HVCKATHON

MMXIX

SURGEON GENERAL'S HEALTH WARNING

THIS PPT IS AVAILABLE ON GITHUB & SLACK ALL NIGHT

GITHUB: HTTPS://GITHUB.COM/TRESATA/HACKATHONCLT2019

SLACK: HTTPS://HACKATHONCLT2019.SLACK.COM

HACKATHON

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)

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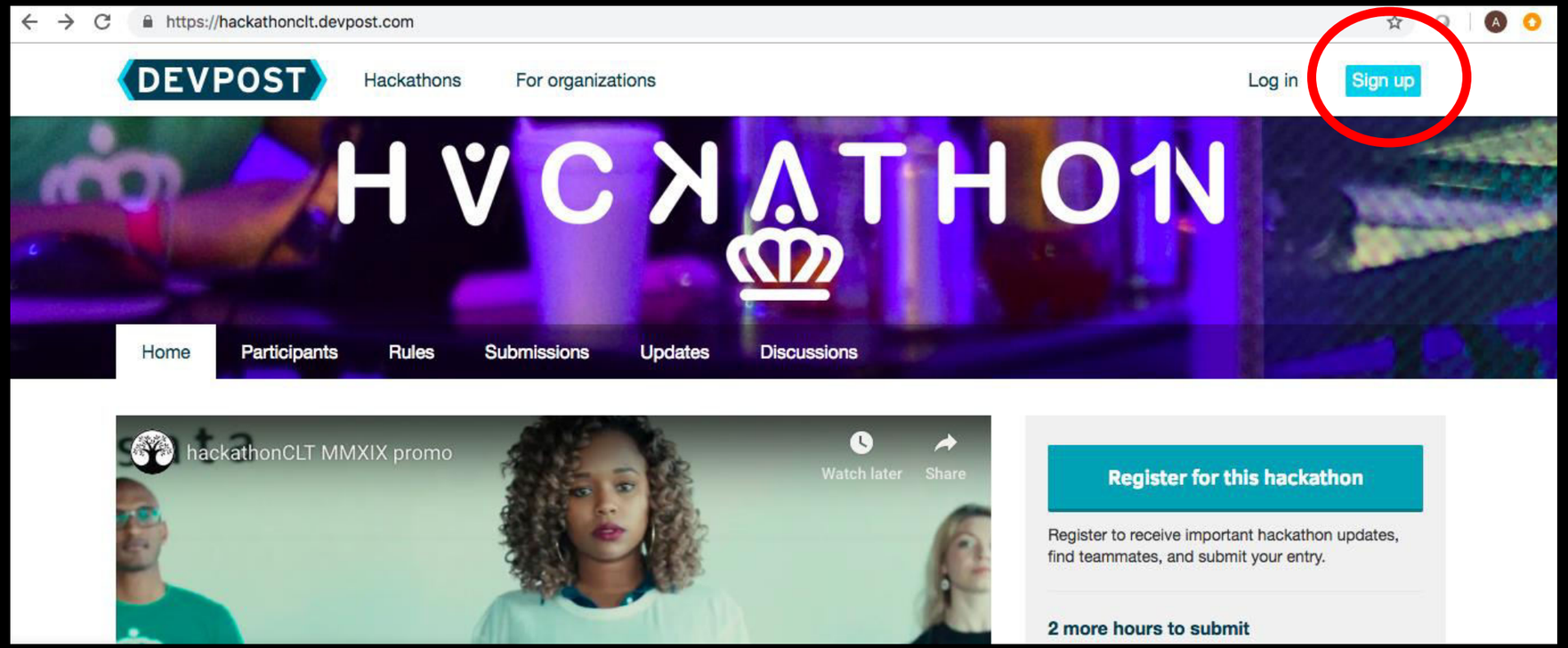
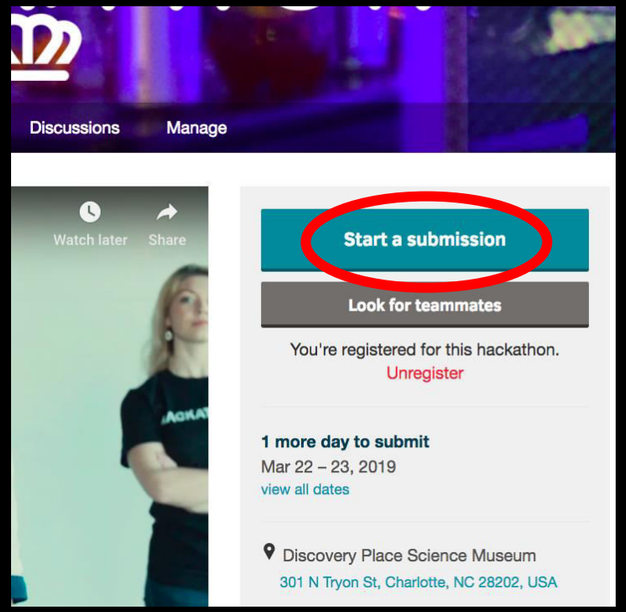
NEW THIS YEAR – FULLY DIGITAL PLATFORM

