



COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK

Justice Through Code

FLAGSHIP F24

Multi-Cloud and Hybrid Infrastructure Management

Automate MLOps and DataOps at Scale

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Agenda

01 ABOUT ME

02 OVERVIEW

03 WORKSHOP

04 Q&A

About Me

— I work for Flip AI

— 20+ years in IT industry

— Background in Cloud, DevOps, MLOps, Data Engineering

— I love to travel

— Blogging @ <https://trevorrobertsjr.io/blog>

— Public Speaking on Tech

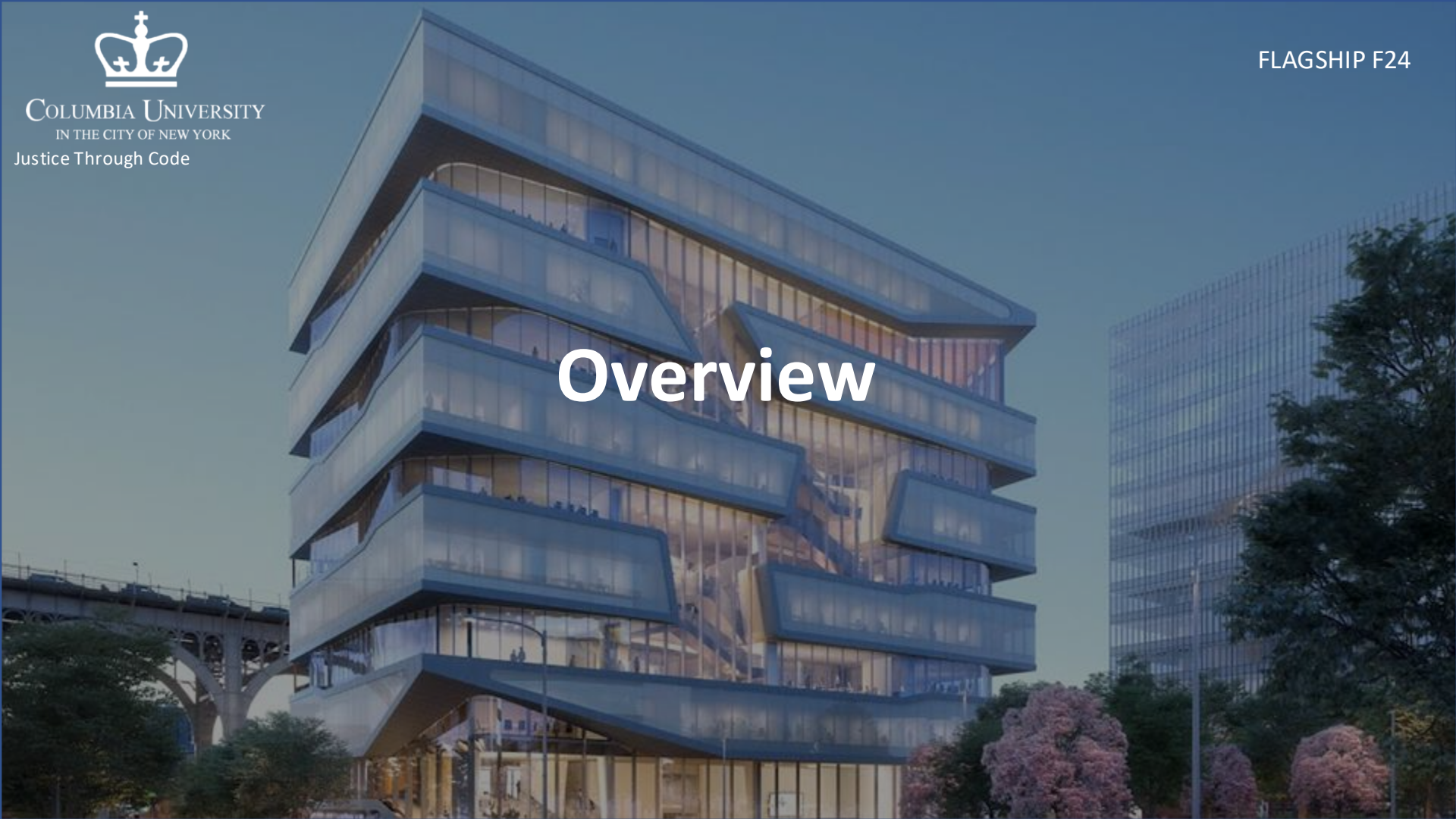


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Overview



Let's Start at the Beginning

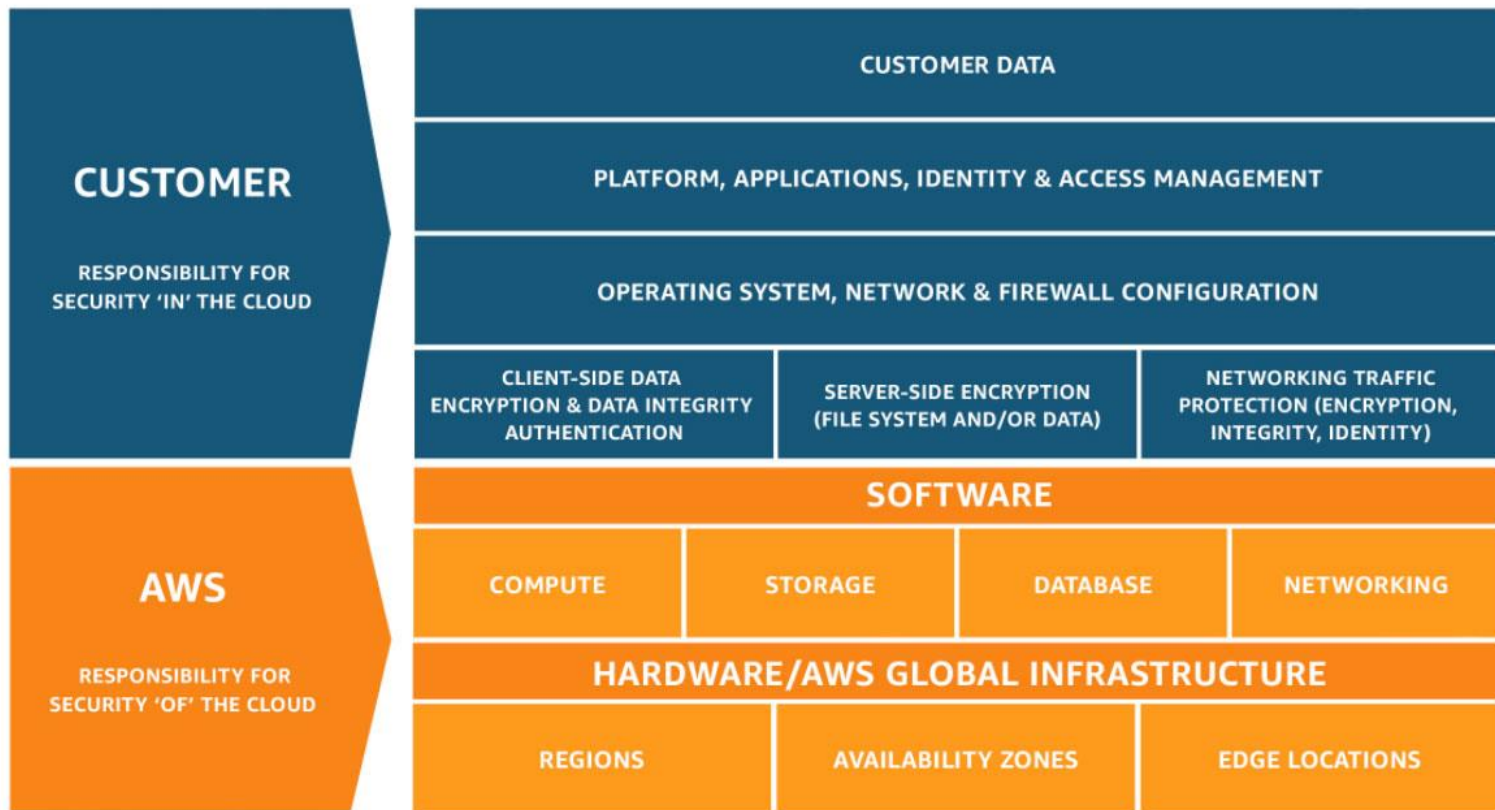
What is cloud?

