Dear MedHacks 2020 Participants,

Welcome! The entire MedHacks team is thrilled to welcome you to the sixth annual MedHacks medical and healthcare hackathon, held virtually from September 4th to September 6th, 2020. We're excited to host hundreds of the best and brightest students from around the world and can't wait to see what this incredible group of individuals will create!

To help with the transition to a virtual event, please review the information detailed in this packet. Included are answers to a variety of questions about the schedule and logistics for the weekend. Please read through this packet in its entirety, including the MedHacks code of conduct, prior to MedHacks. You must follow our code of conduct and keep messages relevant and appropriate at all times, otherwise your participation at MedHacks may be forfeited. *Make sure that you read this packet thoroughly prior to contacting us with any questions; if the answer to your question can be found in this information packet, we will not respond to your message.*

If you have any further unanswered questions, please feel free to message us on any of our social media, Discord, or email us at info@medhacks.io. Additionally, please be sure to follow us on Instagram and Facebook to keep up to date with everything happening this weekend!

Best,
The MedHacks Organizing Team

medhacks.io/2020
facebook.com/medhacks
twitter.com/medhacks
instagram.com/medhacks

Discord

MedHacks will be held entirely online through Discord this year due to the COVID-19 pandemic. We will have separate servers for general announcements/activities, workshops, and mentor sessions, with organizers monitoring activity and sessions. Within each server, there will be different text channels for messaging and voice channels for video calls that will be used as needed. You will also be able to private message other professionals and/or participants in all servers. Many meeting sessions may occur on different streaming platforms depending on need or presenter preference, but these links will be sent out in Discord channels.

Please download the Discord application and watch our Discord tutorials (desktop and mobile) to set up your workspace and get acquainted with Discord. **Please add MedHacks as a friend on Discord, using the tag MedHacks#3931.** You can then join the MedHacks General Discord Server here (click "join server"). *This will be your only source for information and updates throughout the weekend, so please make sure your notifications are on.* Important links needed throughout the weekend (schedule, workshop list, mentor list, registration form, workshop sign-up form, etc.) will be pinned in the #announcements channel in the general server. **Please do not message us asking for these links.**

Zoom

Our opening/closing ceremonies, pitch sessions, and some workshops will be taking place on Zoom. Please make sure that you have Zoom downloaded before MedHacks and make an account if you don't already have one in order to participate in these sessions. You can register for a free Zoom account here.

Tracks

Our three tracks for this year are:
- Aging in place with resilience and resources (Johns Hopkins University School of Nursing)
- Personalized medicine using data driven healthcare (Johns Hopkins University Applied Physics Laboratory)
- Patient adherence and quality care during a global pandemic

More details about each of these tracks will be presented during our opening ceremony.

Prizes

Each track will have 1st, 2nd, and 3rd place winners. The top three teams will be picked from top five teams that advance to the second round of judging (see more details about judging below). 1st place winners will receive $3000 per team, 2nd place winners will receive $2000 per team, 3rd place winners will receive $1000 per team. We will also have a community vote prize, and the winning team will receive $1000. Branded prizes from this year include prizes from Google Cloud, echoAR, Domain.com, and UiPath.

MEDHACKS

Event Schedule
A detailed schedule that will be updated throughout the weekend is available to view here. Sessions and times are subject to change. Links to any sessions using a platform other than Discord will be sent out in the appropriate Discord channel 5-10 minutes ahead of time.

