

Use Case : Retrieval Augmented Generation (RAG)

Employee HR Q & A Application with RAG

Pre- Requisites - Installation

Pre-requisites – List of items to be installed

1. **pip3 install flask-sqlalchemy**
2. **pip install pypdf**
3. **pip install faiss-gpu** (for CUDA supported GPU)

or
4. **pip install faiss-cpu** (depending on Python version).

Pre-Requisites

For installation of other items for this use case, if not already installed, refer to below Section and Lecture (one shown in video as well). If already installed, skip next few slides.

Section : Building a Chatbot with Llama 2, Langchain & Streamlit

Lecture : Chatbot - Environment Setup before coding

Pre-requisites – List of items to be installed

1. Download VS Code
2. Install Python
3. Install AWS CLI
4. Configure IAM Role for VSCode
5. Anaconda Navigator Download
6. Install Boto3
7. Install Langchain
8. Install Streamlit
9. Bedrock
10. AWS Profile

Pre-requisites – How to install

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- Download VS Code - <https://code.visualstudio.com/download>
- Install Python
- Install AWS CLI - <https://docs.aws.amazon.com/cli/latest/userguide/getting-started-install.html>
 - `aws -- version`
 - Extensions – AWS Toolkit and AWS Boto3
- Configure IAM Role for VSCode - <https://docs.aws.amazon.com/cli/latest/userguide/cli-configure-files.html>
 - Create IAM Role
 - `aws configure`
 - Provide credentials
 - Set profile - `aws configure set region us-east-1 --profile Udemy_Rahul`
 - Profile Setting Details - <https://docs.aws.amazon.com/cli/latest/userguide/cli-configure-files.html>

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- Anaconda Navigator Download - <https://docs.anaconda.com/free/anaconda/install/windows/>
 - Open VS Code from Anaconda Navigator – **Very Important**
 - Install boto 3 - `pip install boto3`
 - Install Langchain – `pip install langchain`
 - Install Streamlit – `pip install streamlit`
 - Install Bedrock – `pip install bedrock` (If you face issues, restart the VSCode editor and/or your laptop)
 - Check profile name - `aws configure list-profiles`

Pre-requisites – Test if everything is working okay

1. Download VS Code
2. Install AWS CLI - `aws -- version`
3. Configure IAM Role for VSCode – `aws s3 ls`
4. Anaconda Navigator Download – Dashboard
5. Install Boto3 – `pip show boto3`
6. Install Langchain – `pip show langchain`
7. Install Streamlit - `streamlit hello`
8. AWS Profile - `aws configure list-profiles`

Anaconda Navigator Dashboard

