

HVCHATHON



MMXIX

SURGEON GENERAL'S HEALTH WARNING

THIS PPT IS AVAILABLE ON GITHUB & SLACK ALL NIGHT

GITHUB: [HTTPS://GITHUB.COM/TRESATA/HACKATHONCLT2019](https://github.com/TRESATA/HACKATHONCLT2019)

SLACK: [HTTPS://HACKATHONCLT2019.SLACK.COM](https://hackathonclt2019.slack.com)



JUST LIKE ALWAYS

3 – THE MAX NUMBER OF PARTICIPANTS PER TEAM

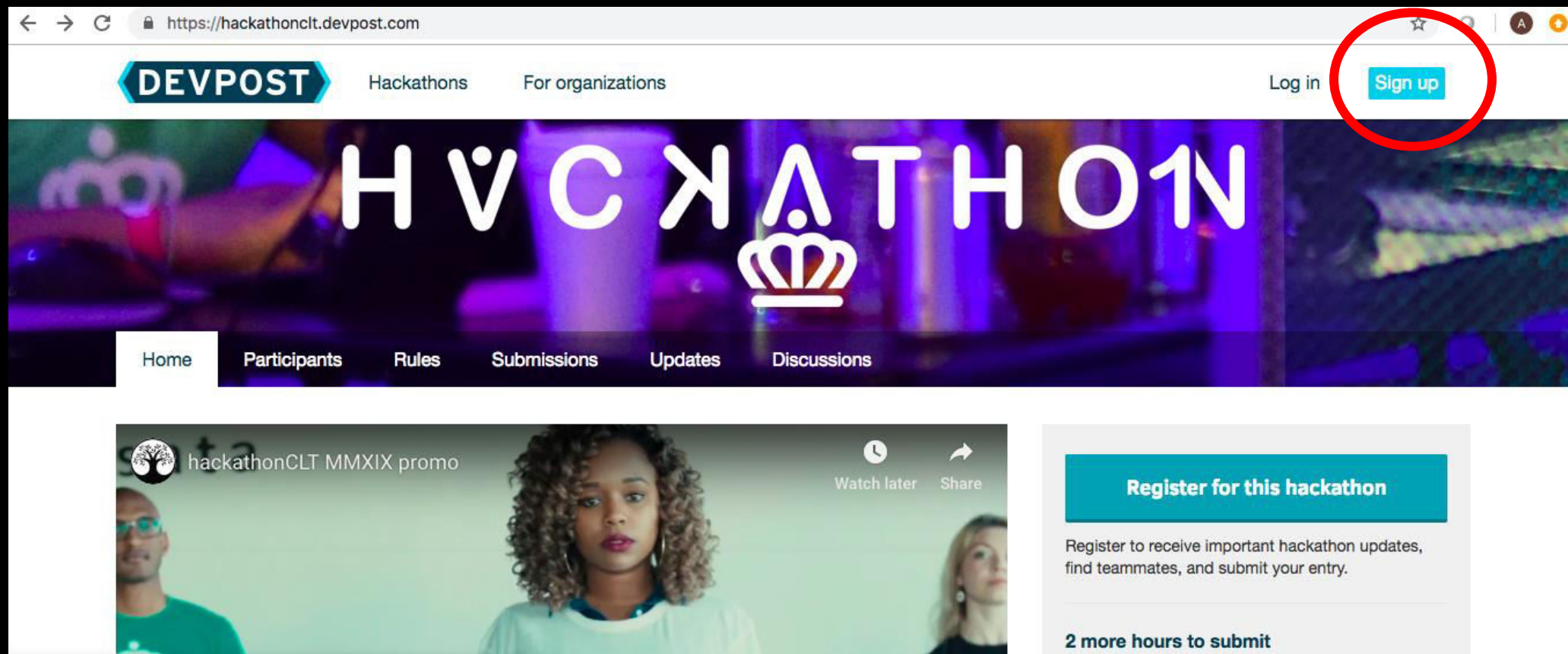
3 – CATEGORIES YOU CAN PARTICIPATE IN (HACK, CODE, FREESTYLE)

3 – KEYS FOR THE NIGHT (TECH, SPACE, FOOD)



