

Resources for the Anthem challenge

HachGT hackathon

October 16-18, 2020

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Kaggle Health-related datasets

Type: data, code

Needed for access: registration on Kaggle

<https://www.kaggle.com/search?q=health>, <https://www.kaggle.com/search?q=medicine>

The screenshot shows the Kaggle search results page for the query 'health'. The page is divided into a left sidebar with filters and a main content area with search results.

Search Bar: The search bar at the top contains the text 'health'.

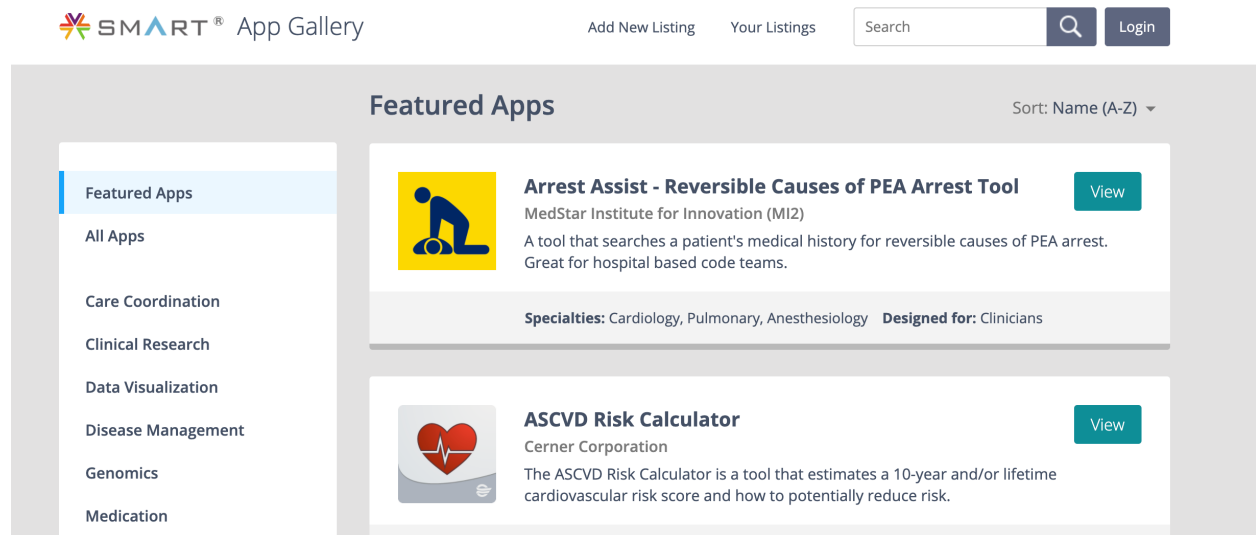
Filters: The left sidebar contains several filter categories:

- Date:** Radio buttons for 'Last 90 days' (2,952), 'Last week' (348), and 'Today' (49).
- Dataset Size:** Checkboxes for 'small' (4,020), 'medium' (1,255), and 'large' (609).
- Dataset File Types:** Checkboxes for 'csv' (3,707), 'jpg' (453), and 'xlsx' (362). A 'More' link is also present.
- Dataset License:** Checkboxes for 'Other' (3,595), 'Commercial' (2,219), and 'Non-Commercial' (98).
- Kernel Language:** Checkboxes for 'Python' (2,992) and 'R' (398).

Search Results: The main content area shows 15,053 results, sorted by 'Relevancy'. The results are displayed as a list of items, each with a thumbnail, a title, and a brief description.

- Health Insurance Marketplace:** A dataset by US Department of Health and Human Services, 3 years ago, 829 MB, 447 upvotes.
- Heritage Health Prize:** A competition featured 7 years ago, \$500,000 prize, 1350 teams.
- Mental Health, Happiness, Economics, Human Freedom:** A notebook by Rupa Lahiri, 2 years ago, 3m to run, Python, 227 upvotes.
- Mental Health in Tech Survey:** A dataset by Open Sourcing Mental Illness, LTD, 4 years ago, 49 KB, 617 upvotes.

SMART - Open source health apps, sample patient data, data and tools



MHEALTH mobile health dataset

<https://archive.ics.uci.edu/ml/datasets/MHEALTH+Dataset>

The MHEALTH (Mobile HEALTH) dataset comprises body motion and vital signs recordings for ten volunteers of diverse profile while performing several physical activities. Sensors placed on the subject's chest, right wrist and left ankle are used to measure the motion experienced by diverse body parts, namely, acceleration, rate of turn and magnetic field orientation. The sensor positioned on the chest also provides 2-lead ECG measurements, which can be potentially used for basic heart monitoring, checking for various arrhythmias or looking at the effects of exercise on the ECG.

