

MICHIGAN STATE

UNIVERSITY

Beta Presentation

AWSome Availability Zones

The Capstone Experience

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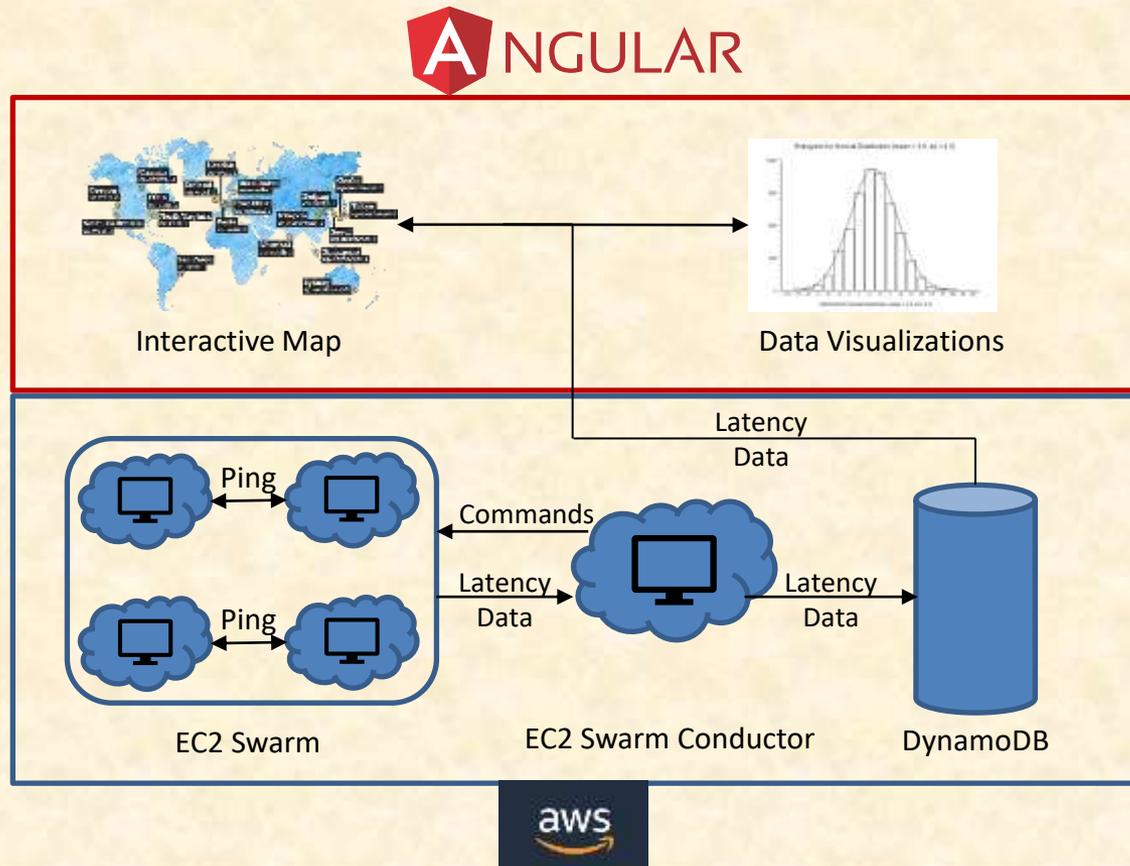
*From Students...
...to Professionals*