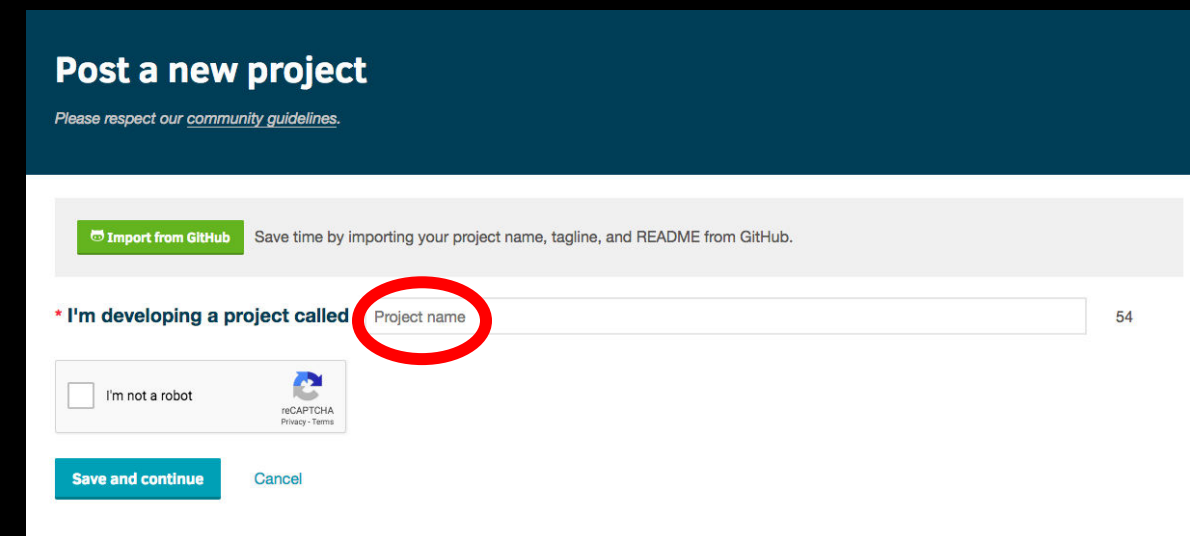
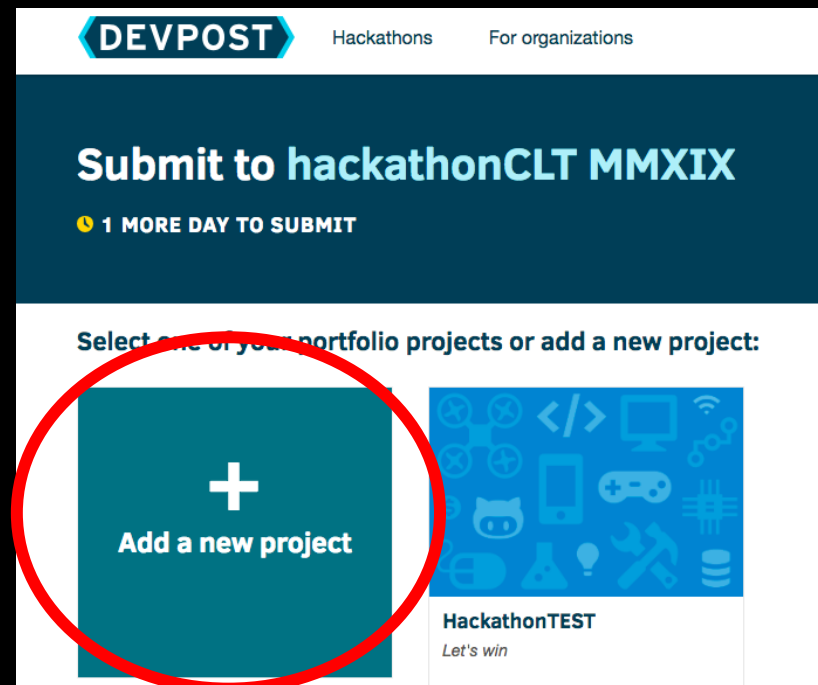
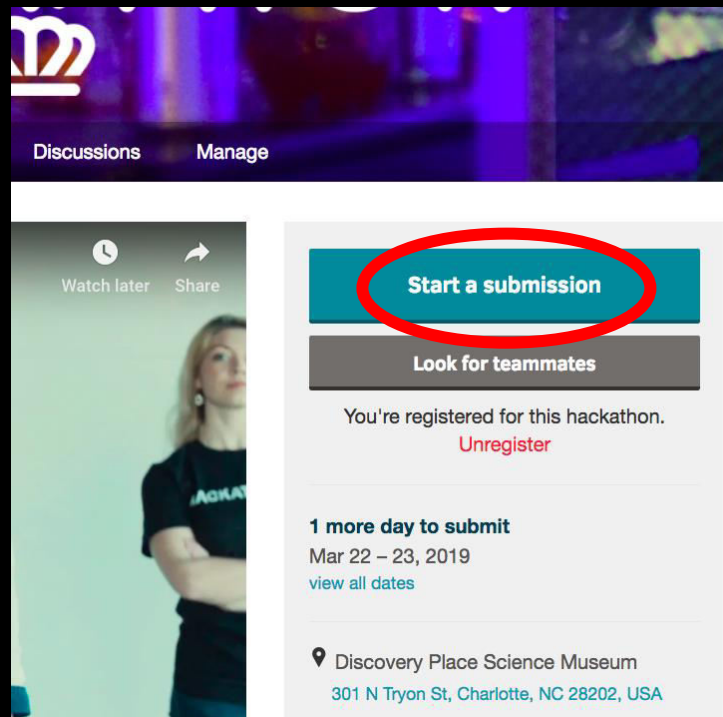
NEW THIS YEAR – FULLY DIGITAL PLATFORM

