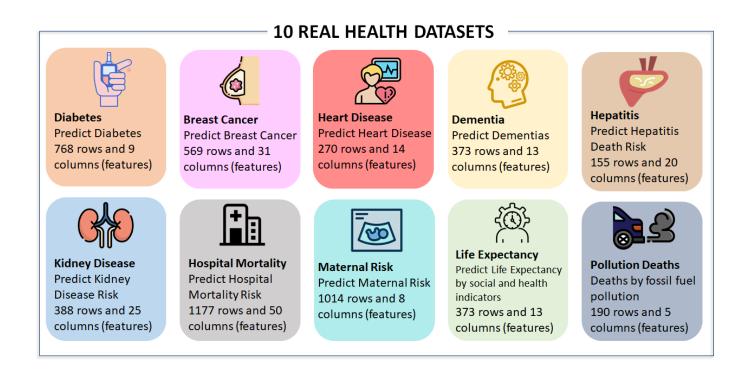
Article

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Open Exchange

# Ten real health datasets in a just one OEX application



# Hi Community,

In a hard work of data curation and data quality, the Health Dataset application deploy to you the above datasets.

These datasets can be used in your ML applications/models, AutoML and analytics projects. See more details here:

# Installation

- 1. Clone/git pull the repo into any local directory
- \$ git clone https://github.com/yurimarx/automl-heart.git
  - 2. Open a Docker terminal in this directory and run:
- \$ docker-compose build
  - 3. Run the IRIS container:
- \$ docker-compose up -d

### 4. Do a Select to the HeartDisease dataset:

#### SELECT

age, bp, chestPainType, cholesterol, ekgResults, exerciseAngina, fbsOver120, heartDis ease, maxHr, numberOfVesselsFluro, sex, slopeOfSt, stDepression, thallium FROM dc\_data\_health.HeartDisease

### 5. Do a Select to the Kidney Disease dataset:

### SELECT

age, al, ane, appet, ba, bgr, bp, bu, cad, classification, dm, hemo, htn, pc, pcc, pc v, pe, pot, rbc, rc, sc, sg, sod, su, wc FROM dc\_data\_health.KidneyDisease

### 6. Do a Select to the Diabetes dataset:

#### SELECT

Outcome, age, bloodpressure, bmi, diabetespedigree, glucose, insulin, pregnancies, sk inthickness
FROM dc\_data\_health.Diabetes

### 7. Do a Select to the Breast Cancer dataset:

### SELECT

areamean, arease, areaworst, compactnessmean, compactnessse, compactnessworst, concave pointsmean, concavepointsse, concavepointsworst, concavitymean, concavityse, concavityworst, diagnosis, fractaldimensionmean, fractaldimensionse, fractaldimensionworst, perimetermean, perimeterse, perimeterworst, radiusmean, radiusse, radiusworst, smooth nessmean, smoothnessse, smoothnessworst, symmetrymean, symmetryse, symmetryworst, tex turemean, texturese, textureworst
FROM dc data health.BreastCancer

### 8. Do a Select to the Maternal Health Risk dataset:

### SELECT

BS, BodyTemp, DiastolicBP, HeartRate, RiskLevel, SystolicBP, age FROM dc\_data\_health.MaternalHealthRisk

### 9. Do a Select to the Hospital Mortality dataset:

### SELECT

age, aniongap, atrialfibrillation, basophils, bicarbote, bloodcalcium, bloodpotassium, bloodsodium, bmi, chdwithnomi, chloride, copd, creatinekise, creatinine, deficiency anemias, depression, diabetes, diastolicbloodpressure, ef, gendera, glucose, "group", heartrate, hematocrit, hyperlipemia, hypertensive, inr, lacticaacid, leucocyte, lymp hocyte, magnesiumion, mch, mchc, mcv, neutrophils, ntprobnp, outcome, pco2, ph, plate lets, pt, rbc, rdw, relfailure, respiratoryrate, spo2, systolicbloodpressure, tempera ture, ureanitrogen, urineoutput FROM dc\_data\_health.HospitalMortality

### 10. Do a Select to the Life Expectancy dataset:

### SELECT

AdultMortality, Alcohol, BMI, Country, Diphtheria, GDP, HIVAIDS, HepatitisB, IncomeCo mpositionOfResources, InfantDeaths, LifeExpectancy, Measles, PercentageExpenditure, P olio, Population, Schooling, Status, Thinness1To19Years, Thinness5To9Years, TotalExpe nditure, UnderFiveDeaths, Year FROM dc\_data\_health.LifeExpectancy

### 11. Do a Select to the Pollution Deaths dataset:

#### SELECT

Country, CountryCode, DeathYear, ExcessMortality FROM dc\_data\_health.PollutionDeaths

### 12. Do a Select to the Dementia dataset:

### SELECT

ASF, Age, CDR, EDUC, Genre, Hand, MMSE, MRDelay, Outcome, SES, Visit, eTIV, nWBV FROM dc\_data\_health.Dementia

