MICHIGAN STATE
U N I V E R S I T Y

Alpha Presentation
AWSome Availability Zones

The Capstone Experience

Team Amazon

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Department of Computer Science and Engineering
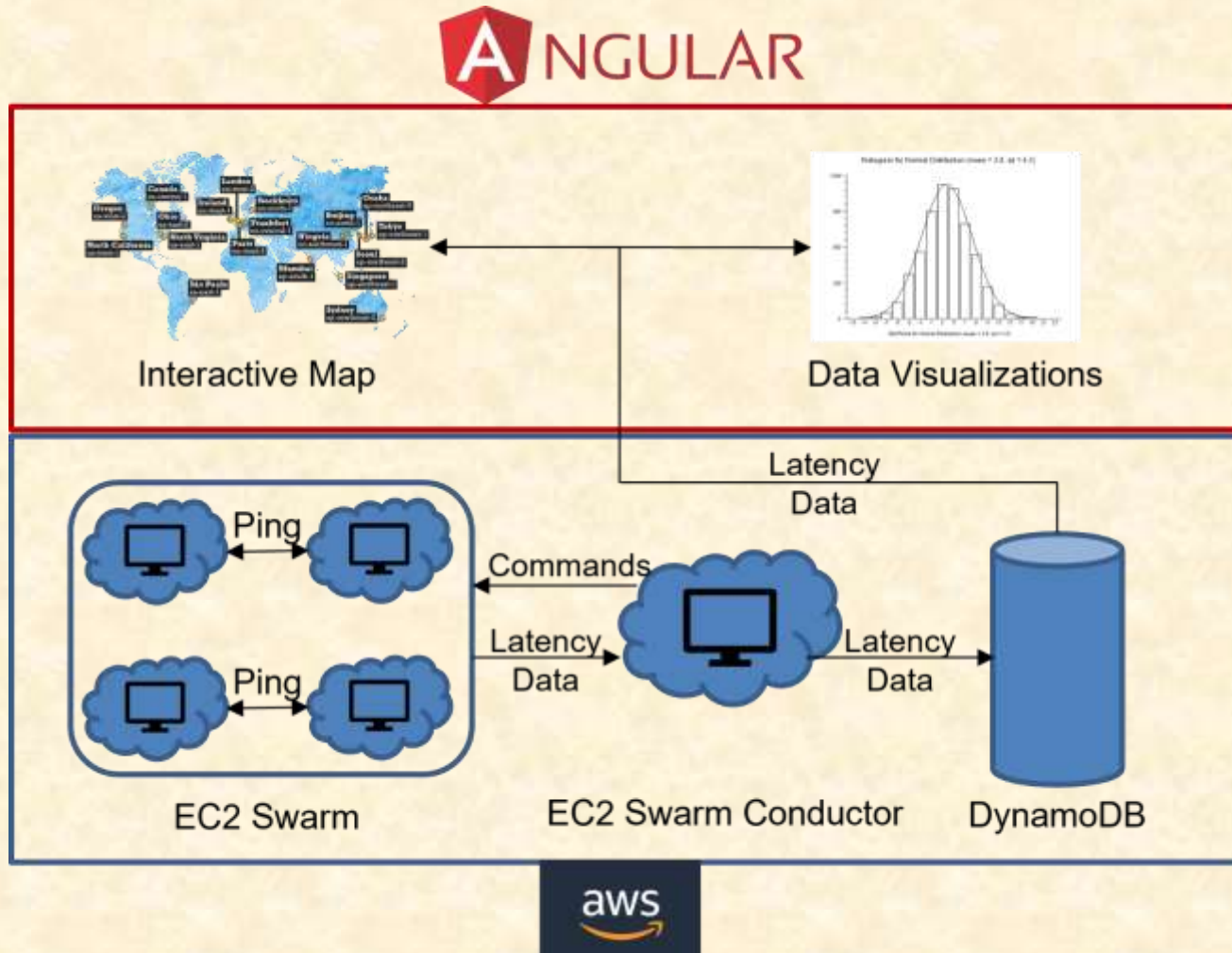Michigan State University