YOUR TEAM MUST CREATE A DEVPOST ACCOUNT BEFORE 9PM TONIGHT



SO EASY EVEN A HACKER CAN DO IT – DEVPOST BASICS

- START A SUBMISSION
- ADD A NEW PROJECT
- PROJECT NAME == TEAM NAME
- CONFIRM YOU'RE NOT A ROBOT



HACK THE SYSTEM

- POST YOUR NEW PROJECT
- UPLOAD FILE ... AFTER SUBMISSION
- SUBMIT
- READY TO ROCK AND CODE

Post a new project

Please respect our community guidelines.

I'm developing a project called

TEST

50

Here's the elevator pitch

A short tagline for the project

117

It's built with

Languages, APIs, hardware, hosts, libraries, UI Kits, and frameworks

The team

Add team members via email – someone@example.com

Send invite

Sherrell Dorsey (that's you!)

Here's the whole story

Inspiration...

Format your description with [Markdown](#). Here are some tips:

Try it out

URL for demo site, app store listing, GitHub repo, etc.

ADD ANOTHER LINK

Image gallery

JPG, PNG or GIF format, 5 MB max file size.
For best results, use a 3:2 ratio.

Choose files

or drag and drop

Thumbnail image

JPG, PNG or GIF format, 5 MB max file size.
For best results, use a 3:2 ratio.

TEST

TEST

Submit to hackathonCLT MMXIX

1 MORE DAY TO SUBMIT

Step 1: select a project

TEST

TEST

CREATED BY:

sherrell

Edit project details

Step 2: complete your hackathon submission

Upload a File

Upload a file as part of your submission - e.g., zip, pdf, word, apk, etc. To upload multiple files, put them in a zip file and upload the zip file. Limit: 35 MB.

Choose File No file chosen

Submit to hackathonCLT MMXIX

You can edit your submission until the submission deadline.

HVCNATHON

ALSO NEW FOR THIS YEAR

SHORTLISTING AND FINAL JUDGING IN DEVPOST

SUBMISSIONS TO DEVPOST COULD INCLUDE

- THE LINK TO YOUR TEAM'S GITHUB REPO WITH ANY SCRIPTS
- PRESENTATION SLIDES (I.E. PPT)
- ANY OTHER CONTENT YOU GENERATE

JUDGING CRITERIA - SMALL IMPROVEMENTS

AGENDA UPDATES

NUMBER OF TEAMS SELECTED TO ADVANCE (MORE ON THIS IN A MOMENT)



IF YOU WANT TO WIN...