Project Overview

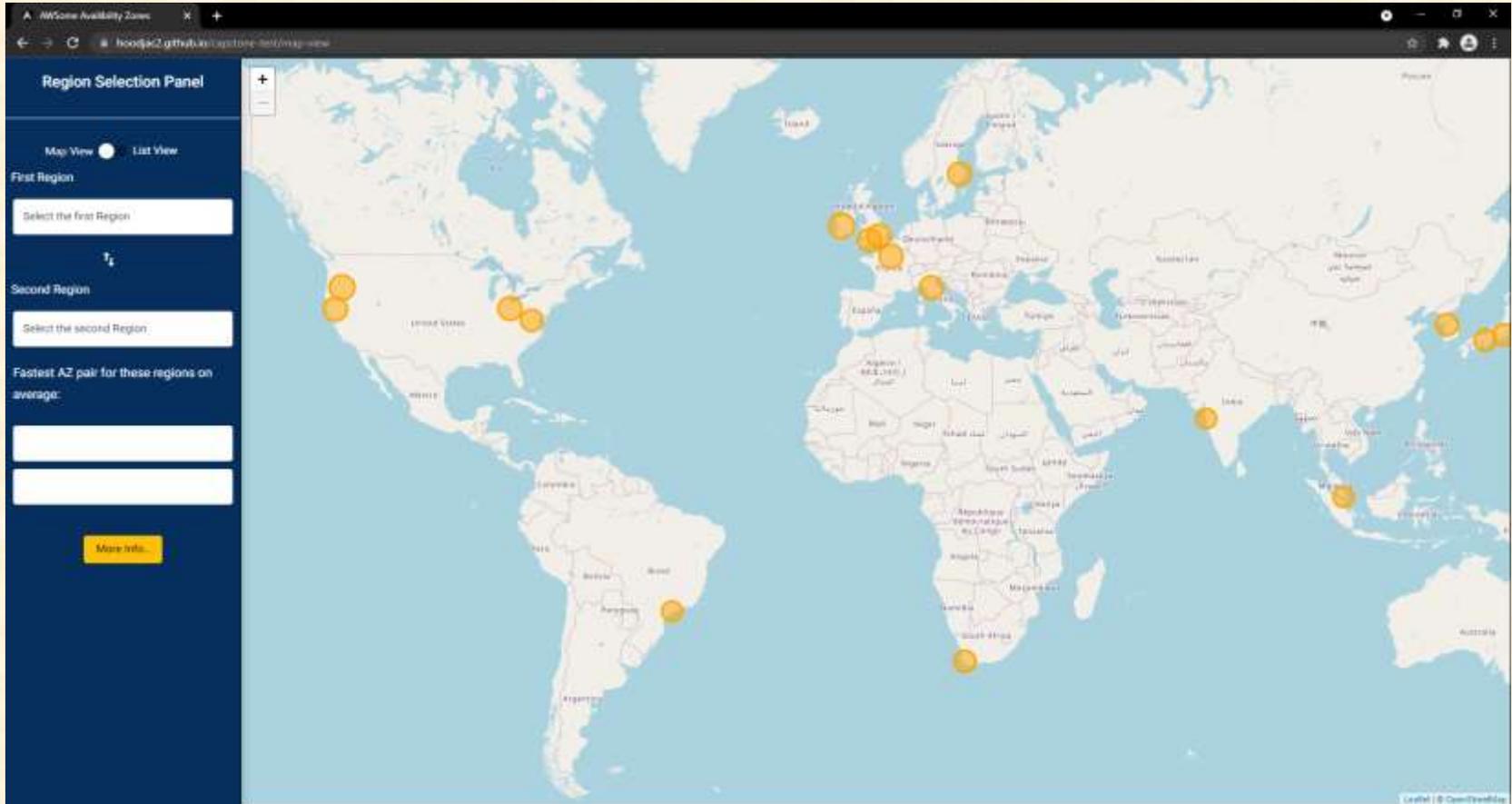
- Create an open-source tool that...
 - Automatically measures network latency between AWS data centers around the world
 - Provides all AWS customers with an easy-to-use visualization of this latency data
 - Allows experienced AWS customers to quickly answer questions about their specific use case



