

**How long will designing the
following responsive web
page using CSS media
queries take?**

Desktop View



Mobile View



Now, if the same responsive web page design must be created using Bootstrap, how long will it take?

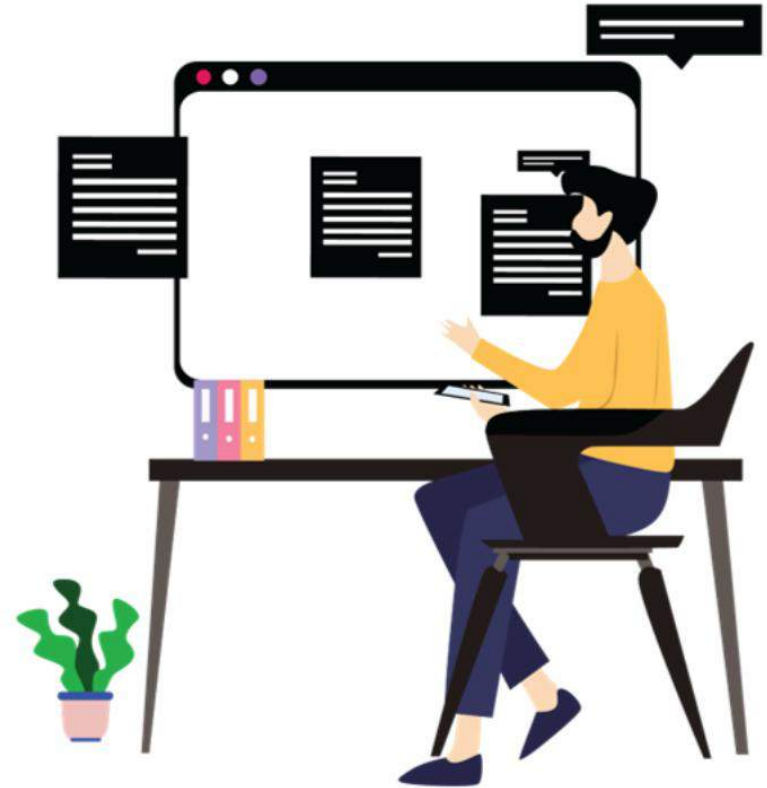


Think and Tell

Is there any tool that can help to create responsive web page designs in less time?