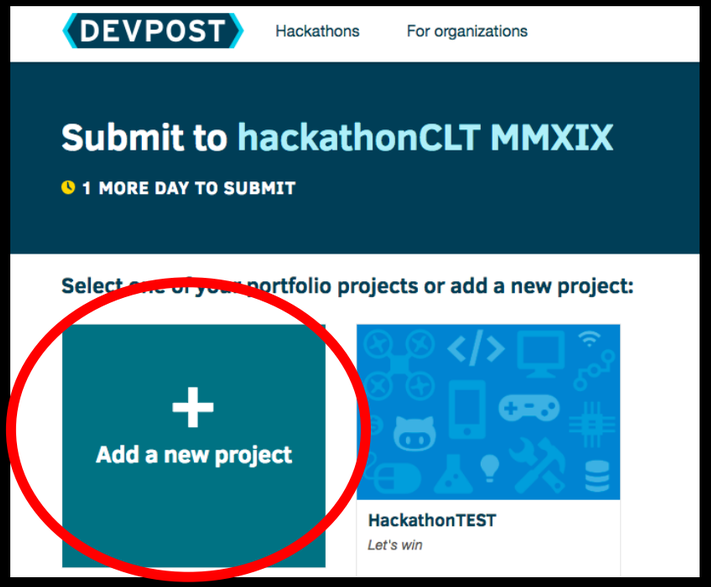
YOUR TEAM MUST CREATE A DEVPOST ACCOUNT BEFORE 9PM TONIGHT

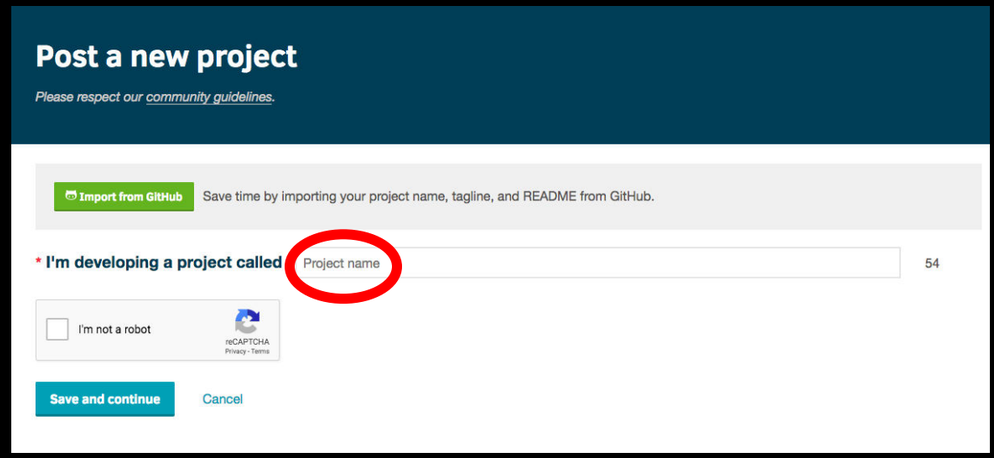


SO EASY EVEN A HACKER CAN DO IT – DEVPOST BASICS

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

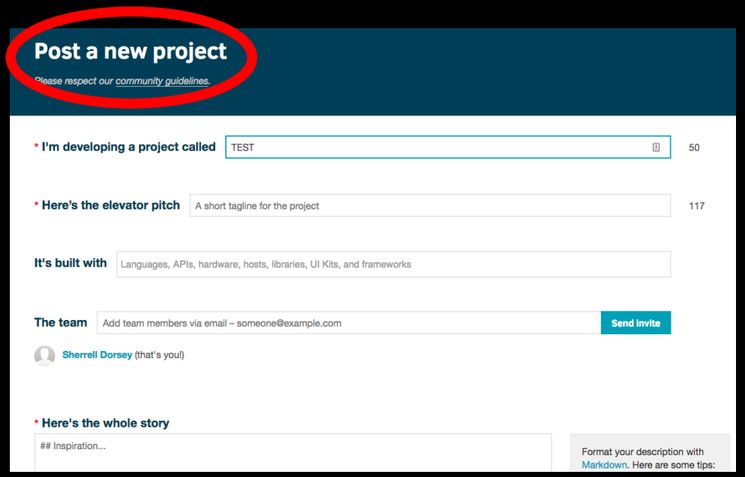


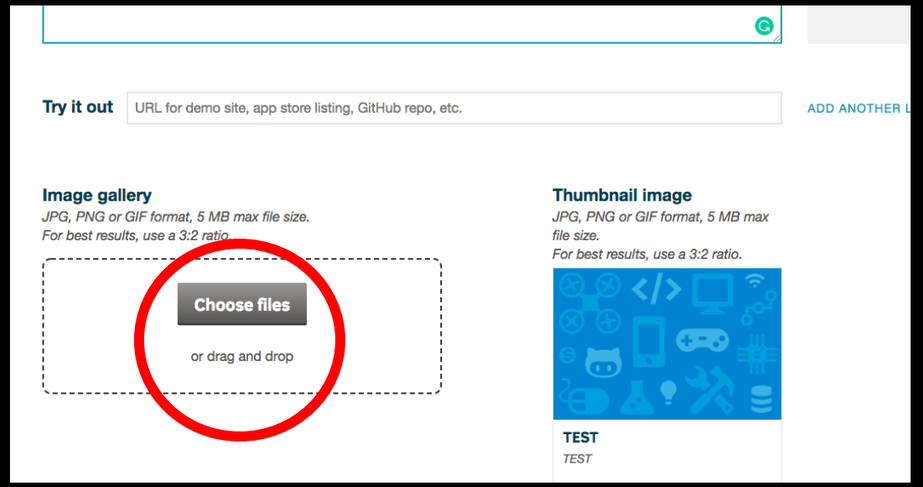


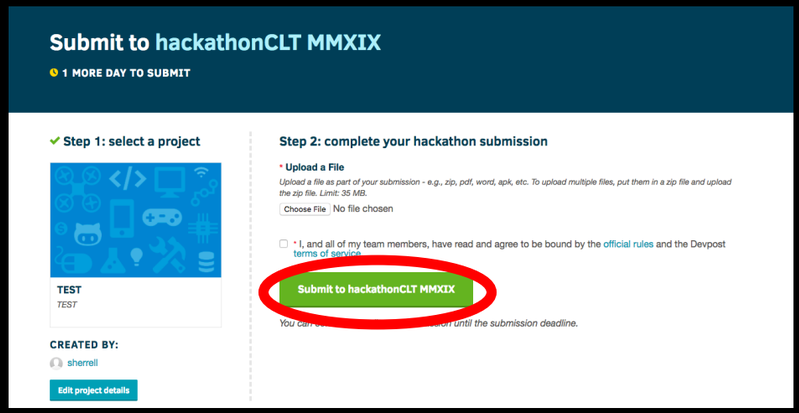


HACK THE SYSTEM

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







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**

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LOGISTICS

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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