- Someone else's computer 😊
- On-demand access to compute with on-demand pricing

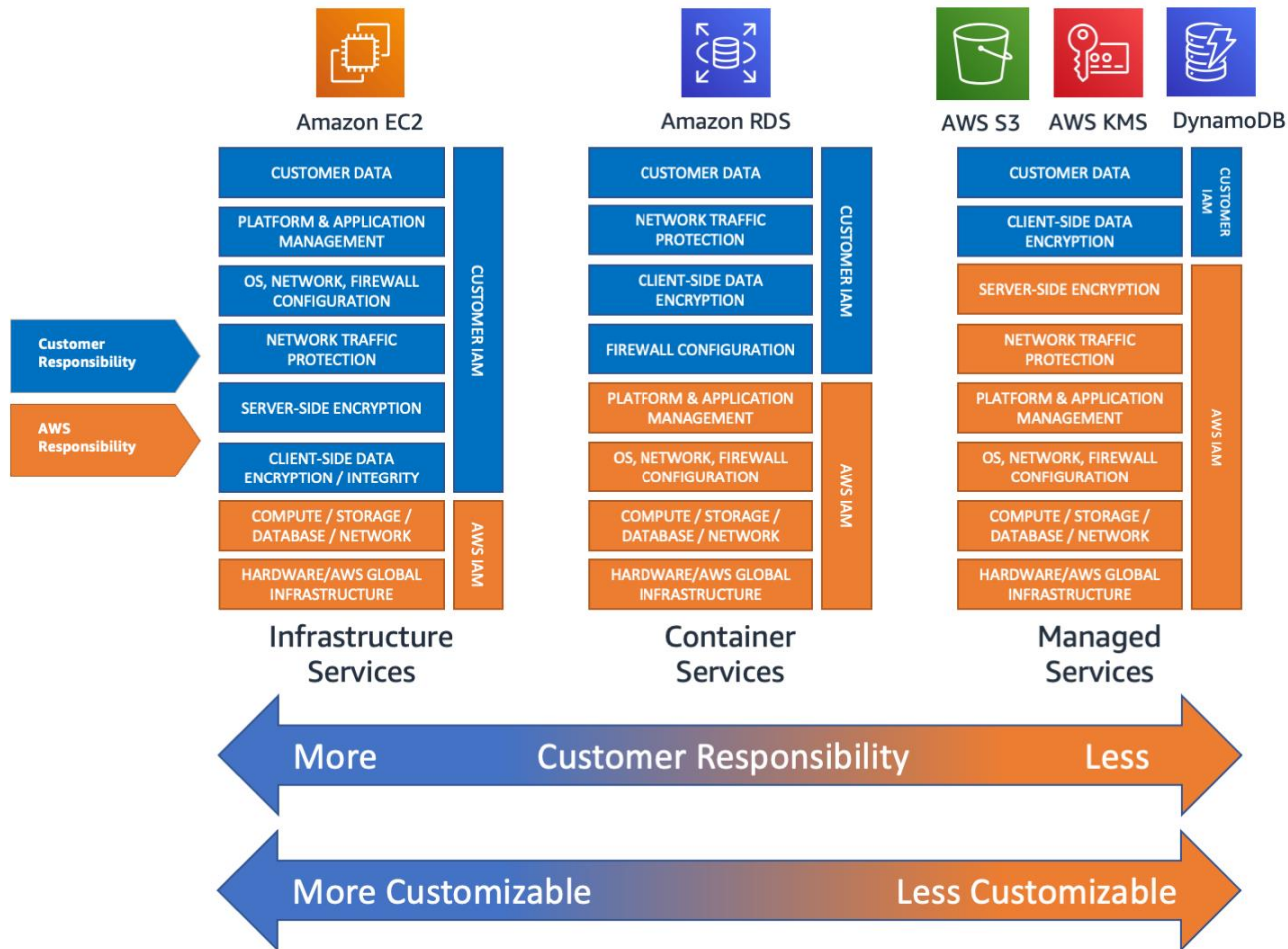
Isn't my laptop good enough?

