I-DAIR CODEX

Codeless AI/ML platform for Public Health Researchers

2023 - Steve Cygu & Oliver Deak

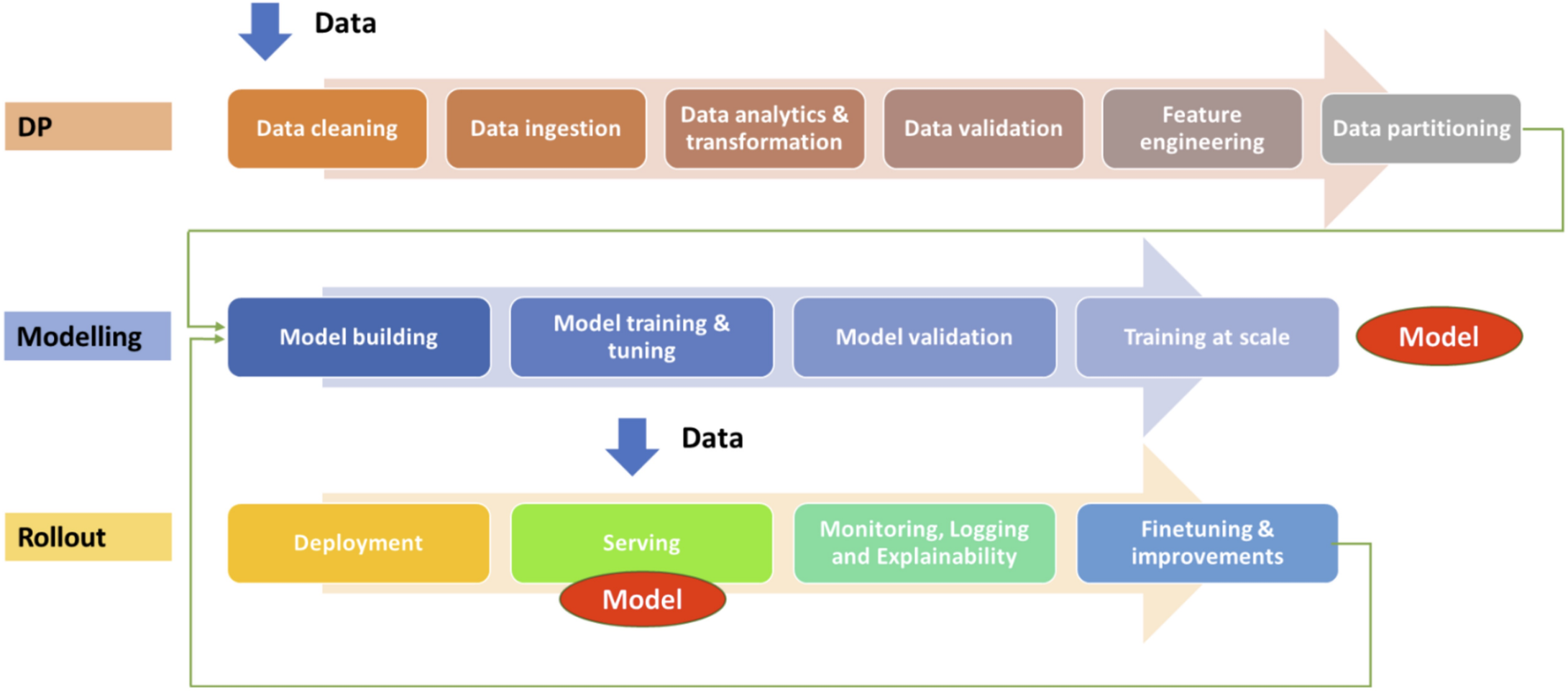
I-DAIR CODEX: Codeless Experience AI/ML Software

- Reduce the complexity and the learning curve of using ML/AI
- Reduce the need for specialist Data Scientist know-how
- Speed up the process of ML/AI adoption