### 13. Do a Select to the Hepatitis Death risk dataset:

#### SELECT

age, albumin, alkphosphate, anorexia, antivirals, ascites, bilirubin, fatigue, histol ogy, liverbig, liverfirm, malaise, outcome, protime, sex, sgot, spiders, spleenpalpab le, steroid, varices
FROM dc\_data\_health.Hepatitis

### To install with ZPM

It's packaged with ZPM so it could be installed as:

zpm "install dataset-health"

# Dataset Licenses and sources/credits

- 1. MIT License for this Application
- 2. CC BY-NC-SA 4.0 License for the Breast Cancer Dataset
  - o Original Source: https://www.kaggle.com/uciml/breast-cancer-wisconsin-data
  - File into the app: /opt/irisapp/data/breast-cancer.csv
  - Persistent Class: dc.data.health.BreastCancer
- 3. CC0: Public Domain for Diabetes Dataset
  - o Original Source: https://www.kaggle.com/mathchi/diabetes-data-set
  - File into the app: /opt/irisapp/data/diabetes.csv
  - o Persistent Class: dc.data.health.Diabetes
- 4. CC0: Public Domain for Heart Disease
  - Original Source: <a href="https://data.world/informatics-edu/heart-disease-prediction">https://data.world/informatics-edu/heart-disease-prediction</a>
  - File into the app: /opt/irisapp/data/heart-disease.csv
  - o Persistent Class: dc.data.health.HeartDisease
- 5. CC0: Public Domain for Maternal Health Risk

- o Original Source:
  - https://www.kaggle.com/vasserhessein/classification-maternal-health-5-algorithms-ml/data
- File into the app: /opt/irisapp/data/maternalhealthrisk.csv
- o Persistent Class: dc.data.health.MaternalHealthRisk
- 6. CC0: Public Domain for World Life Expectancy
  - Original Source: <a href="https://www.kaggle.com/kumarajarshi/life-expectancy-who">https://www.kaggle.com/kumarajarshi/life-expectancy-who</a> The data was collected from WHO and United Nations website with the help of Deeksha Russell and Duan Wang.
  - File into the app: /opt/irisapp/data/lifeexpectancy.csv
  - Persistent Class: dc.data.health.LifeExpectancy
- 7. CC0 1.0 Universal (CC0 1.0) Public Domain Dedication for Hospital Mortality
  - Original Source: <a href="https://www.kaggle.com/saurabhshahane/in-hospital-mortality-prediction">https://www.kaggle.com/saurabhshahane/in-hospital-mortality-prediction</a> (Zhou, Jingmin et al. (2021), Prediction model of in-hospital mortality in intensive care unit patients with heart failure: machine learning-based, retrospective analysis of the MIMIC-III database, Dryad, Dataset, <a href="https://doi.org/10.5061/dryad.0p2ngf1zd">https://doi.org/10.5061/dryad.0p2ngf1zd</a>)
  - File into the app: /opt/irisapp/data/hospitalmortality.csv
  - o Persistent Class: dc.data.health.HospitalMortality
- 8. CC0 1.0 Universal (CC0 1.0) Public Domain for Pollution Deaths dataset
  - Original Source: <a href="https://www.kaggle.com/mathurinache/pollution-deaths">https://www.kaggle.com/mathurinache/pollution-deaths</a>
  - File into the app: /opt/irisapp/data/pollution-deaths-from-fossil-fuels.csv
  - o Persistent Class: dc.data.health.PollutionDeaths
- 9. Attribution-NonCommercial-ShareAlike 3.0 IGO (CC BY-NC-SA 3.0 IGO) for Dementia dataset
  - Original Source: <a href="https://www.kagqle.com/shashwatwork/dementia-prediction-dataset">https://www.kagqle.com/shashwatwork/dementia-prediction-dataset</a>
  - File into the app: /opt/irisapp/data/dementia.csv
  - Persistent Class: dc.data.health.Dementia
- 10. CC0 1.0 Universal (CC0 1.0) Public Domain for Hepatitis Death Risk dataset
  - o Original Source: https://www.kaggle.com/codebreaker619/hepatitis-data
  - File into the app: /opt/irisapp/data/hepatitis.csv
  - o Persistent Class: dc.data.health.Hepatitis
- 11. CC0: Public Domain for Kidney Disease
  - Original Source:
    - @misc{Dua:2019,
    - author = "Dua, Dheeru and Graff, Casey",
    - year = "2017",
    - title = "{UCI} Machine Learning Repository",
    - url = "http://archive.ics.uci.edu/ml",
    - institution = "University of California, Irvine, School of Information and Computer Sciences" }
  - File into the app: /opt/irisapp/data/kidneydisease.csv
  - o Persistent Class: dc.data.health.KidneyDisease

#Analytics #Data Import and Export #Machine Learning (ML) #InterSystems IRIS #InterSystems IRIS for Health Check the related application on InterSystems Open Exchange

Source URL: <a href="https://community.intersystems.com/post/ten-real-health-datasets-just-one-oex-application">https://community.intersystems.com/post/ten-real-health-datasets-just-one-oex-application</a>