

Model Catalog Documentation

August 2023

1 Set up Flask on Windows

1. Install Python
2. Create and activate a Virtual Environment

```
python -m venv venv
venv\Scripts\activate
```

3. Install Flask

```
pip install flask
```

4. Install the `python-dotenv` package to manage environment variables automatically

```
pip install python-dotenv
```

5. In the top-level directory of the project, create a file named `.flaskenv`
6. In the `.flaskenv` file, add the environment variable for the **Flask** app

```
FLASK_APP=app/app.py
```

7. Run the App

```
flask run
```

8. Access the App:
Navigate to `http://127.0.0.1:5000/` to see the app

2 Set up Elasticsearch on Windows

1. Downlaod and install Java
2. Go to the official Elasticsearch download page and download the Windows version of Elasticsearch
3. Extract the downloaded Elasticsearch archive to a directory
4. Configure elasticsearch
 - (a) Edit the `elasticsearch.yml` file in the `config` directory and disable the xpack-security feature flag Edit the `elasticsearch.yml` file in

```
# Enable security features
xpack.security.enabled: false

xpack.security.enrollment.enabled: false
```

Figure 1: Disabling xpack authentication

the `config` directory

- (b) Uncomment `transport.host: 0.0.0.0` to allow other nodes to join the Elasticsearch cluster from anywhere

```
# Enable security features
xpack.security.enabled: false

xpack.security.enrollment.enabled: false
```

Figure 2: Network address

5. navigate to the Elasticsearch installation directory, and run the following command to start Elasticsearch

```
bin\elasticsearch.bat
```

6. Open a web browser and go to `??`. You should see a JSON response with information about your Elasticsearch cluster
7. To perform a search query on an Elasticsearch index go to `??`. Elasticsearch will respond with the results of the search query.
8. Install Elasticsearch extension in VS Code
9. Install Elasticsearch

```
pip install Elasticsearch
```

3 MongoDB Atlas and MongoDB Playground

1. MongoDB Atlas Setup
 - (a) Create a MongoDB Atlas account
 - (b) Create a cluster and set up the necessary configurations
2. Get Connection String
 - (a) In your MongoDB Atlas dashboard, click on "Connect" for your cluster
 - (b) Choose *Connect your application* and copy the connection string.
3. Install MongoDB Extension in VS Code
4. Set Up MongoDB Playground
 - (a) Open the MongoDB extension in VS Code
 - (b) Click on the *Playground* icon from the MongoDB sidebar
 - (c) Click on "Connect to MongoDB" and paste the connection string you copied earlier
 - (d) Provide your MongoDB Atlas username and password
5. Modify the `playground.js` file according to your needs
 - (a) `playground.mongodb.js`
 - i. Specifies the database name as *DS-ModelCatalog*
 - ii. Specifies the collection name as *jsonModels*
 - (b) `playground-3.mongodb.js`
 - i. Specifies the database name, collection name, and output folder for saving JSON files
 - ii. Retrieves all documents from the specified collection