1. ONE DEVPOST SUBMISSION PER TEAM
2. MUST SUBMIT BEFORE SHORTLISTING (8:45 AM)
3. DON'T BREAK ANY RULES
4. DON'T EVEN THINK ABOUT TAKING THE DATA WITH YOU



LOGISTICS



GET A CONNECTION

1. FIND WIFI: DISCOVERYPLACEWIFI
2. FIND THE DATA - SERVER AND DATA ACCESS WILL BE GIVEN IN THE TECH COMMAND CENTER
3. FIND AN ID - ONE ID PER TEAM
4. FIND A NAME - FOR YOUR TEAM...MAKE IT FUN



RULES OF ENGAGEMENT

1. NOTHING ILLEGAL
2. RESPECT COPYRIGHT
3. KEEP IT CLEAN
4. TERMS & CONDITIONS
5. ALL WORK MUST BE DONE ON-SITE
6. ORGANIZERS RESERVE THE RIGHT ...
7. YOU CANNOT LEAVE WITH ANY DATA OR SOFTWARE ON YOUR DEVICES...AND...



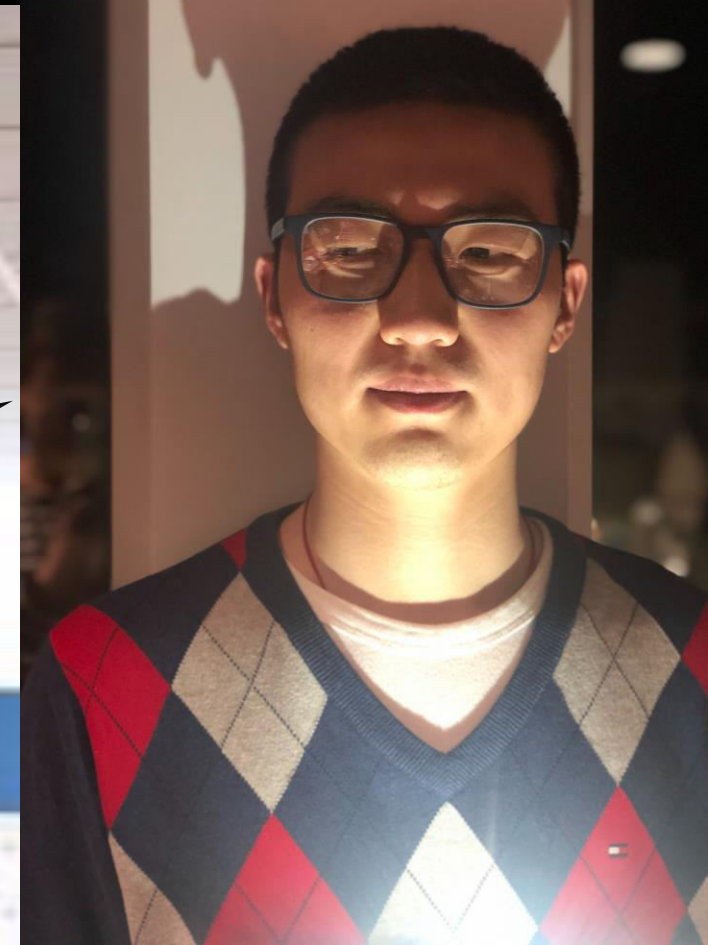
DATA PRIVACY DO'S AND DON'T'S

- **HACKATHONCLT DATA**
 - IS CONFIDENTIAL
 - CAN ONLY BE USED DURING HACKATHONCLT 2019
 - IS NOT TO BE DOWNLOADED / USED FOR ANY OTHER PURPOSE
- **DO NOT**
 - ATTEMPT TO IDENTIFY ANY DE-IDENTIFIED INFORMATION.
 - ATTEMPT TO CONTACT INDIVIDUALS WHO ARE SUBJECTS OF THE INFORMATION.
 - KEEP DATA OR SOFTWARE AFTER THE HACKATHON. LAPTOP CHECK BEFORE EXIT.
 - MIGRATE DATA TO ANY OTHER WEB SERVICE OR PLATFORM (I.E. AMAZON)
- **IF YOU DON'T COMPLY, YOUR TEAM WILL BE DISQUALIFIED.**