- Yes...for local dev/test
- No for operating at scale
- GPT-4 used ~10k+ NVIDIA A100 GPUs across 1,250-2,500 servers

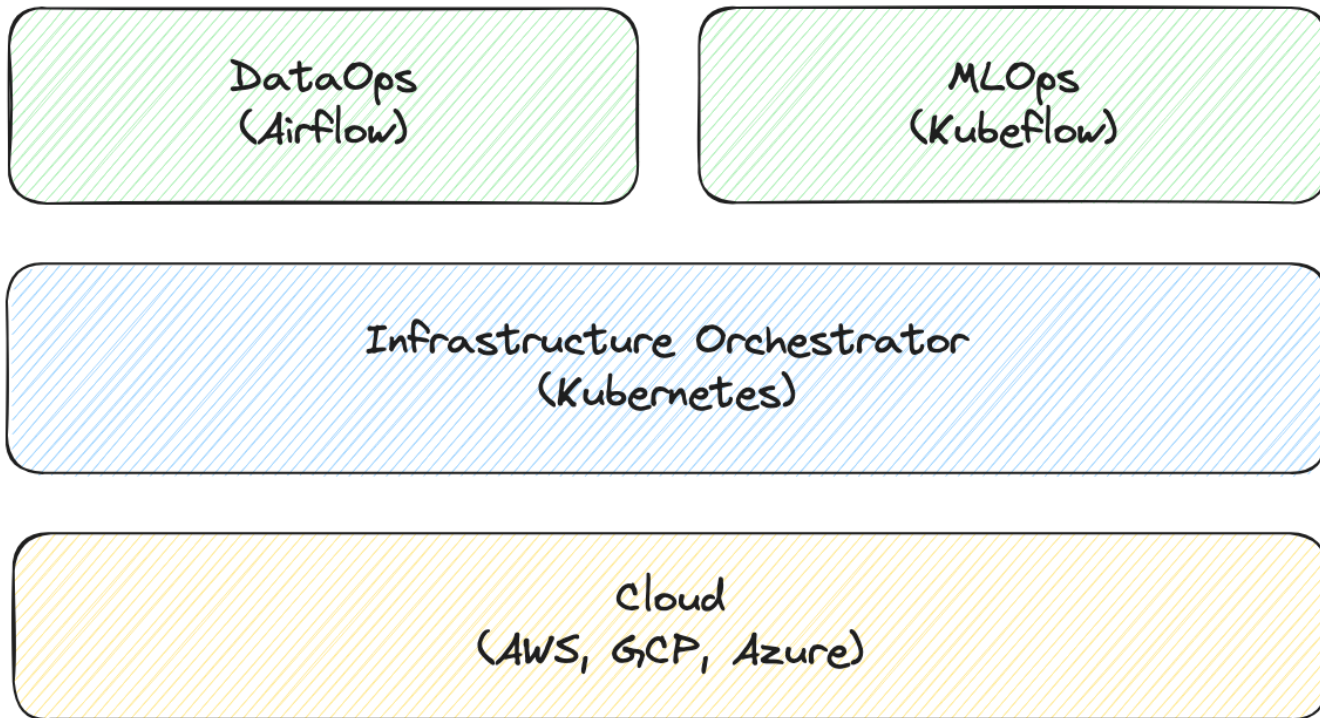
Why Cloud?



Why Cloud?



Components of a Data\ML Pipeline



Definitions

Container – A technology to package an application and its dependencies to run consistently across environments.

Container Registry – A storage and distribution system for container images.

Docker – A platform for building, shipping, and running containers efficiently.

Kubernetes – A system for automating container deployment, scaling, and management.