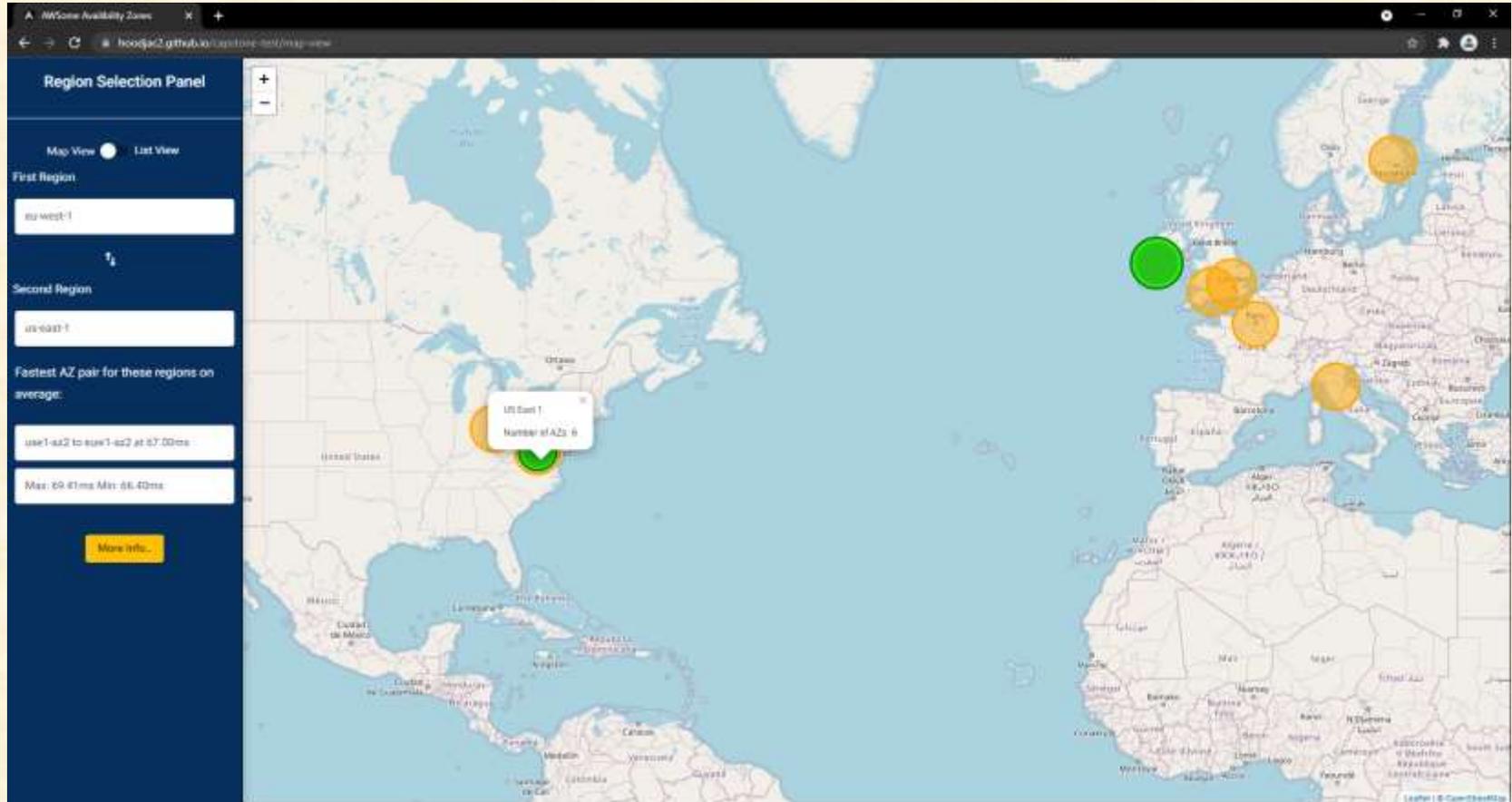
System Architecture



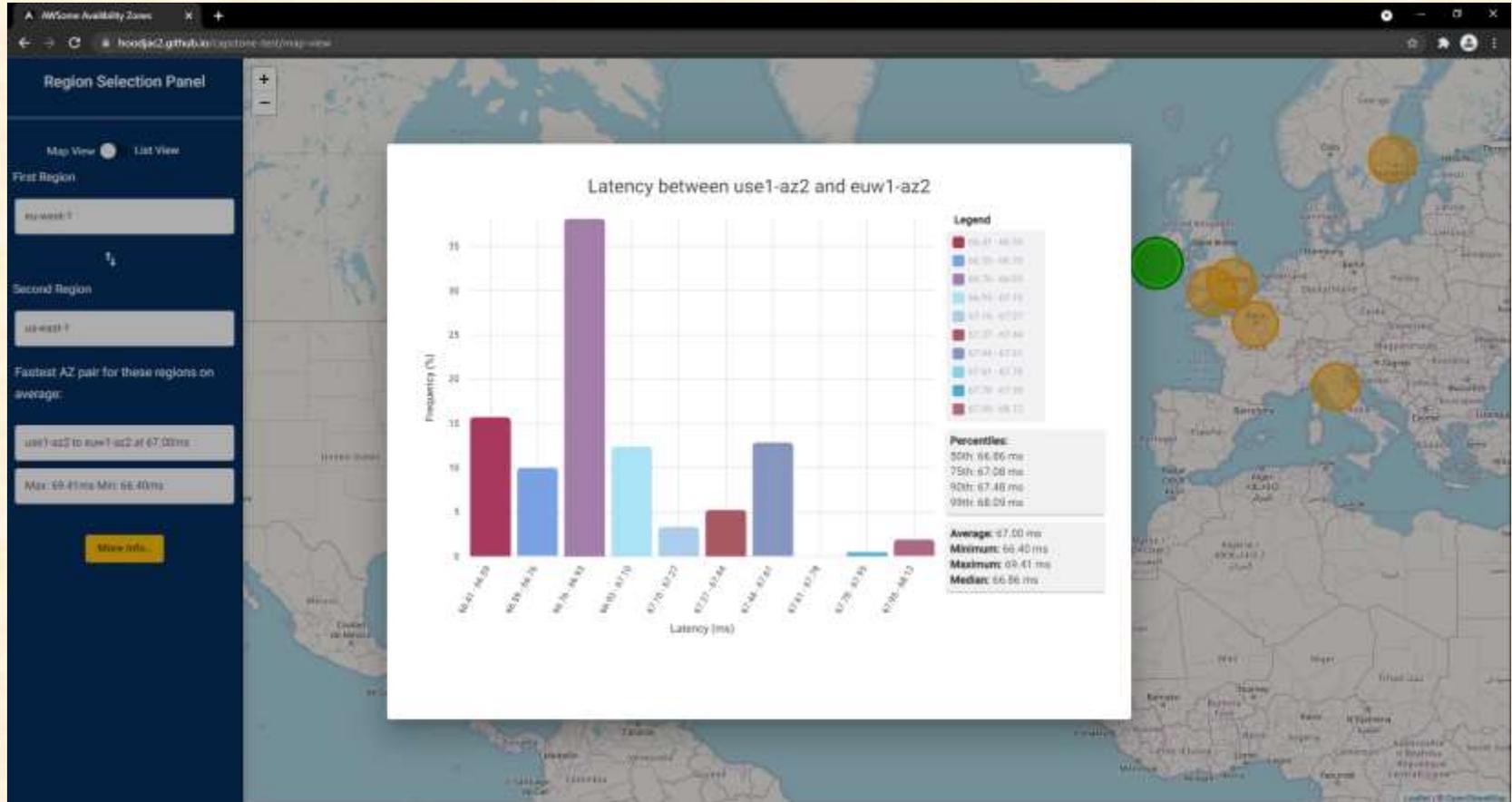
Map View



Map View With Selection



Graph Display



List View

The screenshot displays the AWS Cost Explorer interface for Availability Zones. On the left, there is a 'Region Selection Panel' with 'Map View' and 'List View' options, where 'List View' is selected. Below this, there are buttons for 'Region One' (us-east-1) and 'Region Two' (us-west-2), each with a 'New region...' button. The main area shows a table of data for various AZ Pairs.

AZ Pair	More Information	Ave Round Trip Time	Min Round Trip Time	Max Round Trip Time
use1-az6 => use2-az2	More info	67.95	61.05	73.85
use1-az6 => use2-az1	More info	68.27	61.78	72.89
use1-az5 => use2-az3	More info	67.58	61.51	74.08
use1-az6 => use2-az4	More info	67.76	62.03	71.97
use1-az1 => use2-az2	More info	67.58	60.31	72.29
use1-az1 => use2-az1	More info	67.47	61.02	72.75
use1-az1 => use2-az3	More info	67.09	62.90	72.92
use1-az1 => use2-az4	More info	67.76	62.81	73.06
use1-az3 => use2-az2	More info	66.33	57.94	74.09
use1-az2 => use2-az1	More info	66.97	58.45	76.09
use1-az2 => use2-az3	More info	66.70	60.79	74.43
use1-az2 => use2-az4	More info	66.06	61.46	79.67
use1-az4 => use2-az2	More info	67.06	58.04	75.41
use1-az4 => use2-az1	More info	66.59	60.79	73.48
use1-az4 => use2-az3	More info	67.90	62.60	72.21
use1-az4 => use2-az4	More info	67.33	61.67	72.46
use1-az3 => use2-az2	More info	67.30	59.32	73.89
use1-az3 => use2-az1	More info	66.18	61.02	72.47
use1-az3 => use2-az3	More info	66.80	60.16	73.36



What's left to do?

- Planned Features
 - Fully Implemented
- Stretch Features
 - Less Cryptic AZ Names
 - More Bucket Options for Graph
 - Bidirectional Data in All Views
 - Full Auto Disaster Recovery
 - Lines Between Regions
- Non-Features
 - Make Faster
 - Squish Visual Bugs



Questions?

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