



VDS India Hackathon 2015

Team : Code Avengers

Continuous Integration (Vision)

1. Deliverables:

- a. Source code
- b. Unit Test Case

2. Repository:

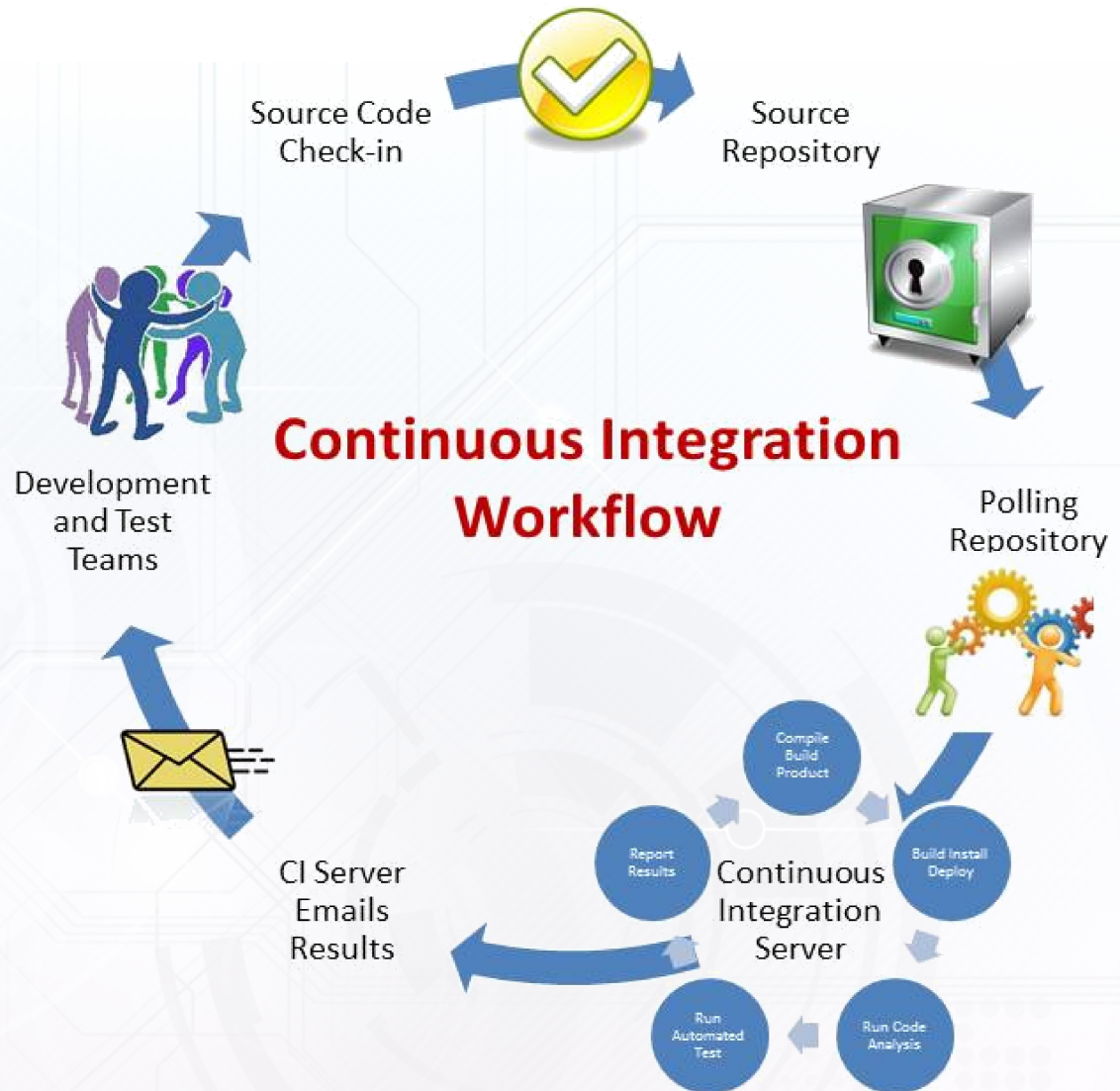
- a. Github