<u>General Event Breakdown</u>

Friday, September 4th

Time (EST)	Event
4:00 PM	Registration Begins
6:00 PM – 7:30 PM	Opening Ceremony
7:45 PM	Pitch Sessions
10:30 PM	HACKING STARTS!
10:30 PM	Team Registration
10:30 PM	Mentor Sessions Begin

Saturday, September 5th

Time (EST)	Event
All Day	Mentor Sessions
10:00 AM – 5:00 PM	Workshops

Sunday, September 6th

Time (EST)	Event
8:30 AM	Mentor Sessions End
8:30 AM	Devpost Submissions Due
9:30 AM – 11:00 AM	Judging Round 1
12:00 PM – 2:30 PM	Judging Round 2
3:00 PM – 4:00 PM	Closing Ceremony

Pre-event Discussion

If you would like to, you can post information about yourself, including areas of expertise and project ideas/interests, in the channel called #participant-bios, to introduce yourself to and meet other participants. You must follow the template provided in the channel or your message will be deleted. You will then be able to private message others you might be interested in working with to help with finding a team. However, please keep in mind that you will also be able to talk to other participants during pitch sessions on Friday evening, and that team formation is not required until Friday night. Please do not send any messages in any other channels.

Friday 9/04

Hacker Registration (4:00 PM)

You will need to check-in to confirm your participation during MedHacks and provide your Discord information to be added to workshops and specific channels. Make sure that you have joined the MedHacks General Discord Server at this time. The registration form will be made available **here** starting at 4 PM on Friday, 09/04. Please fill out this form prior to the opening ceremony or attending any MedHacks-related sessions if you will be joining late.

Opening Ceremony

Our opening ceremony, which will be held via Zoom's Webinar platform, is the first official event of the weekend. We will discuss our three tracks, go over event logistics, introduce prizes, and hear presentations from our keynote speakers, Elsevier President of Global Solutions John Danaher and Contrary Capital founder Will Robbins. There will also be a Q&A session for you to ask our speakers questions.

Pitch Sessions

Pitch sessions are an important part of the event, as they play a crucial role in idea brainstorming and team formation. Pitch sessions for each track will be held on Zoom, and you will be able to attend the pitch session for the track that most interests you. You can only attend one track's pitch session though you are <u>not</u> required to choose this track for your final project submission. Links for each pitch session will be sent out after the opening ceremony.

A company representative for each track sponsor will be present at the session to provide more insight into track details to help you brainstorm ideas. You will have the opportunity to present any ideas that you have to inspire others as well as help find other students who are interested in the same idea. MedHacks organizers will also be present in each pitch session to assist the speakers, help facilitate discussion, and document student-presented ideas. If you don't have a team, this is the perfect time to form one!

Team Registration
You will need to register your team through a form that will be provided at 10:30 PM on Friday. Only **one person per team** should fill out the form. Should you need to make changes to your team, please message us on Discord rather than filling out the form again. At this time, please also make sure everyone on your team registers on the MedHacks Devpost as a participant.

Mentoring
One of the aspects that makes MedHacks truly unique is the interdisciplinary interaction between professional mentors and participants. We bring in mentors from all industries – medicine, public health, medtech, software development, etc. – to promote holistic collaboration to create amazing solutions.

Once teams have been formed, you will begin working on your project and may find that you need help finalizing ideas and directing your project focus. In setting of an in-person event, mentors are normally located in a "help room" and you would go to the mentors with questions or for discussion. We hope to mimic a similar setting virtually, with each mentor having a text and voice channel on the mentor Discord server. A list of mentors including their bios and areas of expertise is available **here**. If your team needs help, please message a mentor through their text channel (do not send private messages). Video calls will be organized by you and the mentor(s) depending on your needs. **A link to join the mentor server will be posted after pitch sessions on Friday night.**

Please keep in mind that mentors are taking time of their weekend to help you and your team develop successful ideas at MedHacks. We ask that you be respectful, professional, and courteous and remember that mentors have their own schedules and may be located in different time zones. Once you have sent one message, please allow a mentor at least a few hours to reply before following up. If we see that you are being disrespectful or breaking the MedHacks code of conduct, we will remove you from the server.

Movie Night
On Friday night, we will be playing movies at 10 PM, 12 AM, and 2 AM (see event schedule for specific movies). MedHacks organizers will send a link 10 minutes before the movie starts on the #announcements channel on Discord. All you have to do is click the link and enjoy the movie!