Generative AI models

Gen AI Enabled Responsive Web Page Design

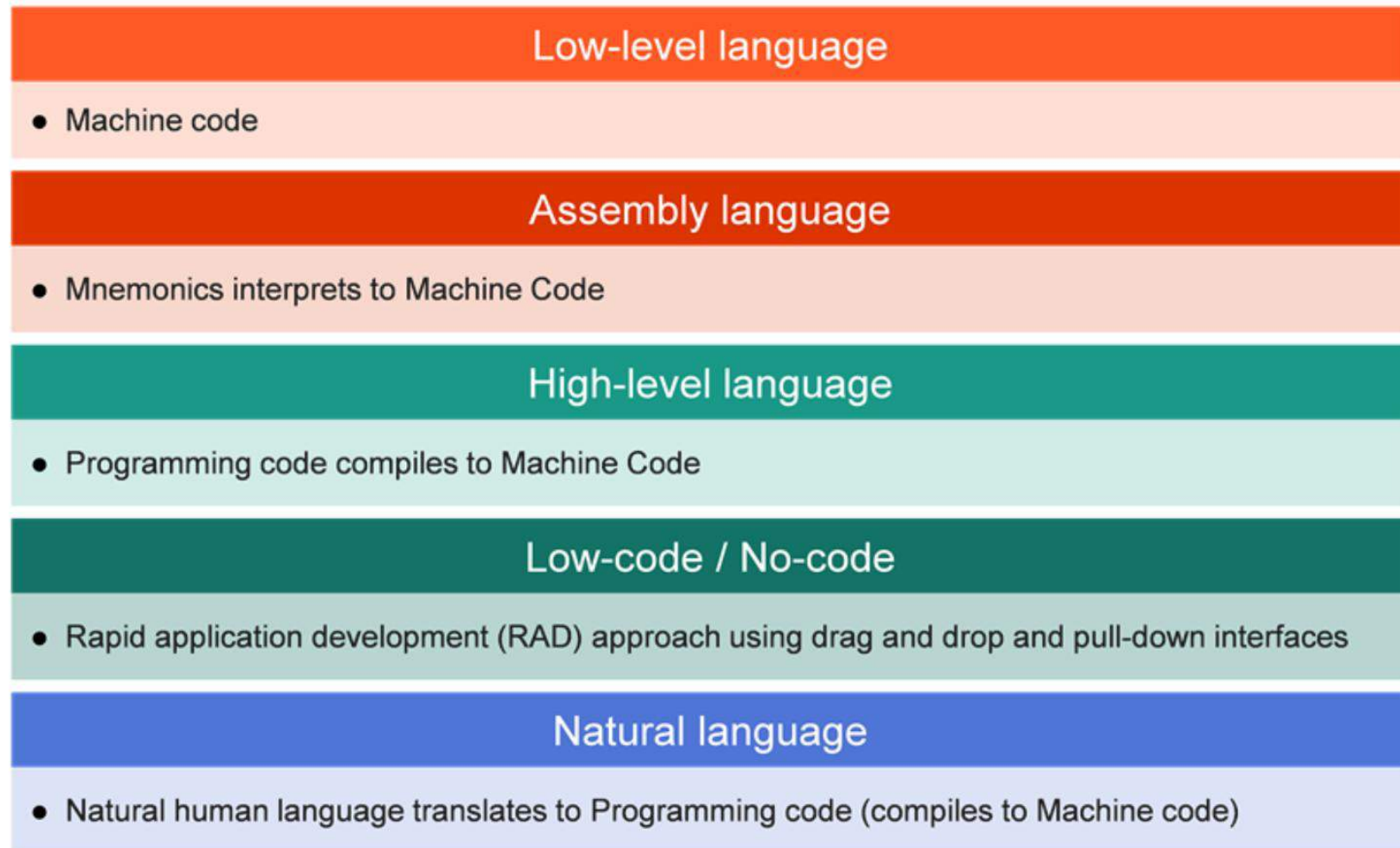




Learning Objectives

- Get an overview of Generative AI
- Explore generative AI tools
- Get introduced to ChatGPT
- Explore ChatGPT in action

