## J.P.Morgan

# **Hack-a-Tips**

#### **Define your problem**

- Impacts What exactly is impacted by the problem and how.
- Description A clear and specific overview of the "current state".
- Constraints Impediments to solving the problem that must be overcome
- Success Criteria How exactly will you know you have solved the problem.

#### **Organize your Team**

- Define roles and expectations—be realistic!
- Choose a scope wrangler—they will keep you on task and on time!

#### **Kickstart your Project**

- Don't start from scratch, there are a TON of resources to get you started.
- Don't know where to start? Ask for help from one of the experts!

#### **Use your Time Wisely**

- Don't be afraid to fail but fail fast. Then move on.
- Use the right technology for the job—decide what that means for you
- Don't be afraid to ask for help. You are in teams for a reason.

#### **Communicate your Findings**

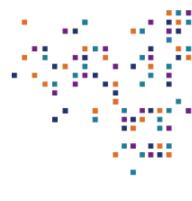
- A demo is worth a thousand words. Spend time practicing your walk-through.
- Your presentation and explanation is as important as your code.
- Remember: For judging, both your research, explanation and understanding of the broader challenge is just as important as your technical analysis

#### **Security and Best Practices**

- Be careful about what you commit to GitHub, as all your code will become publicly available after the event.
- If you integrate with a third-party API or provider, please ensure that credentials or API keys aren't stored in your repo.
- While each provider differs, please leverage environment variables or use .gitignore to ensure that sensitive information isn't added to your repo.
- If you accidentally commit something that you'd like to remove, please reach out to your mentor or event support who can help you remove the data.







#### **Technology Do's**

Ask for advice and assistance if you are unsure of something.

Change all passwords so that they are not the default and make them suitably complex. (UPPER, lower, Numb3r, Symbo!).

Leverage provided GitHub repos and other offerings, like virtual servers and ask our organizers if you need help accessing these tools.

Follow these security best practices:

- If you can restrict what IPs are authorised to speak to the service (ask if you are unsure).
- Delete keys you don't need
- Review your code before releasing it in a public domain.

Utilize provided tools or reputable, managed cloud services

Be innovative, creative and leverage the advice and assistance of the mentors and other event support. We're here to help  $\odot$ 

### **Technology Dont's**

Incur any personal cost participating in the event (don't by your own Amazon / Google / Microsoft credits).

Leverage disreputable or insecure third party services or APIs.

Don't commit to a public repository that wasn't provided by JP Morgan. GitHub repos that we provide will be made public after the event.

Don't save API keys as string literals in code.

Don't store API keys in plain text files in Git. (Git ignore files are your friend).

Create, leverage or manage any personal unmanaged virtual desktop or server for your solution (We provide virtual servers for example, without you having to create your own).

Commit passwords or API keys to Git repos (public or private).

Leverage resources for purposes not related to the event. We look forward to sharing everything that you built with a non-profit in your community.

