***DEVELOPER GUIDE***

**Environmental Computation and Observation System (E.C.O.S)**

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**App/templates**

*feedback.html*

***Feedback*** *refers to the information or response given about someone's performance, behavior, or work, intended to guide improvement, reinforces good practices, or adjust actions.*

*Index.html*

*The index.html file serves as the default landing page for a website. When a user visits a domain (e.g., www.example.com), the server automatically loads this file as the first point of interaction.*

*Login.html*

*In* ***Hadoop, login*** *refers to the* ***authentication process*** *where a user or service is identified and verified before being allowed to interact with the Hadoop ecosystem (such as HDFS, YARN, or MapReduce).*

*Notification.html*

*A notification is a message or alert that provides information, a reminder, or a warning about something that has happened or will happen.*

*Predict.html*

*In* ***Hadoop****, the term* ***"predict"*** *typically refers to making* ***future estimations or classifications using data processing and machine learning models*** *built on top of Hadoop's big data framework.*

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*Register.html*

*In most cases, register refers to the act of recording an event, transaction, name, or other information, or an aggregation of stored data, usually containing past events, transactions, names or other information.*

*Visualization.html*

*In the context of Hadoop,* ***visualization*** *refers to the graphical representation of large datasets processed and stored within Hadoop's ecosystem. Since Hadoop deals with vast amounts of distributed data, visualization helps in analyzing and interpreting complex data in an intuitive and interactive way.*

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**App(\_init\_.py)**

*This file indicates that the App directory is a Python package. It allows the package and its modules to be imported and used elsewhere in the project. the environment for the package to run properly.*

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*Auth.py*

*Auth.py is a Python file that typically handles authentication and authorization in a web application. It contains functions and logic to manage user-related actions like logging in, signing up, logging out, and protecting routes.*

*data\_ingestion.py*

*A typical data\_ingestion.py script is used to handle the process of ingesting data from various sources into a system for further processing, analysis, or storage. It often includes the following functionalities.*

*feedback.py*

*A feedback.py file is typically used in Python projects to handle the collection, processing, or storage of feedback data. Depending on the specific use case, it might include functions to:*

*Main.py*

*The main.py file serves as the entry point for the Python application. It typically contains the primary logic that initiates the program. Depending on the project, this file may include the following components:*

*Ml\_model.py*

*A ml\_model.py file usually contains the necessary code to define, train, evaluate, and save a machine learning model. Below is a breakdown of the sections you typically find in such a file:*

*Models.py*

*In Django, models.py is a Python file that is used to define the models for the application. Models in Django represent the structure of your database tables and contain the logic for interacting with the database.*

*Mongo.py*

*Mongo.py is usually a Python file used to interact with a MongoDB database, handling operations like connecting to the database, performing CRUD (Create, Read, Update, Delete) operations, and managing collections and documents within MongoDB.*

*Notifications.py*

*Notifications.py is a Python module responsible for handling notifications within an application or system. It is typically used to alert users or administrators about important events, actions, or system updates.*

*Views.py*

*Views.py is a Python file in a Django app that* ***connects the user’s request (from the browser) to the appropriate response****. It contains the logic for what happens when a user visits a certain page.*

*Visualizations.py*

*The visualization.py file is typically used in data science or analytics projects to hold all the code related to* ***visualizing data****. It helps convert raw data into visual formats like graphs and charts, making the data easier to understand and analyze*.

*Config (config.py)*

*In Hadoop, Configuration* ***(or*** *config****)*** *refers to the settings that control how Hadoop services and applications behave. It is a core part of how Hadoop is set up and managed.*

*. env*

*A .env file is a* ***simple text file*** *used to store* ***environment variables****. These variables define configuration settings that your application needs to run — such as database credentials, API keys, port numbers, and other sensitive or environment-specific information.*

### ***Key Features***:

1. *It helps* ***keep secrets and configuration separate from your source code****.*
2. *Commonly used in development environments with frameworks like* ***Node.js, Python, Django,*** *etc****.***

**Logs**

*App.log*

*The app. logs file (or application.log) is a* ***log file*** *that stores* ***runtime events*** *generated by an application. It's mainly used by developers and system administrators to* ***monitor****,* ***debug****, and* ***analyze*** *how an app is functioning.*

**Static**

*Styles.css*

*A style.css file is used to define the visual appearance and layout of a website or web page.*