Saturday 9/05

Workshops
Workshops will be held throughout the day on Saturday. A list of workshops that we are offering is available **here** and will be available on a first-come, first-serve basis if attendance needs to be capped due to platform limitations. Workshops offered are subject

to change at any time. Registration is required for each workshop in order to gain access; you will be able to [sign up for workshops here](#) starting Wednesday, 09/02, at 9 AM EDT and registration will close on Friday, 09/04, at 11:59 PM EDT. You will be added to the workshop's channel by Saturday morning, and meeting information will be provided 5-10 minutes before the specified workshop time. We will also be recording workshops if possible and making them available to participants afterwards, so don't worry if you are unable to attend!

Hacker Experience
We will be hosting various hacker experience events via [Instagram](#) and [Facebook](#), so please make sure to follow both pages! More details will be posted on both platforms.

Game Night
We will be hosting a game night on Zoom from 7 PM to 9 PM. We will have various mini games with plenty of prizes available, so please attend if you are interested! A Zoom link will be sent in the #announcements channel right before game night.

Movie Night
On Saturday night, we will be playing movies at 10 PM and 12 AM (see event schedule for specific movies). MedHacks organizers will send a link 10 minutes before the movie starts on the #announcements channel on Discord.

Sunday 9/06

Project Submissions
All project submissions are due on Devpost ([medhacks2020.devpost.com](#)) on Sunday, 09/06, at 8:30:00 AM EDT. Late submissions will not be accepted. Your submission should include the written Devpost submission and a 5-minute video explaining and demonstrating your project idea, and you must choose one (1) track to submit your project to. You will also have the chance to enter your project to one or more of the branded prizes available. If you are having issues submitting on Devpost, please message Devpost support in the #devpost-help channel in the general server. MedHacks organizers will also be available for Devpost questions on Saturday night in the #devpost-help channel.

Judging – Qualifying Round (9:30 AM– 11:00 AM)
Multiple first round judges will be evaluating your Devpost submission based on [our judging rubric.](#) We will normalize scores for each judge as well as among judges to ensure fair evaluation of all projects, regardless of the judge. During this time, take the chance to relax! No matter the outcome, you've done great work over the last two days and should be proud of what you've created. *Please do not message us asking about the status of your project, we will announce which teams move on to the final round in the #announcements channel when they have been selected.*

Judging – Final Round (12:00 PM - 2:30 PM)
The top 5 teams from each track will be invited to present their projects to a track-specific judging panel via Discord video call. Each team will give a 10-minute presentation with the opportunity for Q&A afterwards. The top 3 teams from each track will then be selected as 1_{st}, 2_{nd}, and 3_{rd} prize winners. These presentations will be limited in attendance to the presenting team, judging panel, and MedHacks organizers to minimize technical difficulties. We will be recording these sessions and posting them on our website after the event if you are interested in viewing them.

Closing Ceremony (3:00-4:00 PM)
This is our last official event for the weekend. Hosted on Zoom Webinar, we will be giving closing remarks and announcing prize winners for the event. There will also be a community vote prize after MedHacks that will allow participants who submitted a project to vote for one project of their choice on Devpost. More details about the community vote will be discussed during the closing ceremony.

Thank you for taking the time to read through this information packet. Again, please review our code of conduct below and available resources below prior to MedHacks. Make sure that you read this packet thoroughly prior to contacting us with any questions; if the answer to your question can be found in this information packet, we will not respond to your message. If you have any further questions not answered by this packet, please direct them to info@medhacks.io or message us on Discord (MedHacks#3931).

We can't wait to meet you all at MedHacks 2020!

Code of Conduct

By participating in MedHacks, all participants agree to follow all terms listed in this MedHacks Code of Conduct agreement, and to follow any procedures and instructions given by the MedHacks organizing team and Johns Hopkins University. You also agree to MLH's code of conduct, available here. Refusal to comply and any violations will subject hackers to punishment deemed appropriate by the MedHacks organizing staff, such as the revocation of prizes and expulsion from the hackathon.