NOTE: although it does not connect to EHR, readings from ECG are included as well as PPG.

Public health datasets

- Big Cities Health Coalition: <https://bchi.bigcitieshealth.org/indicators/1827/searches/34444>
- Healthcare Cost and Utilization Project: <https://hcup-us.ahrq.gov/databases.jsp>
- Human Mortality Dataset: <https://www.mortality.org/>
- HealthData.gov: <https://healthdata.gov/search/type/dataset>
- Medicare Provider Utilization and Payment Data (Physician and Other Supplier): <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Physician-and-Other-Supplier.html>
- An interesting article with some more resources: <https://www.datasciencecentral.com/profiles/blogs/10-great-healthcare-data-sets>

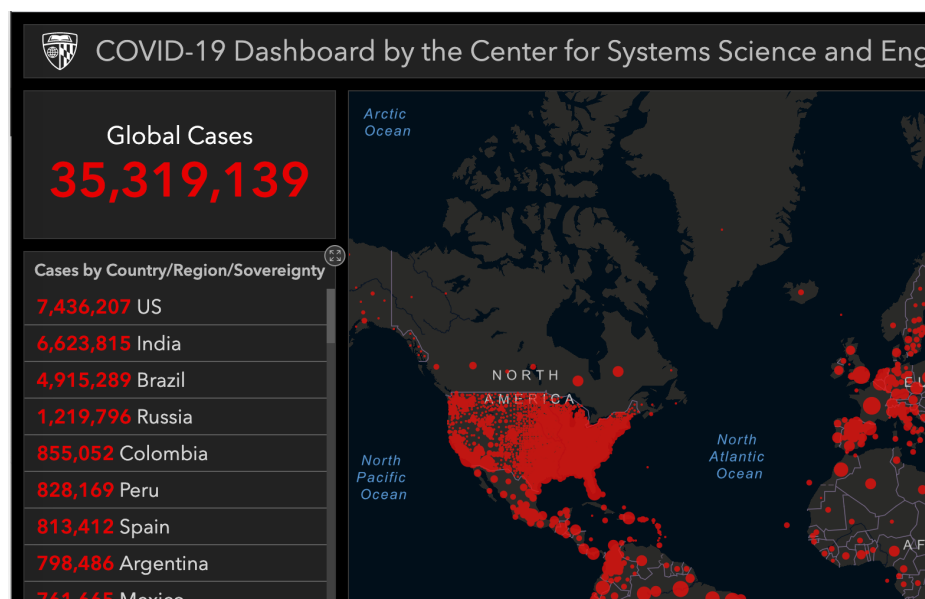
COVID-19 datases

NIH Open-Access Data and Compute Resources

Resource	Resource Description	Data Type	NIH Funded
Amazon Web Services (AWS) data lake for analysis of COVID-19 data	A centralized repository of up-to-date and curated datasets on or related to the spread and characteristics of SARS-CoV-2 and COVID-19. Information on how to best use this resource is available.	dashboards and visualization tools, epidemiology, healthcare resources, literature	
Broad Terra cloud commons for pathogen surveillance	The Broad Terra cloud workspace for best practices with COVID-19 genomics data <ul style="list-style-type: none">Raw COVID-19 sequencing data from the NCBI Sequence Read Archive (SRA)Workflows for genome assembly, quality control, metagenomic classification, and aggregate statisticsJupyter Notebook produces quality control plots for workflow output	genomics	
CAS COVID-19 antiviral candidate compounds dataset	The open source dataset of nearly 50,000 chemical substances includes antiviral drugs and related compounds that are structurally similar to known antivirals for use in applications including research, data mining, machine learning and analytics. A COVID-19 Protein Target Thesaurus is also available. CAS is a division of the American Chemical Society.	chemical structure data	
CDC COVID-19 Cases, Data, and Surveillance	The CDC is providing a variety of data on COVID-19 in the United States.	dashboards and visualization tools,	