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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…

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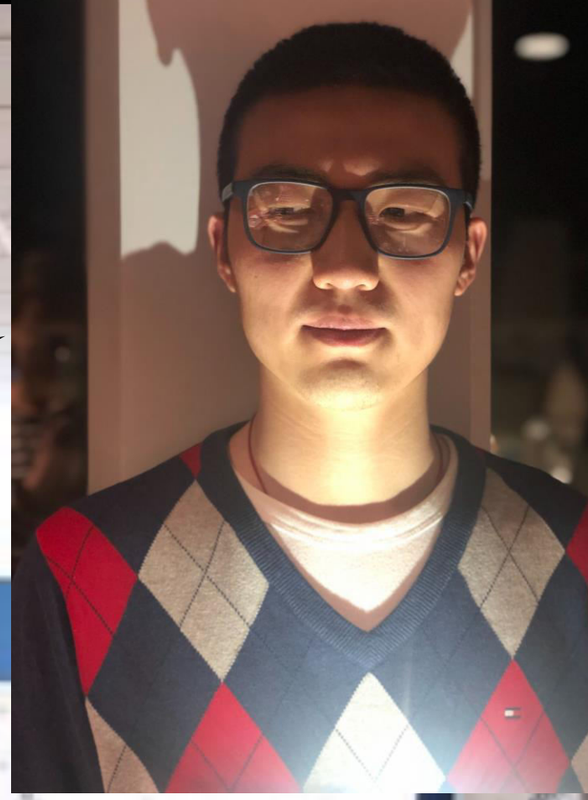
DATA PRIVACY DO'S AND DON'T'S

- 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



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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

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THE **PROBLEM**

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WHAT IS MEDLINK?

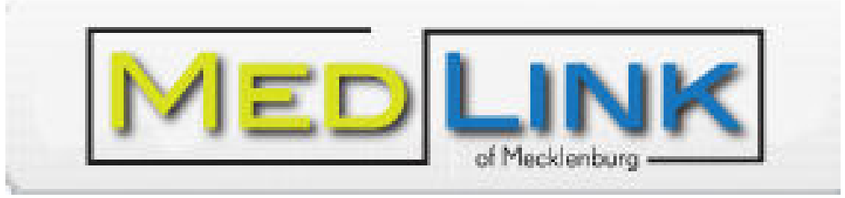
- SAFETY-NET SERVICE PROVIDERS COLLABORATING
- IMPROVE COMMUNITY'S ACCESS TO HEALTH CARE
- REGARDLESS OF ABILITY TO PAY
- 20 CLINICS IN MECKLENBURG COUNTY
- HTTPS://MEDLINKOFMECKLENBURG.ORG/

Mecklenburg County Medical Society

Atrium Health

Center for Prevention Services

Matthews Free Medical Clinic



The C.W. Williams
COMMUNITY HEALTH CENTER, INC.

NOVANT HEALTH

Ada Jenkins
CENTER

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**

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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

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JUDGING

SUBMISSIONS WILL BE RANKED ON THE FOLLOWING:

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

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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

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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

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QUICK TIP: READY FOR JUDGMENT

1. BE CLEAR AND CLEAN IN THREE MINUTES

2. SIGN UP FOR SHORTLISTING IN ADVANCE

DATA + TECH

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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)