THERE IS ONE THING YOU CANNOT DO

CAFÉ IS OFF-LIMITS.
DO NOT ENTER/MOVE/RELOCATE
OR FACE MY WRATH



HVCATHON

PARTY TIME

WHEN	WHAT’S GOING ON	WHERE
8:15PM	RELEASE THE HACKERS! (CODING BEGINS)	EVERYWHERE
10:00PM	ANIMAL ENCOUNTER	STAGE – LEVEL 2
11:00PM	LIQUID NITROGEN COFFEE	STAGE – LEVEL 2
11:30PM	HACKER TIPS & TRICKS	STAGE – LEVEL 2
12:00AM	MIDNIGHT SNACK	COOL STUFF – LEVEL 2
1:30AM	HACKER TIPS & TRICKS	STAGE – LEVEL 2
3:30AM	HACKER TIPS & TRICKS	STAGE – LEVEL 2
4:00AM	OPEN MIC STAND UP	STAGE – LEVEL 2
6:15AM	BREAKFAST HACKER TIPS & TRICKS	COOL STUFF – LEVEL 2 STAGE – LEVEL 2
9:00AM	MUSEUM OPENS (YOU ARE THE EXHIBIT!)	EVERYWHERE





THE PROBLEM



WHAT IS MEDLINK?

- SAFETY-NET SERVICE PROVIDERS COLLABORATING
- IMPROVE COMMUNITY'S ACCESS TO HEALTH CARE
- REGARDLESS OF ABILITY TO PAY
- 20 CLINICS IN MECKLENBURG COUNTY
- [HTTPS://MEDLINKOFMECKLENBURG.ORG/](https://medlinkofmecklenburg.org/)





UP ALL NIGHT FOR A CAUSE

1. THE BENEFICIARY— MEDLINK

2. THE PROBLEM— ACCESS TO CARE AND PREVENTATIVE SERVICES

3. THE POSSIBLE APPROACHES—

- CREATE UNIVERSAL DATA PORTAL FOR MEDLINK PARTNERS
- IMPROVE ACCESS TO CARE FOR SPECIFIC HEALTH PROBLEMS
- DETERMINE CAUSES OF GAPS IN HEALTH CARE ACCESS
- UNDERSTAND HOW GEOGRAPHIC AND SOCIAL CONTEXT AFFECTS ACCESS
- ANY OTHER SOLUTIONS YOU CAN DREAM UP (THE PATHWAYS ARE ENDLESS)

4. THE AGENT OF CHANGE— YOU



WAYS TO PLAY



WAYS TO COMPETE

1. THE HACK

FOR HACKATHON PURISTS, THIS CATEGORY DEMANDS HACKING, CODING AND ANALYTICAL TALENT WHERE THE WINNERS WILL BE JUDGED ON THE QUALITY OF PREDICTIONS AND SCALABILITY OF CODE (REMEMBER “BIG DATA HACKATHON”) THAT IS ABLE TO SOLVE THE BUSINESS PROBLEM.

2. THE CODE

WELL, YOU GOT IT. IN ORDER TO WIN...YOU NEED TO WRITE SOME CODE. IT CAN BE ANYTHING FROM MOBILE APPLICATIONS TO WEBSITES AND EVERYTHING IN BETWEEN, AS LONG AS IT HELPS SOLVE THE BUSINESS PROBLEM.

3. THE FREESTYLE

WE BELIEVE THAT CREATIVITY CAN BE HACKED AS WELL!! SO THIS ONE IS FOR THE ARTISTS, THE VAGABONDS WHO CAN'T CODE (YET) BUT STILL DREAM ABOUT MAKING THE WORLD A BETTER PLACE WITH LATERAL, “NEVER-BEFORE-THOUGHT-OF” IDEAS. DELIVER A KILLER-PREZ BACKED BY A SOLID, SCALABLE, BUSINESS MODEL THAT CONVINCINGLY PROVES THAT YOU CAN SOLVE THE BUSINESS PROBLEM, AND YOU TOO CAN WIN.