Fall 2021

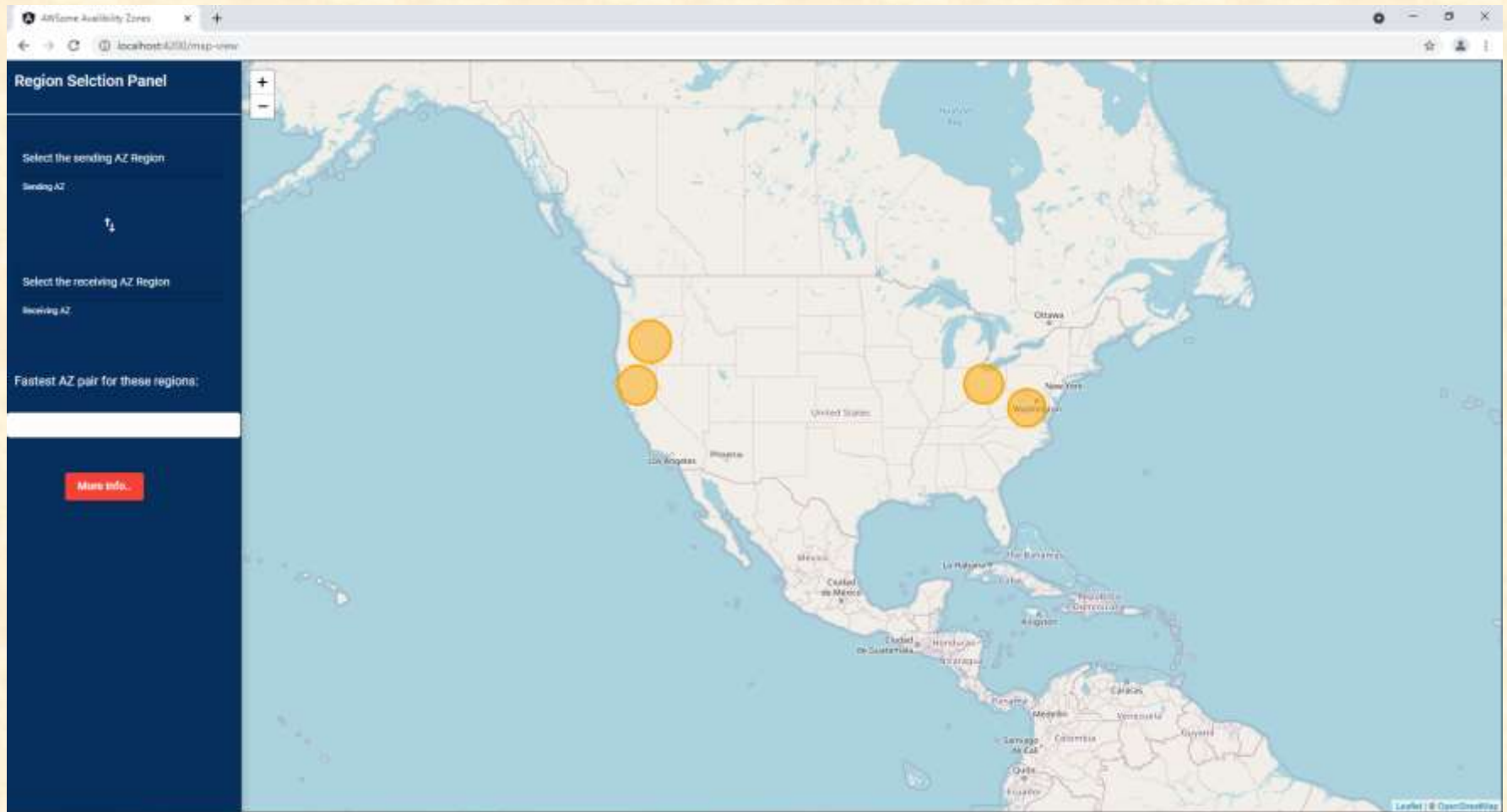*From Students…*
…to Professionals

Project Overview

- Create an open-source tool that…
  - Automatically measures network latency between AWS data centers around the world
  - Provides all AWS customers with an easy-to-use visualization of this latency data
