About Codersarts Training

Codersarts Training is a division of Codersarts that provides training services on a variety of programming languages and technologies. The company's team of experienced trainers can help individuals and businesses of all sizes to learn new skills and improve their existing skills.

Codersarts Training offers a variety of services, including:

- **1:1 Training and Tutoring:** Codersarts offers on-demand 1:1 training and tutoring in a variety of programming languages and technologies. This is a great option for students, developers, and anyone else who wants to learn new skills or improve their existing skills.
- **Programming Assignment Help:** Codersarts can help you with your programming assignments, homework, and final year projects. They can also help you with general debugging and problem-solving.
- **Online Courses:** Codersarts offers a variety of online courses in programming languages, web development, and other related topics. These courses are self-paced and can be taken from anywhere in the world.
- **Mentorship:** Codersarts offers mentorship programs to help students and developers advance their careers. Mentors provide guidance and support on a variety of topics, such as skill development, job search, and career planning.

- **Corporate Training:** Codersarts offers corporate training programs to help businesses train their employees on new technologies and programming languages. These programs can be customized to meet the specific needs of each business.
- **Live Project Training:** This type of training involves working on real-world projects with experienced instructors. This is a great way to gain practical experience and to learn how to apply your skills to real-world problems.

If you are serious about learning to code and starting your career as a software developer, we highly recommend that you consider live project training. It is a great way to gain practical experience, to learn from experts, and to build your portfolio.

Here is a list of in-demand tech skills for course training

- Programming Languages: Python, Java, JavaScript, C/C++, and Go
- Web Development
- Mobile Development
- Cloud Computing
- Data Science
- Machine Learning
- Artificial Intelligence

Please note that this is just a small sample of the many in-demand tech skills. There are many other skills that are valuable in the tech industry, such as cybersecurity, DevOps, and IT support.

Custom NER (Named Entity Recognition)

About the course:

The course is an immersive journey into the world of natural language processing and custom NER model development. In this project-based course, participants will learn to create a custom NER model capable of recognizing specific entities in unstructured text data. The course provides hands-on experience using Python, the spaCy library, and transformer-based language models to develop, train, and test a custom NER model. By the end of the course, students will have the skills needed to tackle real-world NER challenges in various domains, including medicine, finance, and more.

Learning Outcomes:

Upon completing this course, participants will:

- Gain a deep understanding of Named Entity Recognition (NER) and its applications in information extraction from text data.
- Acquire proficiency in using spaCy, a popular NLP library, for custom NER model development.
- Learn how to preprocess text data and format it for training NER models.
- Develop a custom NER model capable of recognizing user-defined entities in text.
- Evaluate and fine-tune the performance of the NER model using real-world data.
- Apply NER techniques to practical use cases, such as extracting medical entities from medical text.

Prerequisites:

- Basic knowledge of programming in Python.
- Familiarity with fundamental NLP concepts is advantageous but not mandatory.

- Access to a Python environment with the required libraries, as demonstrated in the provided code.

Libraries and Programming Language Used:

- Python for coding and scripting.
- spaCy, an open-source NLP library, for NER model development.
- Transformer-based language models, specifically "en_core_web_trf," for contextual word embeddings.

Course Syllabus:

Introduction to Named Entity Recognition (NER)
  - Understanding the significance of NER in information extraction.
  - Real-world applications of NER across various domains.

Setting Up the Environment
  - Installing and configuring the necessary libraries and resources.
  - Preparing the Python environment for NER model development.

Data Preparation
  - Loading and preprocessing text data.
  - Annotating and formatting data for NER model training.

Custom NER Model Development
  - Utilizing spaCy and transformer-based language models for NER.
  - Defining entity labels and creating training data.

Training the NER Model
  - Training the custom NER model on annotated data.
  - Monitoring and evaluating model performance.

Practical Applications
  - Applying the custom NER model to real-world text data.
  - Extracting medical entities from medical text as a practical example.