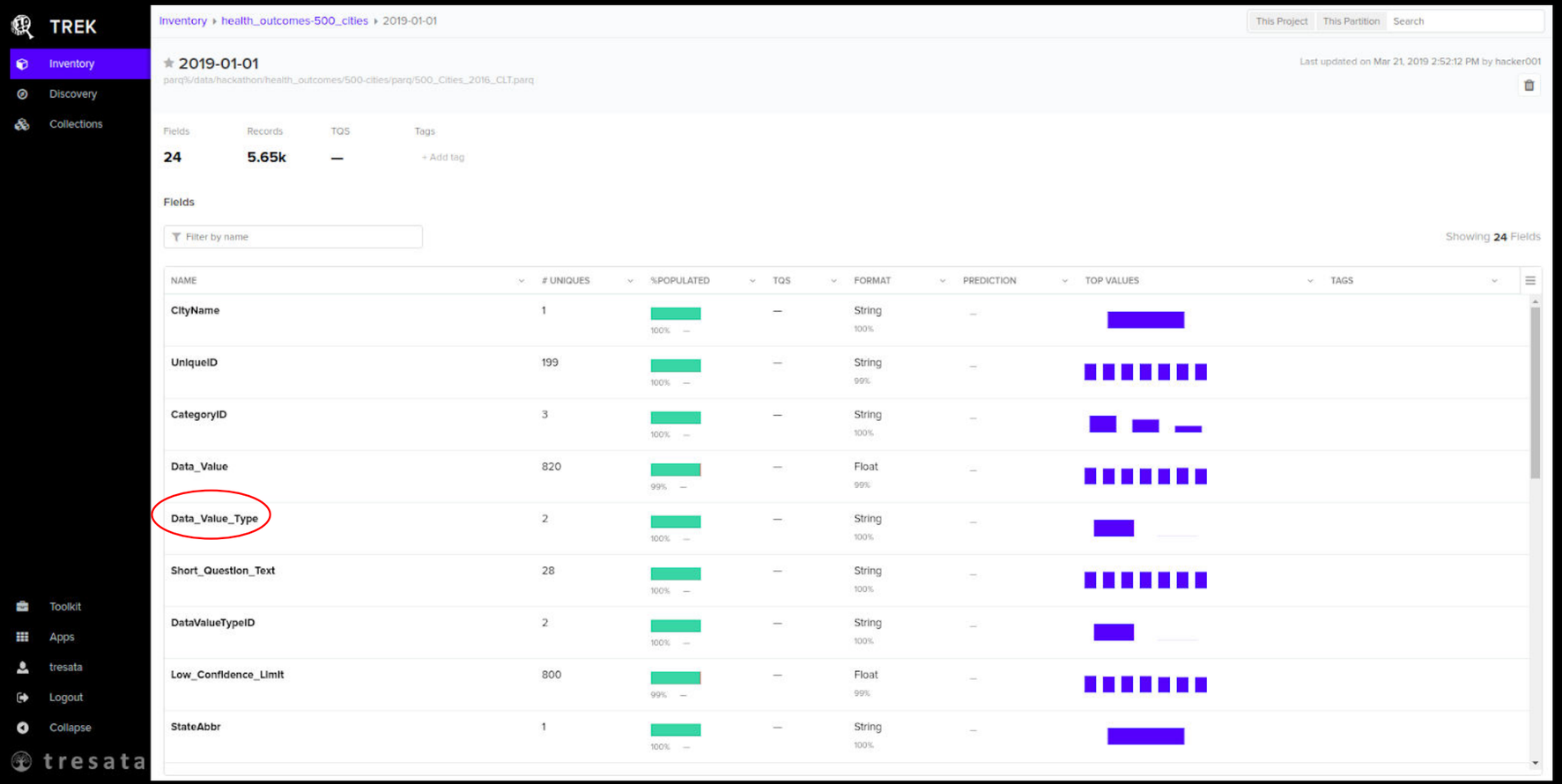
6. DATA DESCRIPTIONS, DICTIONARIES ON GITHUB (HTTPS://GITHUB.COM/TRESATA/HACKATHONCLT2019)

7. STAY INFORMED AND COMMUNICATE ON SLACK (HTTPS://HACKATHONCLT2019.SLACK.COM)

8. SUBMIT CONTENT FOR JUDGING ON DEVPOST (HTTPS://HACKATHONCLT.DEVPOST.COM)

TRESATA TREK: DATA DISCOVERY

CONNECT @ HACK01.NORTHSTATE.NET:5603



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TRESATA TREK: DATA DISCOVERY