Terraform – An Infrastructure as Code (IaC) tool used to define and provision cloud resources in a declarative way.

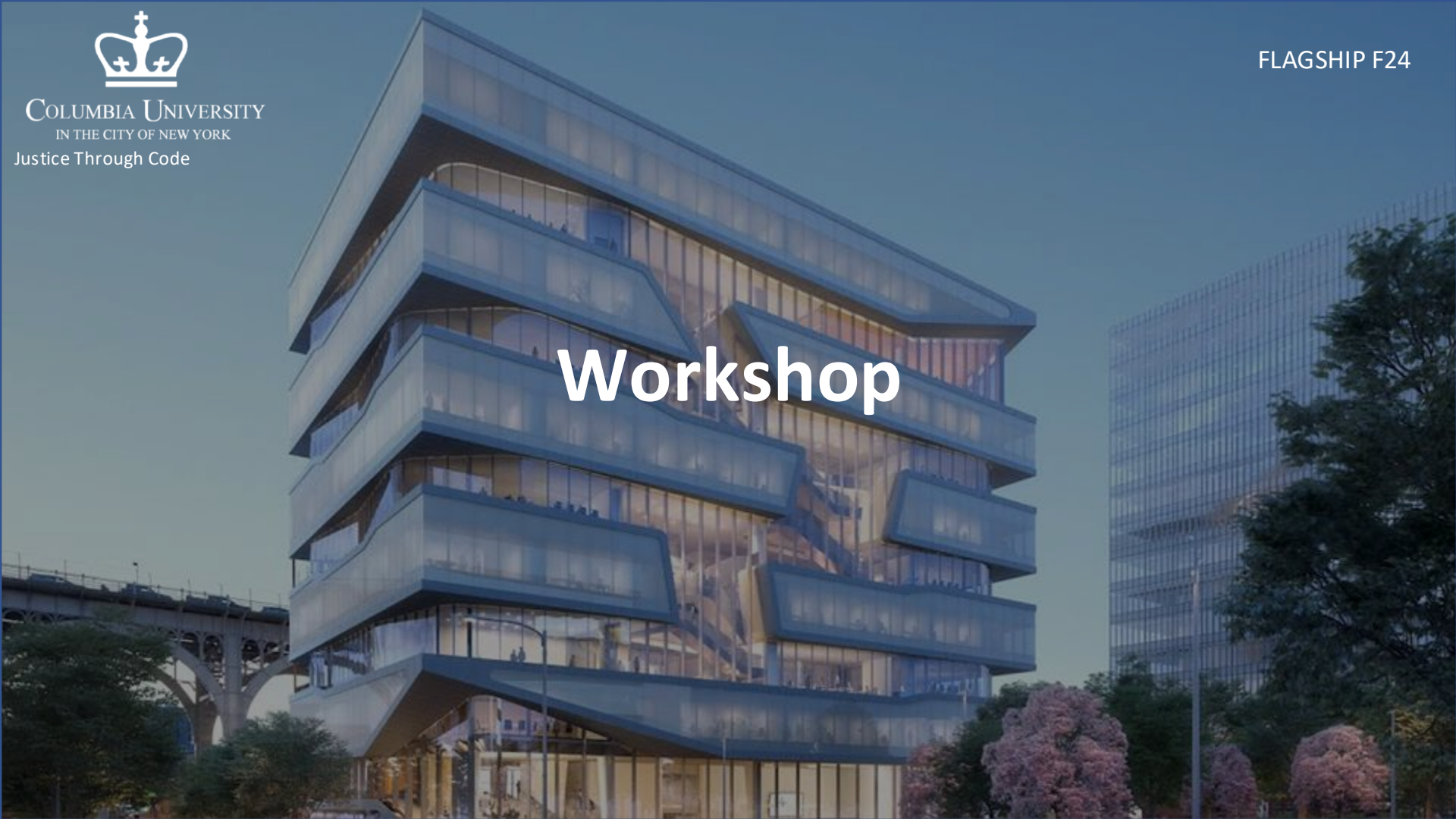


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Workshop



