

intel.



Google Cloud











Discord and Github Training



Join the HPC in the City Discord using this QR Code!



intel.



Google Cloud









Discord and Github Training

Agenda

HP

in the

- Introductions
- Hackathon Objective
- Deliverables and Resources

HACKATHON

- General Information
- Discord Basics
- GitHub (Web) Basics





Organizers



Alex Nolte - University of Tartu alexander.nolte@ut.ee



HPC City: St. Louis Amy Cannon - Omnibond amycannon@omnibond.com



HACKATHON



Boyd Wilson - Omnibond boyd@omnibond.com



http://hackhpc.org/hpcinthecity

Je'aime Powell - TACC jpowell@tacc.utexas.edu

Linda Hayden - ECSU haydenl@mindspring.com



Presenter: Je'aime Powell

The Objective of HPC in the City: St. Louis

The hackathon aims to harness the resources, skills, and knowledge found in the HPC community in an effort to provide applied exposure towards students from 2-4 year post-secondary educational institutions. In short, the hackathon will provide HPC skills and training while targeting problems that directly affect the participants.

http://hackhpc.org/hpcinthecity

• Develop knowledge about solutions to identified issues affecting St. Louis through application of data analysis/presentation or management.

Student Outcomes

- Increased familiarity with data science in the cloud
- Experience collaborative software engineering
- Develop professional communication skills

ΗΔCΚΔΤΗΟΝ

Student Deliverables and Resources

Deliverables:

- Source code Including Comments
- PDF of presentation
 - Team members with pictures
 - Use of HPC technology in the project
 - Regional (St. Louis) implications of the project
- Github Repository Link
 - README.md with project description

HACKATHON

Resources:

- Google Cloud (Provided Credits)
- Cloudy Cluster
- Most Commonly Used
 - Python
 - Jupyter Notebooks
 - Node.Js (JavaScript)
 - Repl.it (Collaborative Environment)
 - HTML
- Discord

https://discord.com/invite/rSXasYKDwE



Join the HPCHack Discord using this QR Code!



General Information (the 3 T's)

• Teams

- 4-5 Students
- 1 Primary Mentor
- 1 Specialist/Staff

• Time

- November 4th 8th
 - 11/4@~6pm ET Event Start
 - Team formation
 - 11/[5-8] @ 11 ET & 6pm ET- Checkins
 - 11/8@6pm ET-Final Presentations

HACKATHON

• Topic Examples

- Data Analysis of COVID 19
- Economic disparities and their effects on college participation
- Genomics, Molecular Dynamics, or Weather Modeling in the Cloud.
- Social Justice

- Al-based Crowd Status
- Public Data Management
- Graduation Rates
- Broadband Access
- Insurance vs. Public Health Resilience



Communication Platforms











Discord - Basics

HPC

in the

HackHPC Discord Server: https://discord.gg/auwynz9Y

Functions:

- Messages
 - Direct and Group

Video Conference

- Group
- Screen share
- Meeting Rooms
- File Exchange



Join the HPC in the City Discord using this QR Code!



HACKATHON http://hackhpc.org/hpcinthecity

Discord Channels and Tips Important Channels

HACKATHON

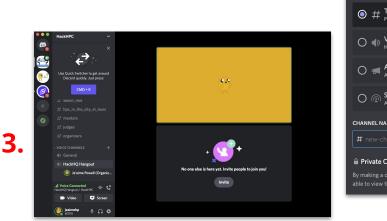
• #hpc_in_the_city_st_louis

- *#assistance (voice channel)*
- HackHQ-general (voice channel)
- Custom team channel

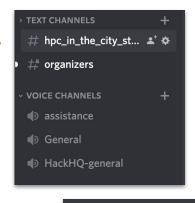
Tips

in the

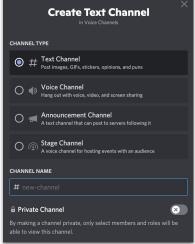
- 1. Browse for a channel
- 2. Create Group
- 3. Conference



http://hackhpc.org/hpcinthecity



2





GitHub (Web) - Basics



Note: A GitHub repository will be required of all teams when reporting out

during final presentations. (Examples http://hackhpc.org/pasthacks/)

[HINT] <u>GitHub Pages</u> is a powerful, free feature!

