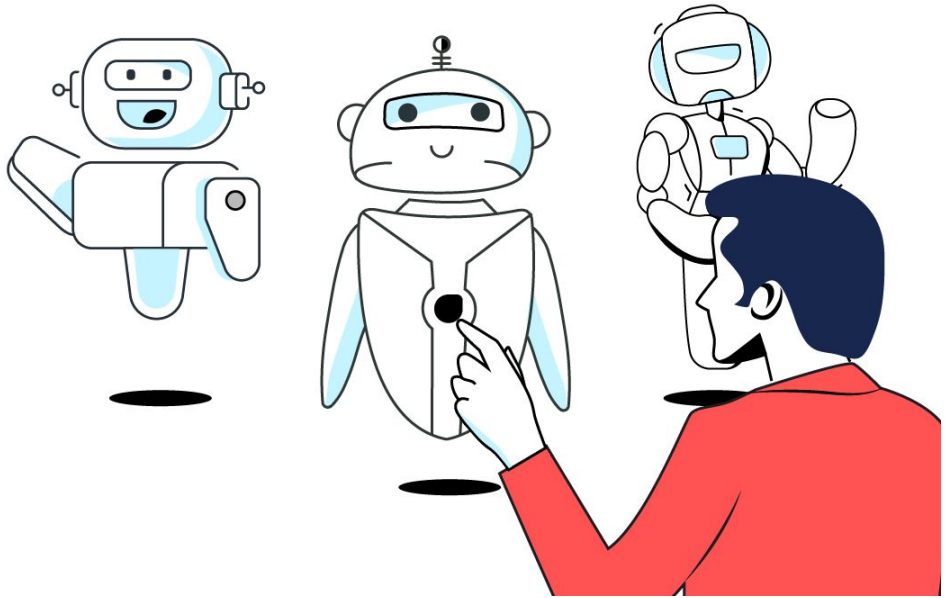
# What Can Bots Do?



- Serve as customer support to resolve user queries.
- Scrape the web for information.
- Act as virtual assistants.
- Healthcare aid in diagnosing ailments.
- Book reservations.
- Serve as sources of entertainment.
- Automate our daily routines.
- Help monitor activities.
- Scan for vulnerabilities and carry out DDOS attacks.

# Categories of Bots

- Chat Bots
- Web Scrapers & Crawlers
- Social Media Bots
- Informational Bots
- Entertainment Bots
- Virtual Assistants
- Spam Bots
- Malicious Bots



# How are Bots Created?

- Python
- Golang
- Java
- JavaScript
- Ruby
- Clojure

# Exercise One: Write a Bot to Generate Dog Images

```python
import webbrowser
import requests


def generate_dog_image():
    r = requests.get("https://random.dog/woof.json")
    if r.status_code == 200:
        image_url = r.json()["url"]
        return image_url
    else:
        return "an error occured while generating dog image!"


if __name__ == "__main__":
    dog_image = generate_dog_image()
    webbrowser.open(dog_image)
```

# Exercise Two: Write a Bot to Fetch Crypto Prices

```python
import requests


def fetch_crypto_price(ticker):
    ticker = ticker.upper()
    r = requests.get(
        f"https://min-api.cryptocompare.com/data/price?fsym=
{ticker}&tsyms=USD")
    if r.status_code == 200:
        response = r.json()
        if response.get("Response") == "Error":
            return "the specified ticker does not exist!"
        else:
            return f"1 {ticker} ~ ${response['USD']:,}"
    else:
        return "an error occured while fetching price info!"


if __name__ == "__main__":
    while True:
        ticker = input("Enter a ticker: ")
        print(fetch_crypto_price(ticker), "\n")
```

# Exercise Three: Write a Word Meaning Finder Bot

```python
import requests
from bs4 import BeautifulSoup


def find_word_meaning(word):
    r = requests.get(f"https://www.dictionary.com/browse/{word}")
    if r.status_code == 200:
        page = BeautifulSoup(r.text, "html.parser")
        luna_pos = page.find("span", {"class": "luna-pos"}).text
        word_meaning = f"{word} - {luna_pos}\n\n"
        meanings = page.find(
            "div", {"class": "css-1uqerbd e1hk9ate0"}).find_all("div",
{"class": "e1q3nk1v2"})
        for i, meaning in enumerate(meanings):
            word_meaning += f"{i + 1} - {meaning.find('span').text}\n\n"

        return word_meaning.strip()
    elif r.status_code == 404:
        return "the specified word does not exist!"
    else:
        return "an error occured while finding word meaning!"


if __name__ == "__main__":
    print(find_word_meaning("intense"))
```

# Live Coding Session: Let's Build a Telegram Bot

# Social Media Bot Platforms

- Telegram
- Slack
- Discord
- Twitter
- Facebook Messenger
- Reddit

# Learning Resources

- https://github.com/LordGhostX/ECXBotsMastery
- https://github.com/python-telegram-bot/python-telegram-bot
- https://www.section.io/engineering-education/cryptocurrency-tracking-telegram-bot/
- https://github.com/public-apis/public-apis


**Link to Slides:**
https://bit.ly/ECXBotsMastery

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