

AWS Tips and Tricks: MIT COVID19 Challenge

We are thrilled to support this Hackathon and hope you choose to use AWS. We have put together this document based on past Hackathons. We collected links that we shared, questions that we answered and guidance for your future work on these projects. Please continue to innovate and engage with AWS!

Getting Started on Amazon Web Services (AWS)

<https://aws.amazon.com/getting-started/>

AWS Quick Start architecture - HIPAA

<https://aws.amazon.com/quickstart/architecture/compliance-hipaa/>

AWS Quick Start - preclinical infrastructure

<https://aws.amazon.com/quickstart/biotech-blueprint/>

Training and Certification: We are running certification prep virtual webinars (while spots last) at no charge for April to help support your path to certification. <https://pages.awscloud.com/Get-Certified-April-2020.html>

AWS Free Tier:

Understand what free tier is

<https://aws.amazon.com/free/free-tier-faqs/>

View all services that have free tier

<https://aws.amazon.com/free/?all-free-tier.sort-by=item.additionalFields.SortRank&all-free-tier.sort-order=asc>

Publishing a web site

Amazon S3+Cloudfront

https://aws.amazon.com/getting-started/projects/host-static-website/?c_1

Amazon LightSail

<https://aws.amazon.com/blogs/compute/building-a-pocket-platform-as-a-service-with-amazon-lightsail/>

AWS Amplify Console

<https://docs.aws.amazon.com/amplify/latest/userguide/welcome.html>

<https://aws-amplify.github.io/docs/>

AWS Beanstalk

<https://aws.amazon.com/elasticbeanstalk/details/>

Security

Security Best Practices as You Configure Your AWS Resources

<https://aws.amazon.com/blogs/security/getting-started-follow-security-best-practices-as-you-configure-your-aws-resources/>

CIS Benchmark - Securing Amazon Web Services

https://www.cisecurity.org/benchmark/amazon_web_services/

AWS Compliance Information to download AWS Compliance related information and agreements:

<https://aws.amazon.com/artifact/>

Overview on how healthcare organizations can embed their clinical protocols into and deploy an AWS-powered chatbot to triage individuals calling in about COVID-19:

<https://aws.amazon.com/blogs/industries/building-clinically-validated-conversational-agents-to-address-novel-coronavirus/>

Alliance for Connected Care: [CMS COVID-19 Interim Final Rule Summary](#)

[Amazon Comprehend for Medical](#) (NLP)

Suitable baseline/checklist with other security folks in this channel. What is a practical and reasonable level of security given the short timeframe? I am thinking of focusing on:

1. data (especially PII): Macie will protect it leaving and Inspector will help analyze if you have an issue.
2. secrets handling - <https://aws.amazon.com/secrets-manager/?hp=tile&so-exp=below>
3. user authentication: If for applications: <https://aws.amazon.com/cognito/?hp=tile&so-exp=below>
4. backend/infra authentication: <https://aws.amazon.com/iam/?hp=tile&so-exp=below>

Registry of Open Data on AWS

<https://registry.opendata.aws/>

IoT

IoT Device Simulator

<https://aws.amazon.com/solutions/iot-device-simulator/>

AWS Elemental

<https://aws.amazon.com/medialive/>

Amazon Managed Blockchain

<https://aws.amazon.com/qldb/>

<https://github.com/aws-samples/non-profit-blockchain>

<https://aws.amazon.com/blogs/database/building-a-serverless-blockchain-application-with-amazon-managed-blockchain/>

FAQ

Any tips for setting up an AWS team account?

https://docs.aws.amazon.com/IAM/latest/UserGuide/id_users_manage.html

https://docs.aws.amazon.com/IAM/latest/UserGuide/id_groups_create.html

https://docs.aws.amazon.com/IAM/latest/UserGuide/id_roles.html

Are there any Amplify integrations with Samsung Health SDK?

If I'm creating a webapp interacting with a sql db, which aws solution do you recommend?

https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_GettingStarted.html

<https://aws-amplify.github.io/docs/>

<https://aws.amazon.com/blogs/mobile/aws-amplify-announces-new-amazon-aurora-serverless-and-graphql-transform-features-for-building-aws-appsync-apis/>

<https://aws.amazon.com/getting-started/projects/build-serverless-web-app-lambda-apigateway-s3-dynamodb-cognito/>

<https://aws.amazon.com/getting-started/tutorials/launch-an-app/>

Does amplify only support javascript for backend? Can we use java or python instead?

Please refer to the following: <https://github.com/aws-amplify/amplify-js/issues/584>

Thank you and we look forward to working with you this weekend and see you on Slack!

AWS COVID Hackathon team