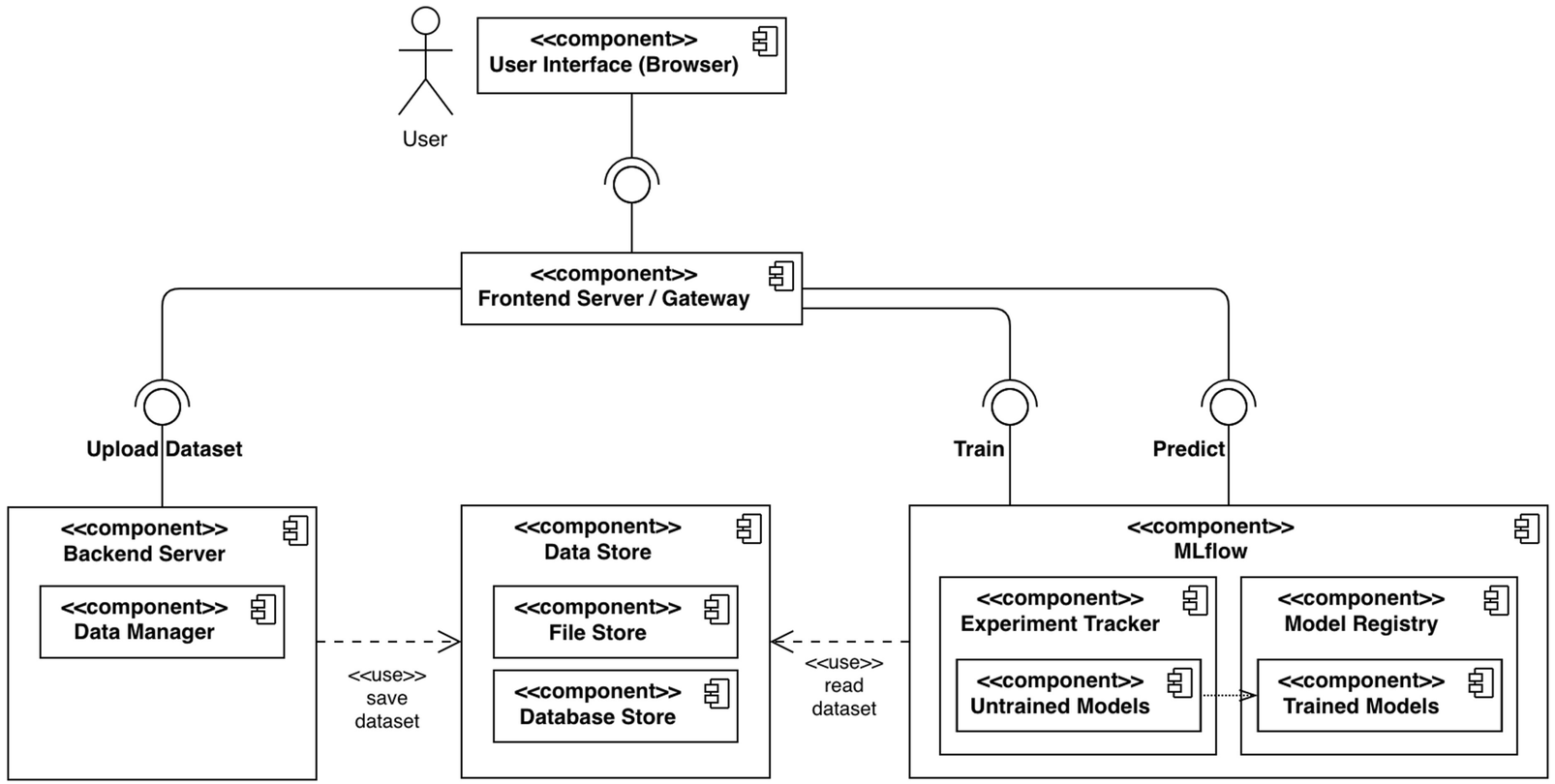
I-DAIR CODEX Overview

- Tailored ML/AI analytics geared towards easily gaining insights from structured data sources such as health and demographic surveillance sites (HDSS)
- A federated learning approach where the researchers can train and deploy their model using their own data which remains local, with an option of further sharing between collaborators
- Full automation of the entire AI/ML pipeline, allowing users to iterate through the whole data exploration, model training, deployment and prediction process much faster
- Built-in collaboration capabilities which allows researchers to invite and add collaborators to a specific project, hence fostering interdisciplinary collaboration and allows experts from diverse fields to work together seamlessly
- Support for iterative exploration and experimentation, enabling researchers to refine their methodologies and adapt to evolving research needs efficiently.