QUICK TIP: KEEP YOUR COMPETITIVE EDGE

1. EACH TEAM MUST CHOOSE ONE OF THE THREE CATEGORIES
HACK, CODE, FREESTYLE – BUT ONLY ONE
2. PUT THE CHOSEN CATEGORY IN DEVPOST SUBMISSION COMMENTS
3. TEAMS CAN CHANGE THEIR CATEGORY OVERNIGHT
DON'T SWEAT IT! JUST CHANGE YOUR DEVPOST COMMENT



JUDGING

SUBMISSIONS WILL BE RANKED ON THE FOLLOWING:

1. SCALABILITY
2. MODEL QUALITY
3. CREATIVITY
4. PRESENTATION
5. IMPLEMENTABILITY



TRUST THE PROCESS

1. SHORTLISTING

- COME WITH YOUR BEST 3-MINUTE PITCH
- SIGN UP FOR APPOINTMENTS VIA GOOGLE SPREADSHEET; LINK WILL BE ON SLACK
- MAKE SURE TO HAVE YOUR SUBMISSION IN DEVPOST PRIOR TO SCHEDULED SHORTLISTING

2. FINAL JUDGING

- 7 TEAMS – 2 TEAMS FOR EACH CATEGORY (HACK, CODE, FREESTYLE) + 1 WILDCARD
- 3-MINUTE PITCH + Q/A SESSION



TIME TO BE JUDGY

MARCH 23, 2019	JUDGING STAGE	WHO	WHERE
6AM	SHORTLISTING (LIMITED CAPACITY)	OUR EARLY FINISHERS	COMMAND CENTER (KIDSU)
7AM	SHORTLISTING (FULL CAPACITY)	EVERYBODY	COMMAND CENTER (KIDSU)
8:45 AM	END OF HACKING	EVERYBODY NEEDS TO BE DONE BY THIS TIME	WESTEROS
9:00 AM	END OF SHORTLISTING	EVERYBODY NEEDS TO HAVE SEEN A SHORTLISITING JUDGE BY THIS TIME	COMMAND CENTER (KIDSU)
10:00 AM	FINALIST PRESENTATIONS & AWARDS	EVERYONE WHO WENT THROUGH SHORTLISTING	AUDITORIUM
12:00 PM	EVENT ENDS	WE ALL GO HOME	EVERYWHERE



QUICK TIP: READY FOR JUDGMENT

1. BE CLEAR AND CLEAN IN THREE MINUTES
2. SIGN UP FOR SHORTLISTING IN ADVANCE



DATA + TECH



STACK & SLACK

1. FREE TO USE ANYTHING THAT CAN COMPILE TO A .JAR (JAVA, SCALA, ETC)
2. DATA STORED ON HDFS (HADOOP DISTRIBUTED FILE SYSTEM) & ON HACKER SERVERS
3. CREATE WORKING DIRECTORY FOR YOUR TEAM'S DATA ANALYSIS (SEE GITHUB README)
4. TOOLS FOR YOUR HACKING PLEASURE: R, SPARK, ANACONDA, PYSPARK, HIVE, ELASTICSEARCH



STACK & SLACK

5. YOU ASKED FOR IT: TRESATA TREK (SEE NEXT SLIDE FOR ACCESS INFO)

6. DATA DESCRIPTIONS, DICTIONARIES ON GITHUB
([HTTPS://GITHUB.COM/TRESATA/HACKATHONCLT2019](https://github.com/TRESATA/HACKATHONCLT2019))