  - Allows experienced AWS customers to quickly answer questions about their specific use case
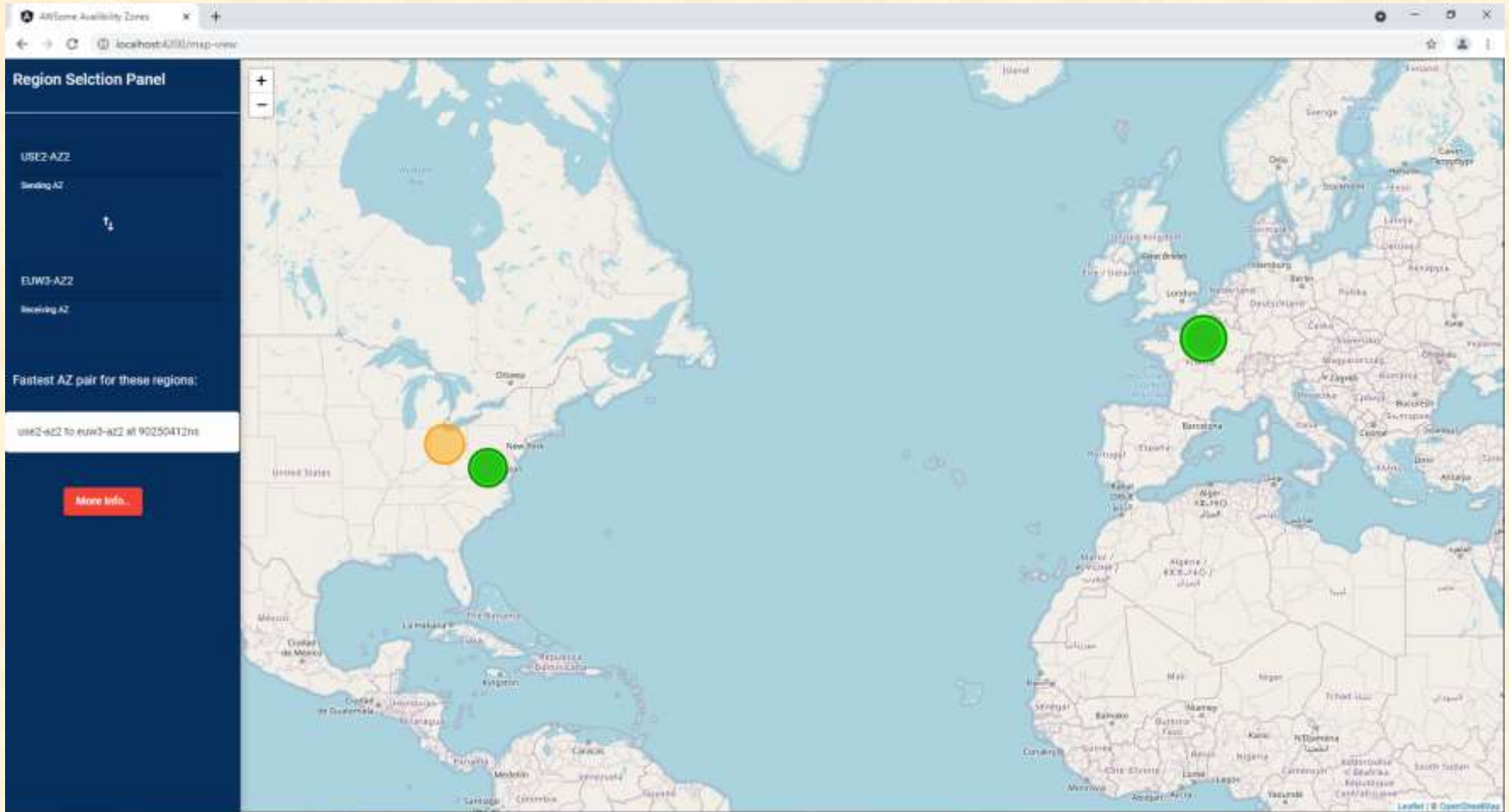
System Architecture
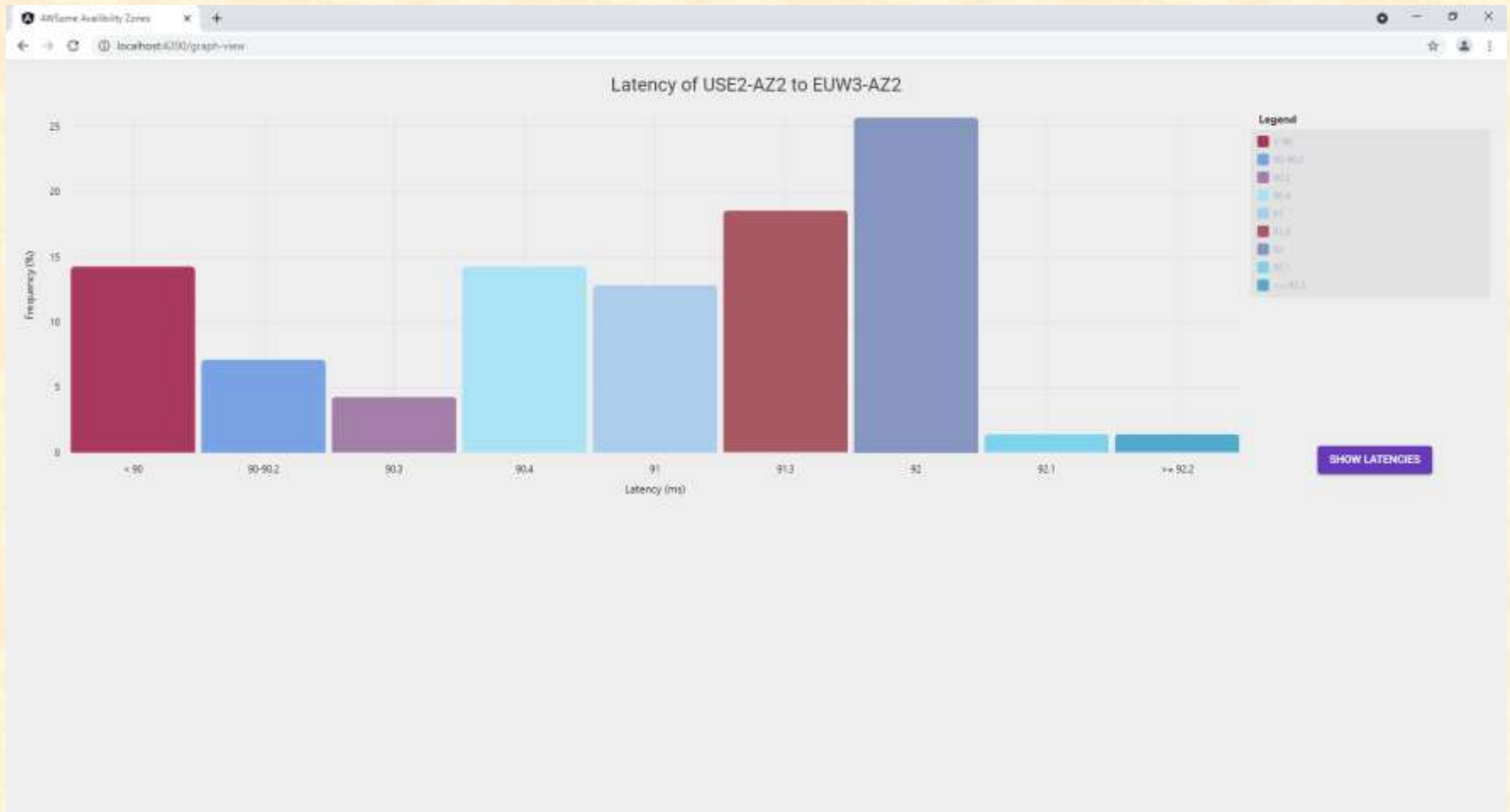
Initial Map View

Map View after selections

List View

Graph View

What's left to do?

- Scale up back-end deployments (monitor all AZ pairs)
- Polish front-end visuals + add more navigation options
- Include "welcome" screen explaining the page's content
- Populate interactive map with all 21 supported Regions
- Consider alternative OS options for Swarm Instances
- Add mechanism for controlling frequency of data collection to Swarm Conductor

Questions?

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System Architecture (Raw PointPoint)