End-to-End ML Platform (CODEX) - ML Lifecycle



Architecture: Logical Component Diagram



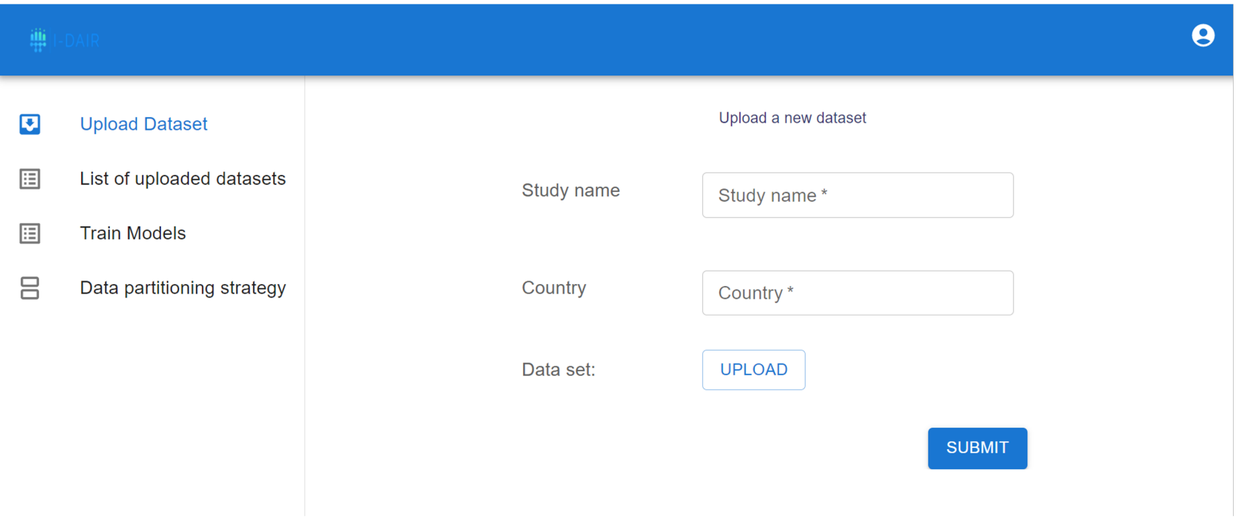
Web based UI
(React JS)

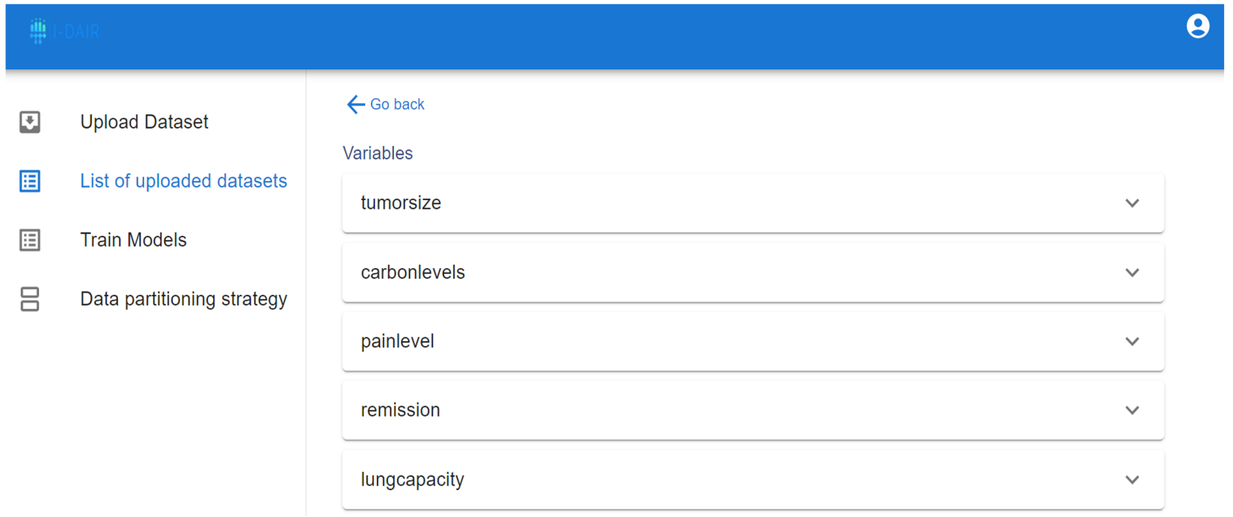
Webserver & Reverse
Proxy (NGINX)