7. STAY INFORMED AND COMMUNICATE ON SLACK ([HTTPS://HACKATHONCLT2019.SLACK.COM](https://hackathonclt2019.slack.com))

8. SUBMIT CONTENT FOR JUDGING ON DEVPOST ([HTTPS://HACKATHONCLT.DEVPOST.COM](https://hackathonclt.devpost.com))



TRESATA TREK: DATA DISCOVERY

CONNECT @ HACK01.NORTHSTATE.NET:5603

TREK

Inventory

Discovery

Collections

Toolkit

Apps

tresata

Logout

Collapse

tresata

Inventory > health_outcomes-500_cities > 2019-01-01

This Project This Partition Search

★ 2019-01-01

Last updated on Mar 21, 2019 2:52:12 PM by hacker001

parql:/data/hackathon/health_outcomes/500-cities/parq/500_Cities_2016_CLT.parq

Fields: 24 Records: 5.65k TQS: — Tags: + Add tag

Fields

Filter by name

Showing 24 Fields

NAME	# UNIQUES	%POPULATED	TQS	FORMAT	PREDICTION	TOP VALUES	TAGS
CityName	1	100%	—	String	—		
UniqueID	199	100%	—	String	—		
CategoryID	3	100%	—	String	—		
Data_Value	820	99%	—	Float	—		
Data_Value_Type	2	100%	—	String	—		
Short_Question_Text	28	100%	—	String	—		
DataValueTypeID	2	100%	—	String	—		
Low_Confidence_Limit	800	99%	—	Float	—		
StateAbbr	1	100%	—	String	—		



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Inventory > health_outcomes-500_cities > 2019-01-01 > Short_Question_Text

This Project This Partition Search

★ Short_Question_Text

Last updated on Mar 21, 2019 2:52:12 PM by tresata

Overview

Comments 0

Discovery

of Populated

of Uniques

Top Format

TQS

of Null

Tags

5.65k (100%)

28 (0.5%)

String (100%)

—

0 (0%)

+ Add tag

Top Values 7

☒

Stroke

3.58%

☒

Binge Drinking

3.58%

☒

Taking BP Medication

3.58%

☒

Coronary Heart Disease

3.58%

☒

Physical Inactivity

3.58%

Top Predictions 0

No predictions found.

Top Formats 3

String

100%

Integer

0%

Float

0%

Top Patterns 7

xxxxxx

3.58%

xxxxxx (xxxxxx xxxx)

3.58%

xxxxxxxx xxxx xxxxxxxx

3.58%

xxxxxx xx xxxxxxxxxxxx

3.58%

xxxxxxxx xxxxxx xxxxxxxx

3.58%



DATA DATA DATA

HEALTH OUTCOMES DATASETS

- **CDC 500 CITIES PROJECT (CHARLOTTE ONLY)**
- **AIDSVU (HIV)**

Individuals' behaviors, lifestyle habits, disease prevalence, etc. aggregated at zip code or census tract level in Meck. County

SERVICES DATASETS FROM MEDLINK PARTNERS

- **CAMINO CLINIC**
- **CARE RING**
- **CHARLOTTE COMMUNITY HEALTH CLINIC**
- **CHARLOTTE CENTER FOR LEGAL ADVOCACY**
- **MECKLENBURG COUNTY PUBLIC HEALTH**
- **NC MEDASSIST**

Client visits in 2018 for each agency aggregated by zip code, sex, and race/ethnicity in Meck. County



DATA DATA DATA

SOCIAL DETERMINANTS OF HEALTH (SDH) DATASETS

- CENSUS
- CHARLOTTE HOUSING AUTHORITY
- CONSUMER FINANCIAL PROTECTION BUREAU
- EPA
- GEO-MAPPINGS
- HOUSING & URBAN DEVELOPMENT
- MECKLENBURG PUBLIC SERVICES-GEO JSON
- MECKLENBURG QUALITY OF LIFE
- NC BOARD OF EDUCATION
- ZILLOW

Contextual factors that influence health, such as race, income, environment, transportation, etc.

ANY OTHER OPEN-SOURCE DATASETS ARE FAIR GAME



FINAL TIP: SOCIAL MEDIA

1. LEVERAGE THE INTERNET TO HACK THE PROBLEM

GOOGLE TRENDS, TWITTER, ANYTHING YOU CAN IMAGINE (CHECK README IN GITHUB)

2. POST PICTURES THROUGHOUT YOUR HACKATHON JOURNEY

USE OUR HASHTAGS AND TAG SOCIAL MEDIA ACCOUNTS DISPLAYED THROUGHOUT THE MUSEUM



Q & A



#CLTHACKSALOT

@charlottehacks

#hackathonCLT



HVCNATHON