1. I have represented myself accurately on the application and all other event forms.
2. I am allowed to develop a concept for a project prior to the event, but any and all programming and tangible creations related to a concept must be done during the duration of the MedHacks event.
3. I am allowed to use publicly available resources and code on my project, and I accept sole responsibility for licensee or owner responsibilities and for any and all licensing or ownership rights and responsibilities of any intellectual property that I use, display, store, distribute, make derivative works from, or otherwise and other appropriate acknowledgement regarding the resources.
4. I understand that the organizing team will not receive any ownership title or rights of any work or project done at MedHacks other than those limited rights herein. All original work will solely remain under the ownership of the creator and/or the employing company. The members of the MedHacks organizing team are not liable for any legal or contractual issues that may arise from the work. I hereby agree to indemnify, hold harmless, and defend the members of the MedHacks staff members against any liability resulting from the project or any created content.
5. I understand that the judges and MedHacks organizing staff are allowed to look at my code for the purpose of judging by volunteer judges, and that the decisions of these judges are final and may not be contested. MedHacks will not be held responsible for any decisions made by sponsors, and the organizers are not liable for any transaction of prizes between a sponsor and a participant.
6. I agree to be respectful and courteous to the MedHacks organizing team, sponsors, volunteers, mentors, venue staff, and all other participants. The staff members have the authority to discipline me if my behavior at the event does not meet their subjective standards of respect and courtesy, including the right to remove at the staff members' subjective discretion.

MEDHACKS IS AN INCLUSIVE SPACE WHERE EVERYONE HAS THE RIGHT TO FEEL SAFE. THE ORGANIZERS HAVE THE AUTHORITY TO DISCIPLINE ANYONE WHO SHOWS ANY SIGNS OF PREJUDICE AND DISCRIMINATION BASED ON (BUT NOT LIMITED TO) RACE, COLOR, CREED, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, GENDER EXPRESSION, CITIZENSHIP STATUS, SOCIOECONOMIC STATUS, MARITAL STATUS, PERSONAL APPEARANCE, AGE, NATIONAL ORIGIN, POLITICAL AFFILIATION, RELIGION, PHYSICAL OR MENTAL DISABILITY.

<u>Resources</u>
These lists are un-exhaustive suggestions for tools to get started with. If you don't know what a particular tool is a great way to get started is to google the name of the tool below followed by the name of the sub-category. i.e. the following search text, separated by single apostrophes: 'R Data Analysis' or 'XCode App Development'

MLH affiliated software (click link for details)
Google Cloud
Domain.com
GitHub
UiPath
MongoDB
Radar

Build real-time AR/VR/3D apps with echoAR; special registration for MedHacks participants here

Open Source/Free Software
Data Analysis:
R
Python
Octave

App development:
Android Studio
Google Firebase

Prototyping:
Wireframe.cc

Proprietary Software
Data Analysis:
MATLAB

App Development:
XCode (Free if you have a MacBook)

Computer Aided Design:
AutoCAD (Can get a 30 day free trial)
Sketchup

Data Sets

Medicare Synthetic Claims Data Set:
https://www.cms.gov/research-statistics-data-and-systems/downloadable-public-use-files/synpufs/index.html

SyntheticMass: Synthetic patient and population health data
https://synthea.mitre.org/
https://synthetichealth.github.io/synthea/

Mobile Health Dataset with body motions (ECG):
https://archive.ics.uci.edu/ml/datasets/MHEALTH+Dataset

EHR Workflow app:
https://smarthealthit.org/

Medication Data for Querying (to find drug-specific information):
https://www.kaggle.com/nlm-nih/nlm-rxnorm

Chest x-ray datasets:
https://www.kaggle.com/nih-chest-xrays/data

Images of skin lesion dataset:
https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/DBW86T