jtc.wanfooru.com



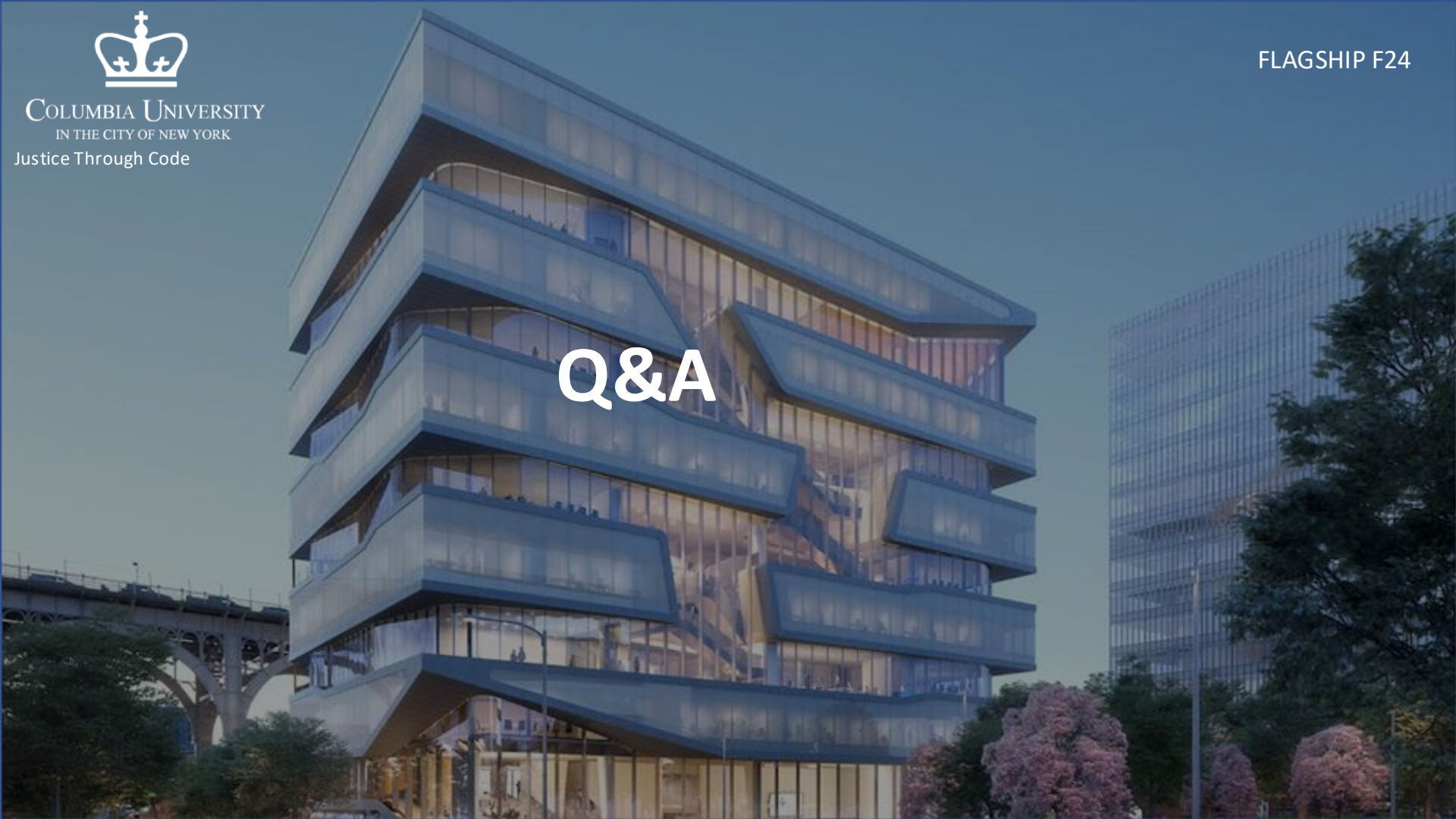


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Q&A



Conclusion



Thank You!

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