MICHIGAN STATE UNIVERSITY Alpha Presentation Evo Observability Platform

The Capstone Experience

Team Evolutio

Abhinay Devapatla Haoxiang Zhang Max Resch Spandan Chatterjee Tyler Triplett

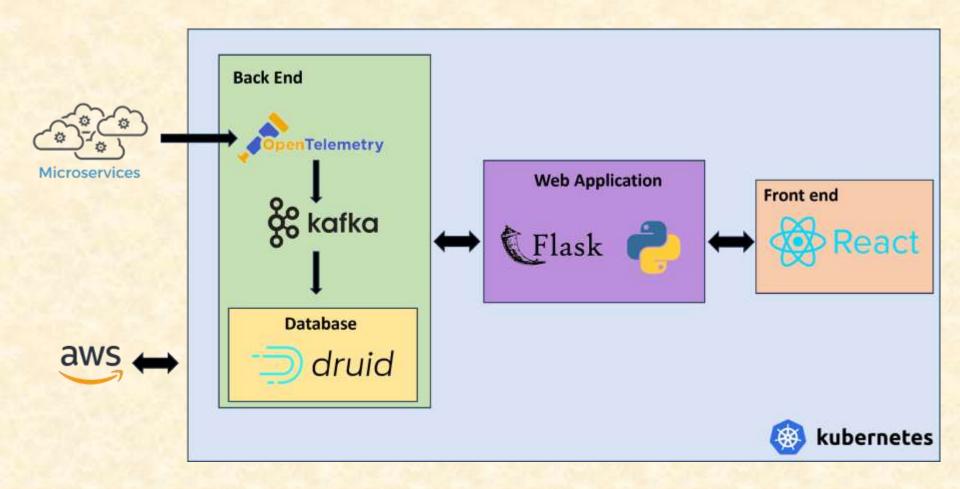
Department of Computer Science and Engineering Michigan State University Fall 2023

From Students... ...to Professionals

Project Overview

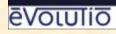
- Utilize existing Observability tools to develop a robust & scalable APM software
- Provide system administators with visibility
 - Application dashboards
 - Dependency mapping
- Analyze and log application behavior
 - Error and exception tracking
 - Alerting and notification

System Architecture



Home Screen

D touHot2003ere	5 d t = 0
o Observability Platform	SETTNUS
Connels by Application None / Apple	
Search by Application Name / Appld	
Evo-ecommerce	
Evo-database-generator	
Product-planner	
Evo-observability-platform	
Evo-storefront	
Evo-analytics	



Application Dashboard

vo-database-generator Metrics	ERROR COUNT: 1	DEPENDENCY MA	PPING SEND ME	TRICS APPLICATION	SETTINGS H	HOME
Call Stack			Application Resp	onse Time		
asicErrorController.error	382 ms	764 ms 1145 ms 1	527 ms 1909 ms 22	91 ms 2673 ms 3054 n	ns 3436 ms 38	18 m
ЕТ	-					
ET /**						
ET /otel/v1/appone/test						
esourceHttpRequestHandler.handleRequest	-			14 1	1	
esponseFacade.sendError	-				Į.	
estController.testOtelInstrumentation	-		<u>11</u>			

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Dependency Mapping

vo-database-generator Dependency Mapping	RETU
TestControl /otel/v1/ap GET TestControl GET/otel Instrument	v te

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Application-Specific Settings

React App - Chromium			_ 7 .
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Evo-database-gener	rator Settings		BETUBY
		uired for a notification to be sent?	
	Save		
	Logs		
	Traces		2
ēVolutio	Errors		© 2023 Exolutio. All rights resorved.

What's left to do?

- Data streaming using Apache Kafka
- Displaying surface metrics on dashboard
- Setting up alert notification thresholds
- Configuring a Kubernetes cluster
- Deploying our application on AWS

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Questions?