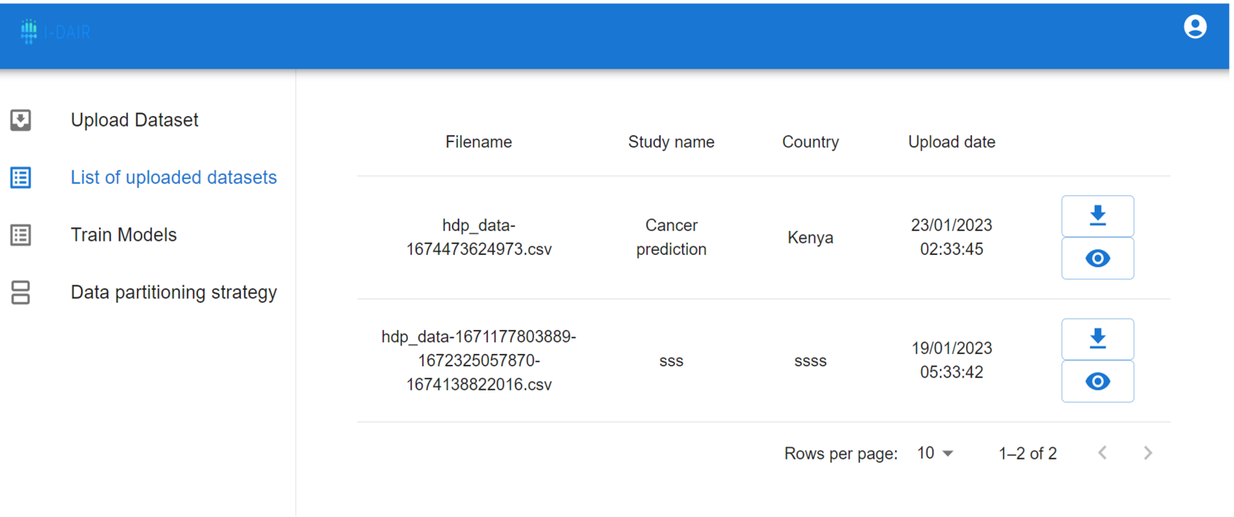
Web based API's
(REST)

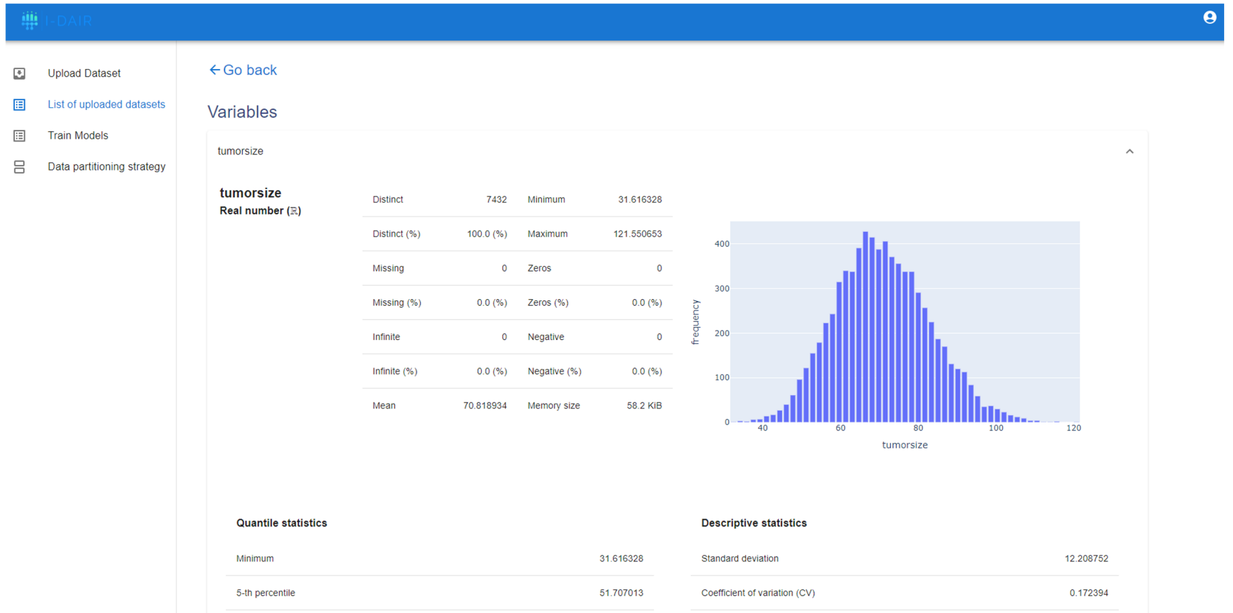
Factory Floor
Components
(can be run on edge
node or cloud)