Evolution in the Field of Program Writing

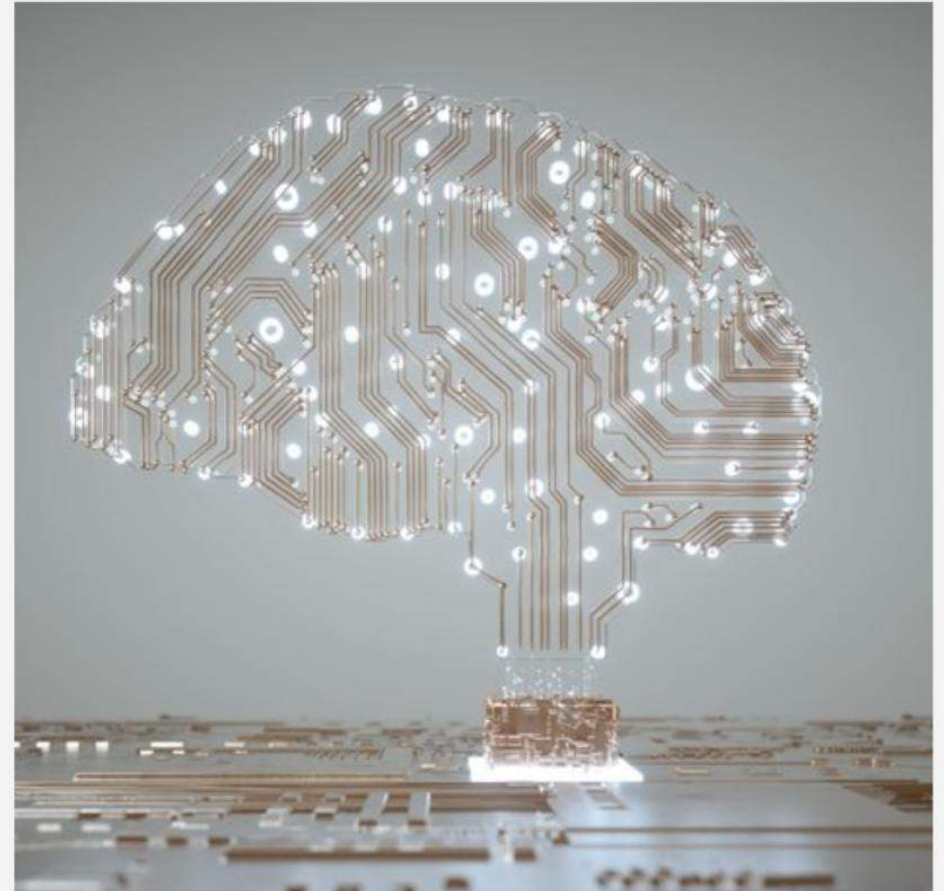




Let's get introduced to the technology that works behind Natural Language Processing for generating requested output.

Generative AI – An Overview

Generative artificial intelligence (AI) is a technology that can create new content, including images, texts, audio, video, and code based on a description given by a user.



Generative AI – Under the Hood



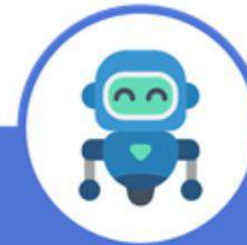
An AI model is a tool or algorithm which is based on a certain data set through which it can arrive at a decision

All without the need for human interference in the decision-making process.



Generative AI models generate new content based on the patterns it has learned from the dataset it was trained on.

*For example, the most popular generative AI chatbot, **ChatGPT**, used **570 GB** of training data or **300 billion words** collected all over the internet.*



Generative AI Models are trained to generate:

Text – Image – Audio – Video

Generative AI – Use Cases



Language

Marketing (content)
Note taking
Gene sequencing
Code development
Essay Generation



Visual

Video Generation
3D Models
Design
Image Generation



Auditory

Music Generation
Voice Generation



Think and Tell

How does the underlying Generative AI Model know what it must generate?

By giving the input in natural language, known as prompt.



About Prompt



Prompt is a specific instruction given as an input to the language model to get the desired output generated



Prompt can be:

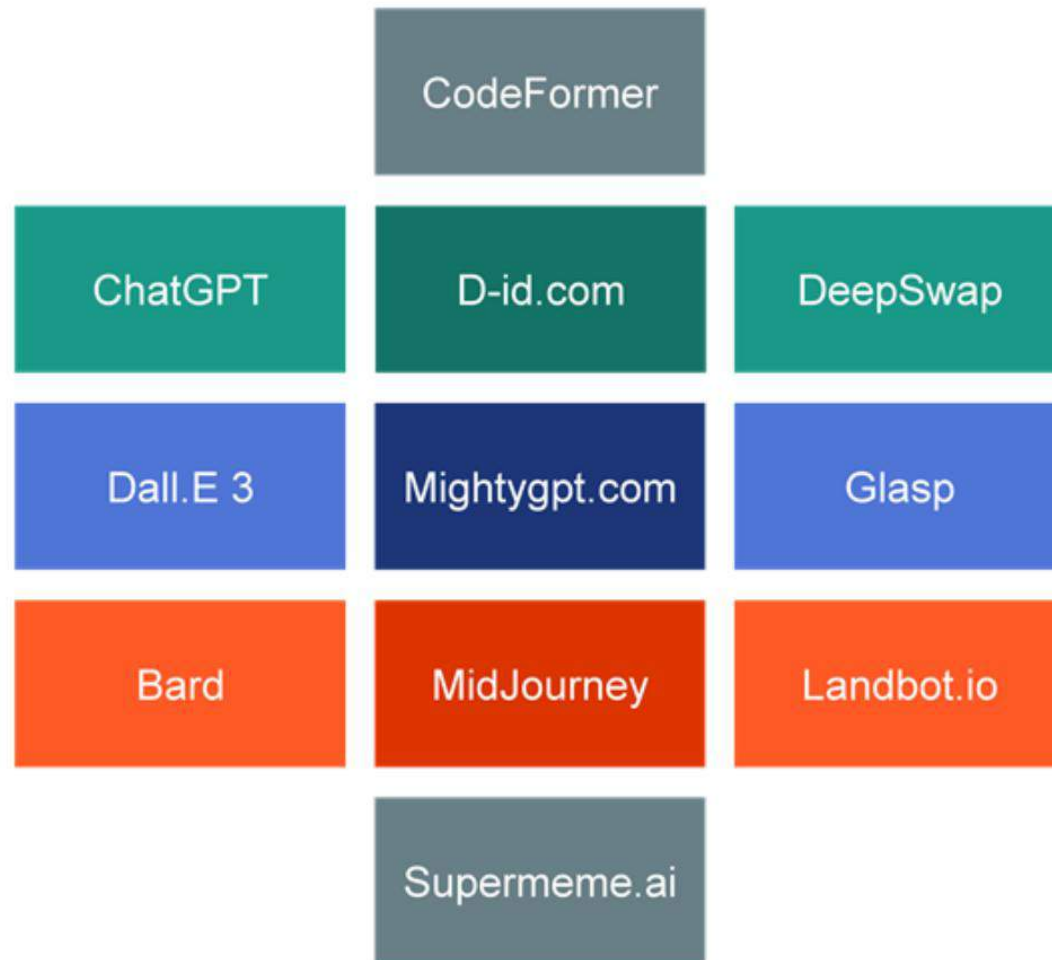
- Single sentence
- Paragraph
- Longer text
- Program Code