JHU C19 data

<https://github.com/CSSEGISandData/COVID-19>

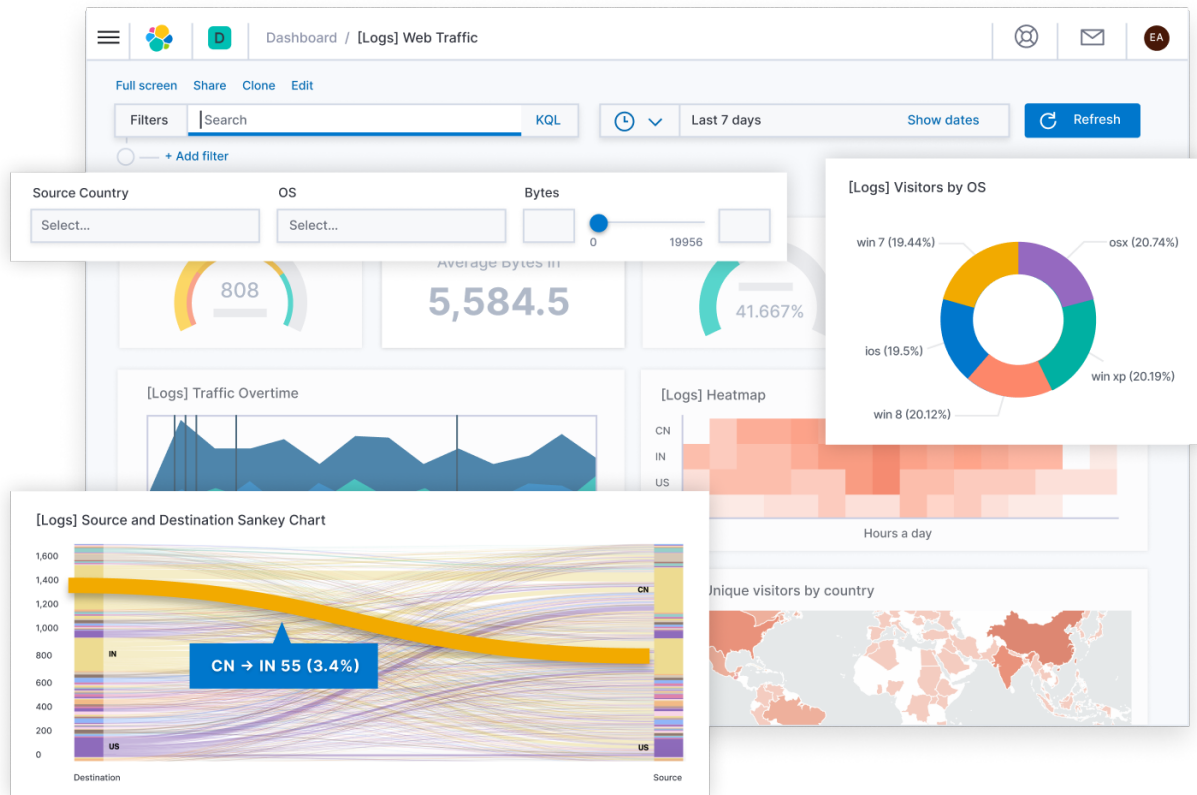


Closely related: COVID-19 Tracking project <https://covidtracking.com>

Visualization tools

Kibana + Elasticsearch

- Open source and high-performance



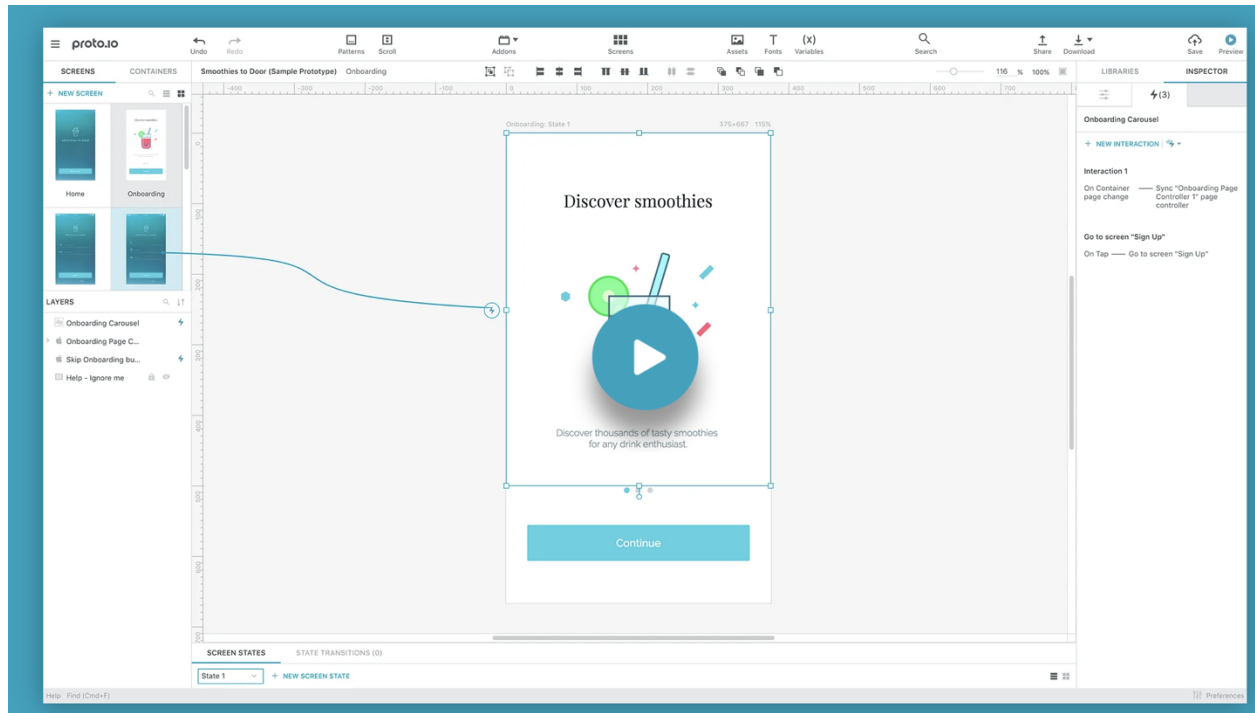
Other population choices: [Tableau](#) / [PowerBI](#)

- Designed for relational databases
- More polished visualization

Prototyping tools

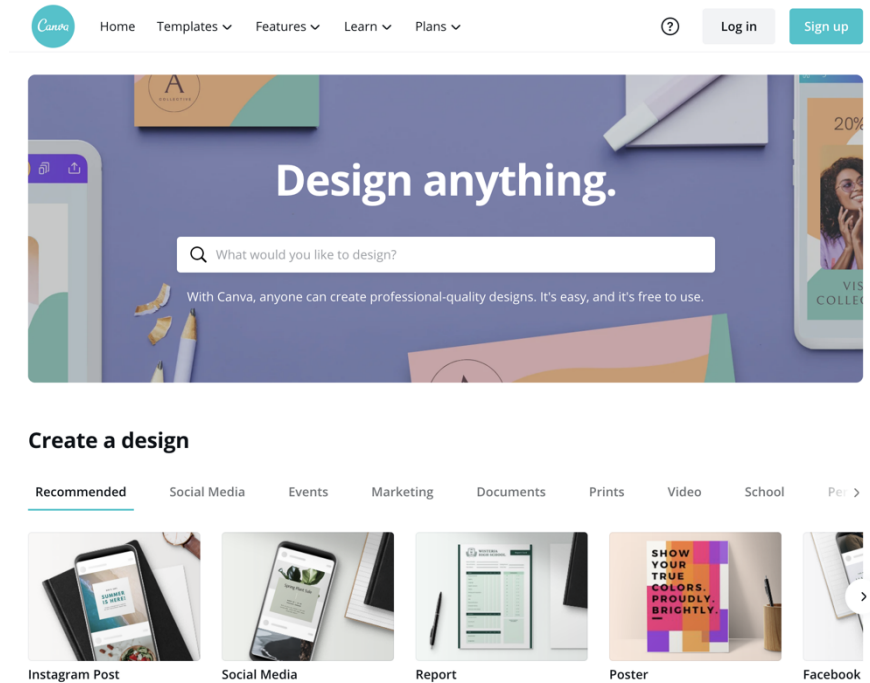
High-fidelity app prototypes <https://proto.io/>

Access instructions: simple registration (14 day trial)



Presentation Designing Tool: <https://canva.com>

Create well-designed presentations, flyers, brochures and social media posts



3D mock ups of devices: <https://www.rotato.xyz/>

Just drag and drop photos, screen recordings or videos into the device mock up and render in 3D.

Present your designs like you mean it

Slick mockup movies and images for promo videos, presentations, portfolios, app store images. Showcasing like the big boys is no longer just for the big boys.

Try it free

See what you can make

Now available: [Google Pixel 4a mockup](#)



Free stock images: <https://pexels.com> <https://unsplash.com/>

The best free stock photos & videos shared by talented creators.

Search for free photos and videos



Suggested: doors, buildings, idea, opportunities, door, win, life, more