End-to-End ML Platform (I-DAIR CODEX)

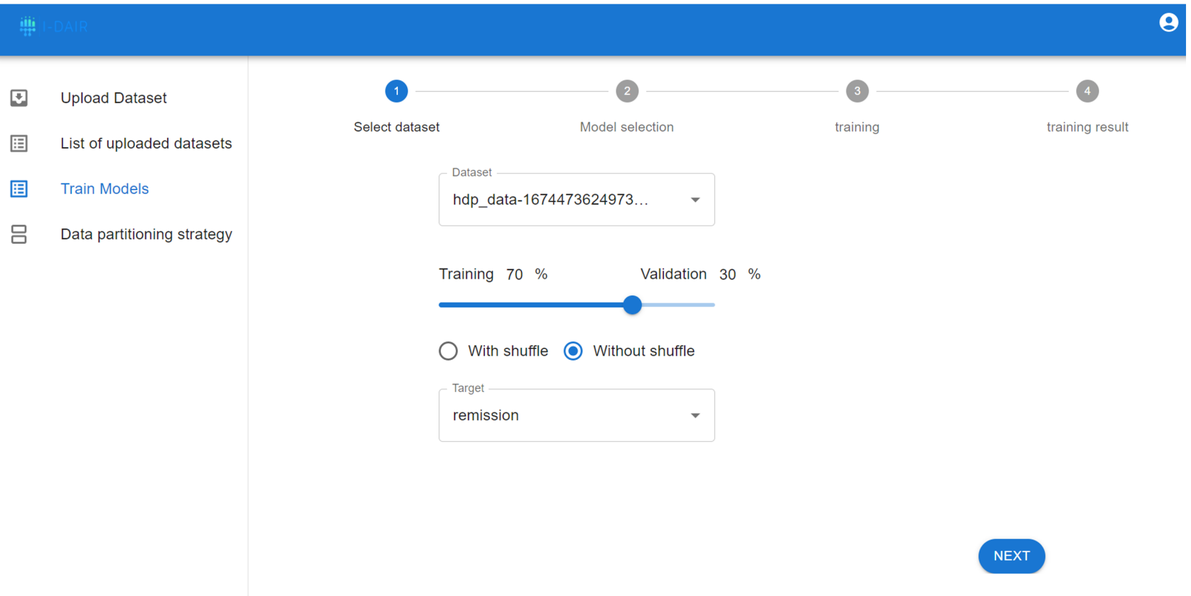


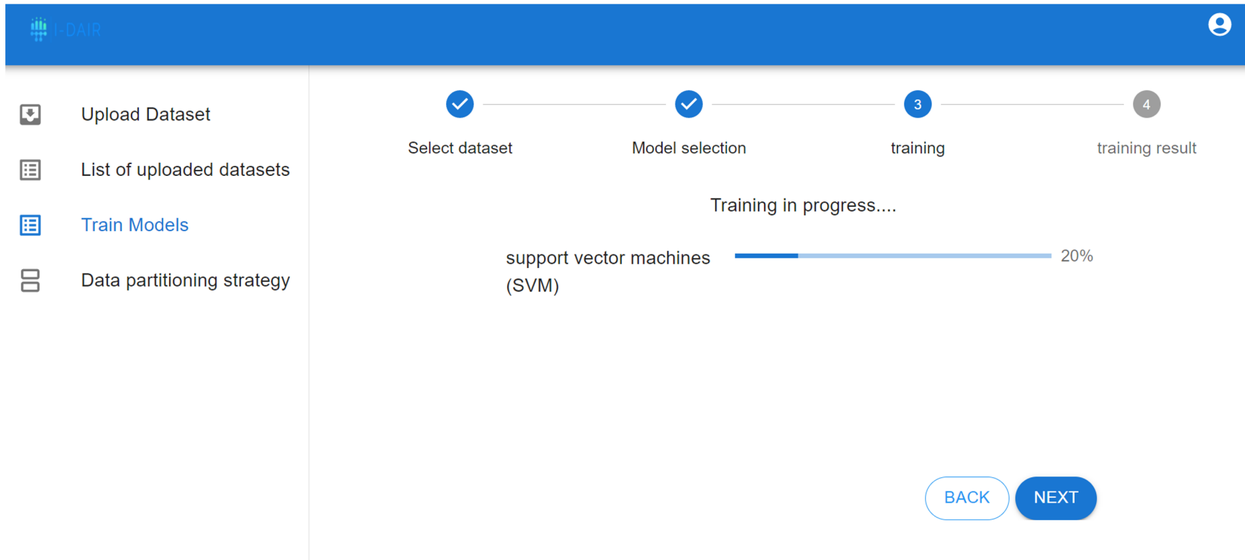


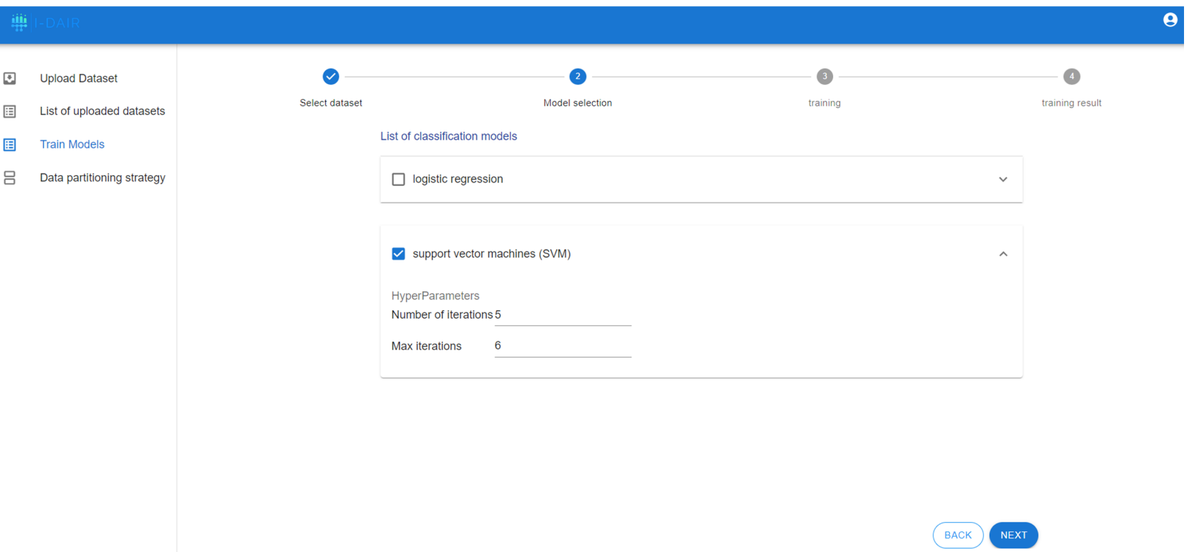