HACKATHON

Code 💮 Issues 🛛 Pull requests	 Actions Projects 	🖾 Wiki 💿 Security 🗠 Insights	
P master - P 1 branch 🛇 0 tags		Go to file Add file * Code -	About
1: demetriusnich Add files via upload		✓ 32af2f2 on Nov 9, 2020 ③22 commits	CD Readme
🖿 assetsjing	First Commit	11 months ago	
🖿 css	First Commit	11 months ago	
🖿 dist	First Commit	11 months ago	Releases
🖿 js	First Commit	11 months ago	
scripts	First Commit	11 months ago	
src 📔	First Commit	11 months ago	Packages No packages published
editorconfig	First Commit	11 months ago	
.gitignore	First Commit	11 months ago	
🗅 .travis.yml	First Commit	11 months ago	go Contributors 3
Breast Cancer Awareness by Slides	Add files via upload	11 months ago	
D LICENSE	First Commit	11 months ago	
README.md	Update README.md	11 months ago	

E README.md

Usage

Basic Usage

After downloading, simply edit the HTML and CSS files included with dist. directory, These are the only files you need to worry about, you can ignore everything else! To preview the changes you make to the code, you can open the index. html. file in your web browser.

Advanced Usage

Clone the source files of the theme and navigate into the theme's root directory. Run new install, and then run new start, which will open up a preview of the template in your default browser, watch for changes to core template files, and live reload the browser when changes are saved. You can view the package.json file to see which scripts are included.

npm Scripts

- npm run build builds the project this builds assets, HTML, JS, and CSS into dist
- npm run build:assets copies the files in the src/assets/ directory into dist
- npm run build:pug compiles the Pug located in the src/pug/ directory into dist
- npm run build:scripts brings the src/js/scripts.js file into dist
- npm run build:scss compiles the SCSS files located in the src/scss/ directory into dist
- npm run clean deletes the dist directory to prepare for rebuilding the project
- non-run start-debun runs the project in debug mode

Breast-Cancer-Prediction

Breast Cancer Prediction Website

HEAD According to Georgia Department of Public Health and the Georgia Center for Cancer Statistics, breast cancer is the leading cause of cancer indicance in women clusters residing in Georgia. Breast cancer accounts for 30% of all new cancers Through prediction modelling, women can understand how risk factors play a part in prevention. Knowing these risks brings awareness and awareness brings about prevention.

We created a website with prediction graphs showing the possible cases of breast cancer for 2020, and compared it to prior years.

This site was created to spread awareness for breast cancer in Atlanta.

You can see what work was done on Google Colab https://colab.research.google.com/drive/1N89pY4MSiTOUGUtVqSta7wfQ1yUzyV-I? usp=sharing

This project was created by Demetrius Nicholson, Rayna Wynn, Elijah Higgs, Javier Guillen, and Tony Guy.

Data for this study was obtained from the BCSC: http://bcsc-research.org/.

Start Bootstrap - Grayscale

Grayscale is a multipurpose, one page HTML theme for Bootstrap created by Start Bootstrap.

Preview

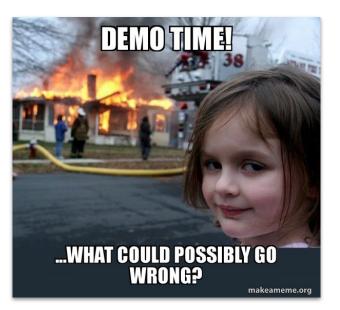




Repository Creation and README.md

Demo Time!!

HACKATHON







Questions and Concerns

Next Training Sessions:

- Google / CloudyCluster [10/14/21]
- Data to Dashboard [10/21/21]

Schedule:

HP'

https://jeaimehp.github.io/HackHPC-HPCintheCity21/

Presenters Contact Information:

Je'aime Powell (TACC) - jpowell@tacc.utexas.edu

HACKATHON

