

# Responsible-ai-fairness Setup Document

## 1)Prerequisites:

- Python 3.9 and above
- MongoDB

## 2)Installation Steps

- Clone the repository
- Create a virtual environment using the command `python -m venv <name>` and activate it by going to Scripts and running the command `activate.bat`
- Setup the DB
  - Go to folder responsible-ai-fairness\responsible-ai-fairness\docs\db\_scripts
  - Add the documents present in the Json files in the collection llm\_connection\_credentials and llm\_analysis.
- Install dependencies.
  - Go to responsible-ai-fairness\responsible-ai-fairness\requirements and run `pip install -r requirements.txt`
- Configuration
  - Add required environment variables

Configurations	Sample Configurations
<b>Header Configurations:</b> allow_methods = "\${allow_methods}" allow_origin = "\${allow_origin}" content_security_policy = "\${content_security_policy}" cache_control = "\${cache_control}" XSS_header = "\${xss_header}" Vary_header = "\${vary_header}" X-Frame-Options = "\${X-Frame-Options}" X-Content-Type-Options = "\${X-Content-Type-Options}" Pragma = "\${Pragma}"	Pragma: no-cache Vary_header: Origin X-Content-Type-Options: nosniff X-Frame-Options: SAMEORIGIN XSS_header: 1; mode=block allow_methods: ["GET", "POST"] allow_origin: ["http://localhost:8000/"] cache_control: no-cache; no-store; must-revalidate content_security_policy: 'default-src "self";img-src data: https;;object-src "none";script-src
<b>Database Configurations:</b> DB_NAME = "\${dbname}" DB_NAME_WB = "\${dbname_wb}" DB_USERNAME = "\${username}" DB_PWD = "\${password}" DB_IP = "\${ipaddress}" DB_PORT = "\${port}" MONGO_PATH="mongodb://\${DB_USERNAME}:\${D	DB_NAME_WB="rai_database" DB_NAME = "rai_database" DB_USERNAME="user" MONGO_PATH="mongodb://user:123mongo@localhost:27071/?authMechanism=DEFAULT" DB_TYPE="mongo"

B_PWD)@\${DB_IP}:\${DB_PORT}/" DB_TYPE="\${dbtype}"	
<b>Optional Configurations:</b> # blob containers Dt_containerName = "\${dt_containerName}" Model_CONTAINER_NAME = "\${model_containerName}" HTML_CONTAINER_NAME = "\${html_containerName}" # blob storage api's AZURE_UPLOAD_API = "\${azure_upload_api}" AZURE_GET_API = "\${azure_get_api}" # telemetry flag tel_Falg = "\${tel_Falg}" # Mixtral Apis MIXTRAL_URL="\${mixtral_url}" MIXTRAL_ACCESS_TOKEN="\${mixtral_access_token }" # telemetry url FAIRNESS_TELEMETRY_URL = "\${fairness_telemetry_url}" # report api url REPORT_URL = "\${reporturl}" # gemini api key GEMINI_API_KEY="\${gemini_api_key}" #openai api key OPENAI_API_KEY="\${openai_api_key}"	

- Run the application
  - Go to responsible-ai-fairness/responsible-ai-fairness/src
  - Run `python main_api.py`

Swagger URL: <http://localhost:8000/api/v1/fairness/docs#/>

Infosys Responsible AI - fairness			^
POST	/api/v1/fairness/bias/analyze	Analyze	✓
POST	/api/v1/fairness/bias/mitigate	Migrate	✓
POST	/api/v1/fairness/bias/mitigate/preprocessing/mitigatedDataset	Preprocessingmigrate	✓
GET	/api/v1/fairness/bias/get/{mlModelId}	Process	✓
GET	/api/v1/fairness/mitigation/getMitigatedData/{fileName}	Process	✓
POST	/api/v1/fairness/bias/Workbench/fileid	Get Data	✓
POST	/api/v1/fairness/bias/UIworkbench/batchId/Attributes	Analyze	✓
POST	/api/v1/fairness/bias/getDataset	Get Data	✓
POST	/api/v1/fairness/bias/getAttributes	Get Attributes	✓