Prompts are used in various applications to:

- Generate conversational response
- Answer questions
- Summarize text
- Write stories

Popular Generative AI Models



Introduction to ChatGPT

- AI-driven language model developed by OpenAI.
- AI system that understands and generates human language.
- Conversational mode of interaction.
- Converse or Chat with users to provide information, answer questions, assist with tasks, and engage in dialogue on various topics.
- Based on Generative Pre-trained Transformer (GPT) architecture.



ChatGPT in Action



Menu



00:17:00:00:29

17 / 29



Explain concepts

Write prompts in ChatGPT to:

1. Explain the concept of responsive design pattern for a beginner.
2. Explain the same concept in nutshell.

DEMO



Compare and Contrast

Write prompts in ChatGPT to:

1. Compare CSS flex and grid system
2. Compare various responsive design patterns with its pros and cons

DEMO



Summarize Content and Generate List

Write prompts in ChatGPT to:

1. Summarize the benefits of a responsive web design in less than 200 words.
2. List the top 10 most used Bootstrap components

DEMO



Role Play and Provide Suggestions

Write prompts in ChatGPT. As a beginner student,

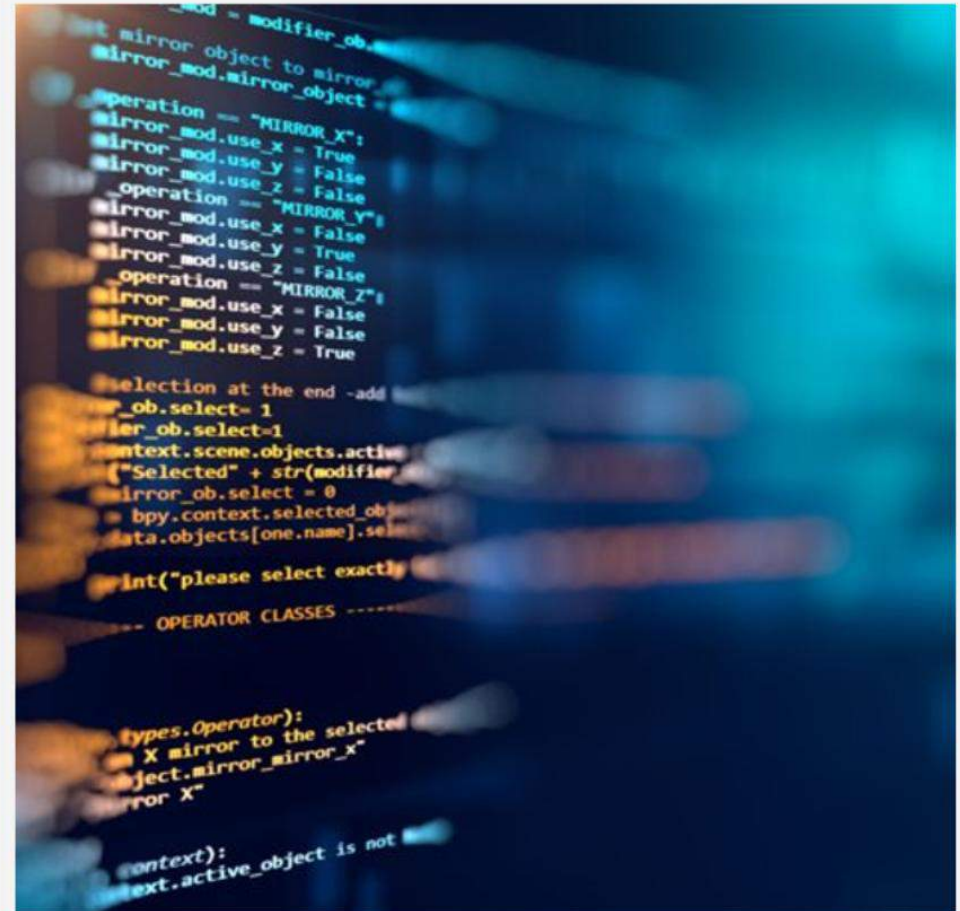
1. provide suggestion in learning CSS floats first and then flex and grid layout or other way around
2. provide suggestion in learning CSS media queries first and then Bootstrap or other way around

