Local Application Directory Structure

- Files under *Local Application* Directory
    - environment.yaml
    - app.py
    - api.py
    - rag_prompt.py
    - llm.py
    - load_check_chromadb.py
- File under *Local Application/rag_collection* Directory
    - rag_cardiovascular_disease_risk.jsonl
- File under *Local Application/finetuning* Directory
    - patient_case_cvd_status.jsonl
- File under *Local Application/finetuning/final_version* Directory
    - fine_tuned.tar
- Files under *Local Application/finetuning/final_version/fine_tuned*
    - added_tokens.json
    - config.json
    - generation_config.json
    - model.safetensors
    - special_tokens_map.json
    - spiece.model
    - tokenizer_config.json
    - training_args.bin

Local Application Setup

Prerequisites

Before proceeding below, ensure that both Anaconda Distribution and Docker Desktop are installed, and that Docker Desktop is in running state.

Steps

Follow below steps to set up Conda Environment and Application in Local:

1. Open Anaconda Navigator
2. Open Powershell Prompt
3. In the opened Powershell Prompt, change to *Local Application* directory

```
cd 'Local Application'
```

Ensure that your working directory is the extracted folder in Powershell Prompt.

4. Create a new environment named *rag_llm_cardiovascular_screening_application* with required libraries using *environment.yaml*

```
conda env create --file environment.yaml
```

5. Activate the newly created Conda environment

```
conda activate rag_llm_cardiovascular_screening_application
```

6. Pull ChromaDB image

```
docker pull chromadb/chromadb:latest
```

7. Start ChromaDB container using earlier pulled ChromaDB image

```
docker run -d -p 8001:8000 --name chromadb chromadb/chroma:latest
```

8. Start FastAPI application

```
uvicorn api:app --host 0.0.0.0 --port 8000
```

9. Start Streamlit application in a new Powershell prompt

```
streamlit run app.py --server.port 8501
```

After starting Streamlit application, the Streamlit application automatically opens in a new tab with URL (http://localhost:8501/) in your default web browser.