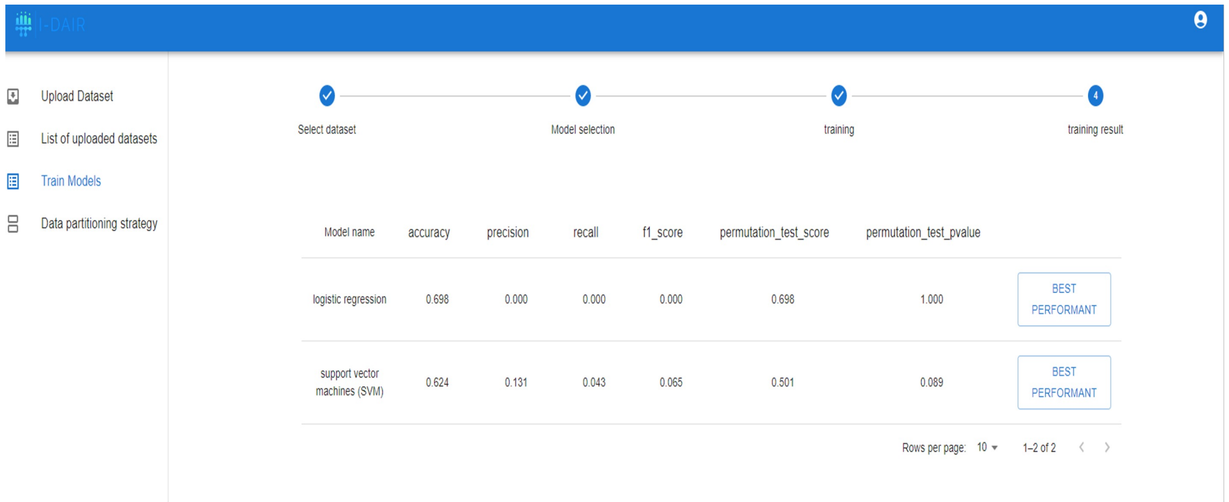


End-to-End ML Platform (CODEX)









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