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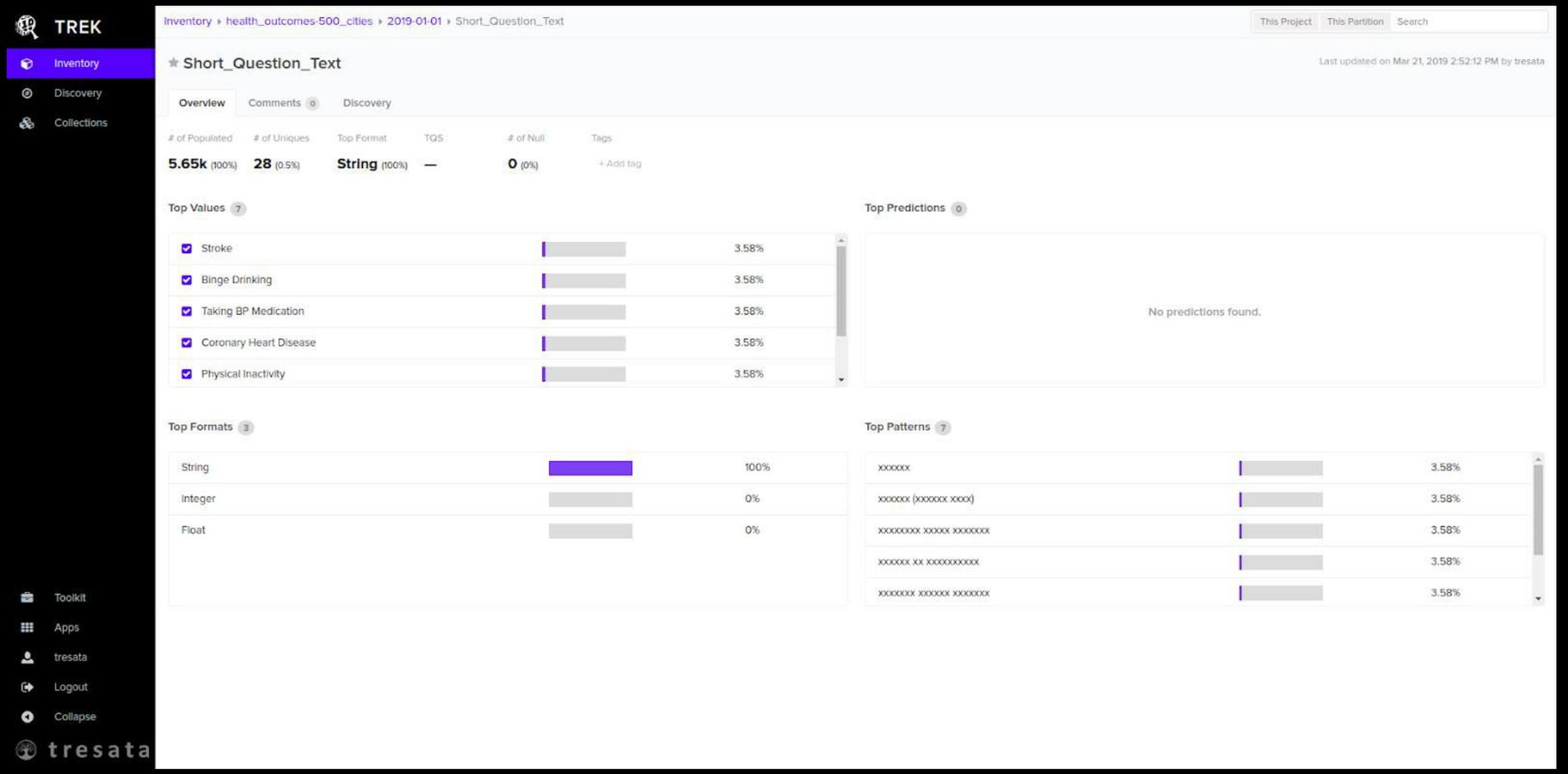

DATA DATA DATA

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

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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

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