DEMO



Tips for Writing Effective Prompts

- Talk to the ChatGPT like you would talk to a person
- Set the context by providing relevant background information
- Tell ChatGPT to assume an identity or profession to get expected responses
- Keep ChatGPT on track by asking it to justify the responses
- Re-ask the question to get a better response since ChatGPT provides new responses for each ask
- Make small changes to your prompt to guide it so that it gives a better answer



Design a Responsive Web Page Using ChatGPT

The protagonist, Alex, a seasoned tattoo artist renowned for their unique designs, had long dreamt of a virtual platform to showcase his masterpieces and connect with art enthusiasts. He wanted a website to show his cool tattoos and talk to people who love art. He also wanted the page exhibit high responsiveness across various devices and screen sizes, ensuring an optimal user experience.

Based on the inputs from the artist, a front-end developer identified the following key features to develop the web page:

- **Hero Section:** A visually captivating hero image with a compelling headline and call-to-action button, directing users to the appointment booking page.
- **About Me Section:** A centered, concise section providing a brief overview of the tattoo artist's journey, skills, and commitment to creativity. This section should display a representative image of the artist at work.
- **Portfolio Gallery:** A dynamic grid layout showcasing a diverse selection of tattoo designs. Images should scale smoothly and maintain visual quality across different screen resolutions.

Design a Responsive Web Page Using ChatGPT (Contd.)

- **Services Section:** Should have separate cards for each service offered, displaying service descriptions with appropriate headings. Cards should be equal in height and present a consistent aesthetic.
- **Contact Form:** A well-designed contact form with fields for name, email, and message. The form should follow modern UI/UX best practices and be visually appealing.
- **Booking Information:** A section detailing the artist's availability for appointments, along with a special offer. This section should prompt users to take immediate action.
- **Footer:** Incorporate Font Awesome icons and links to the artist's social media profiles. The footer should also include a copyright notice.
- **Responsive Design:** Utilize Bootstrap classes to ensure the website's responsiveness across a range of devices, from mobile phones to desktop screens.

Design a Responsive Web Page

Design a responsive web page for a tattoo artist to showcase his services using Bootstrap by giving prompts to ChatGPT

DEMO



Quick Check

GPT in ChatGPT stands for _____

1. Generative Predefined Translation
2. Generative Pre-trained Translation
3. Generative Predefined Transformer
4. Generative Pre-trained Transformer



Quick Check: Solution

GPT in ChatGPT stands for _____

1. Generative Predefined Translation
2. Generative Pre-trained Translation
3. Generative Predefined Transformer
4. **Generative Pre-trained Transformer**



ChatGPT Limitations



Knowledge cutoff

*Trained on data up to 2021
Model may confidently
provide inaccurate info if
queried beyond the
capabilities of ChatGPT*



Training data bias

*Trained on data from
variety of sources (books,
articles, sites) which can
have biased data*



Context training

*Trained to generate
response from earlier
conversations.
If conversation topic shifts
multiple times, ChatGPT
gets confused and may
generate ambiguous
responses.*



Legal and Ethical considerations

*Legal issues may arise
if the use cases of
ChatGPT are not
properly scoped.*