3. Continuous Integration:

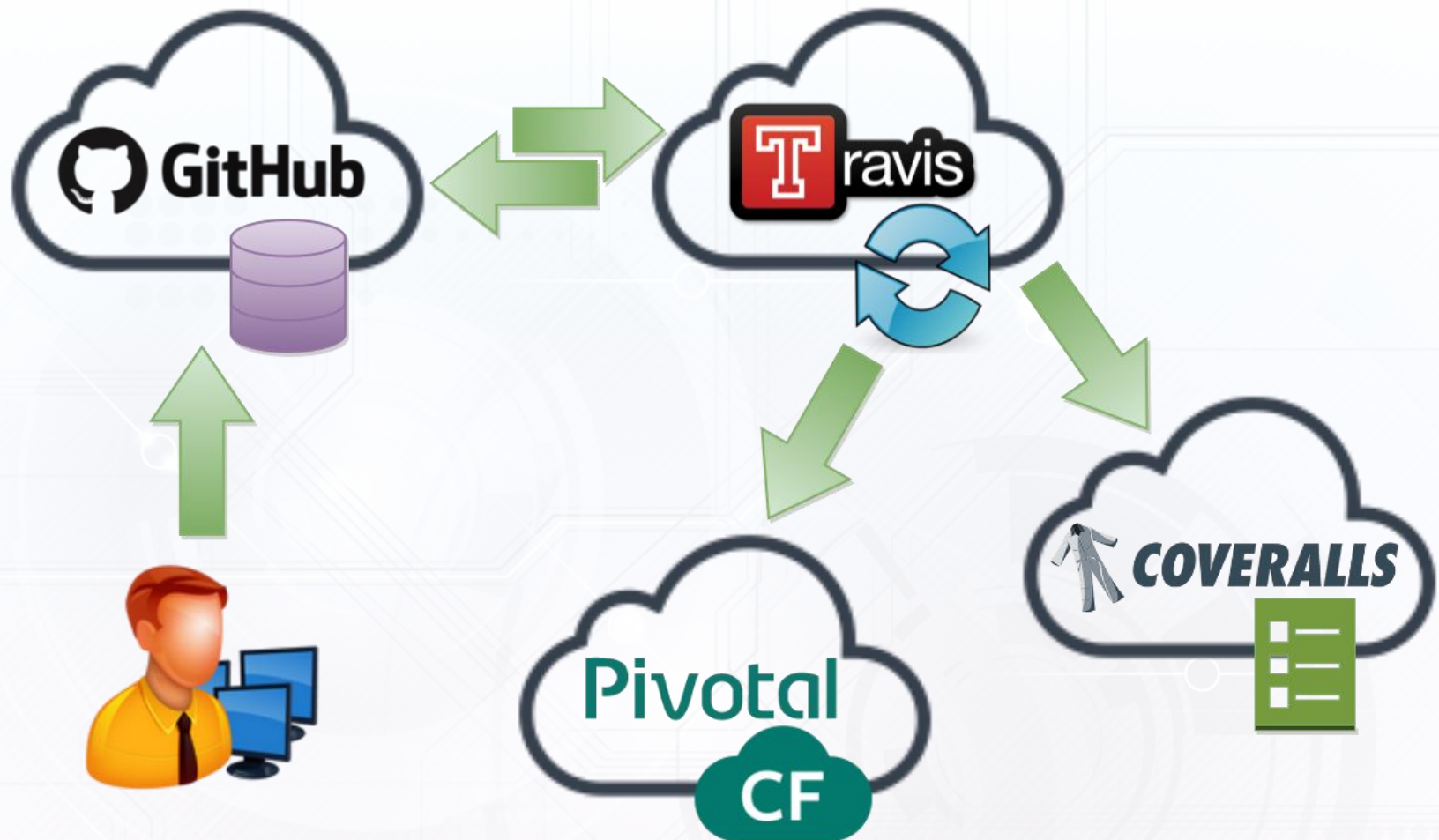
- a. Build
- b. Test Execution
- c. Code Metrics
- d. Deployment

4. Monitoring:

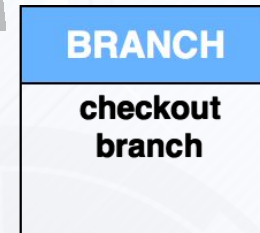
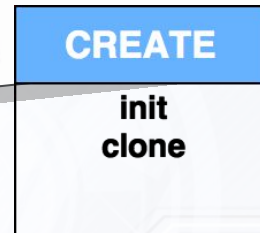
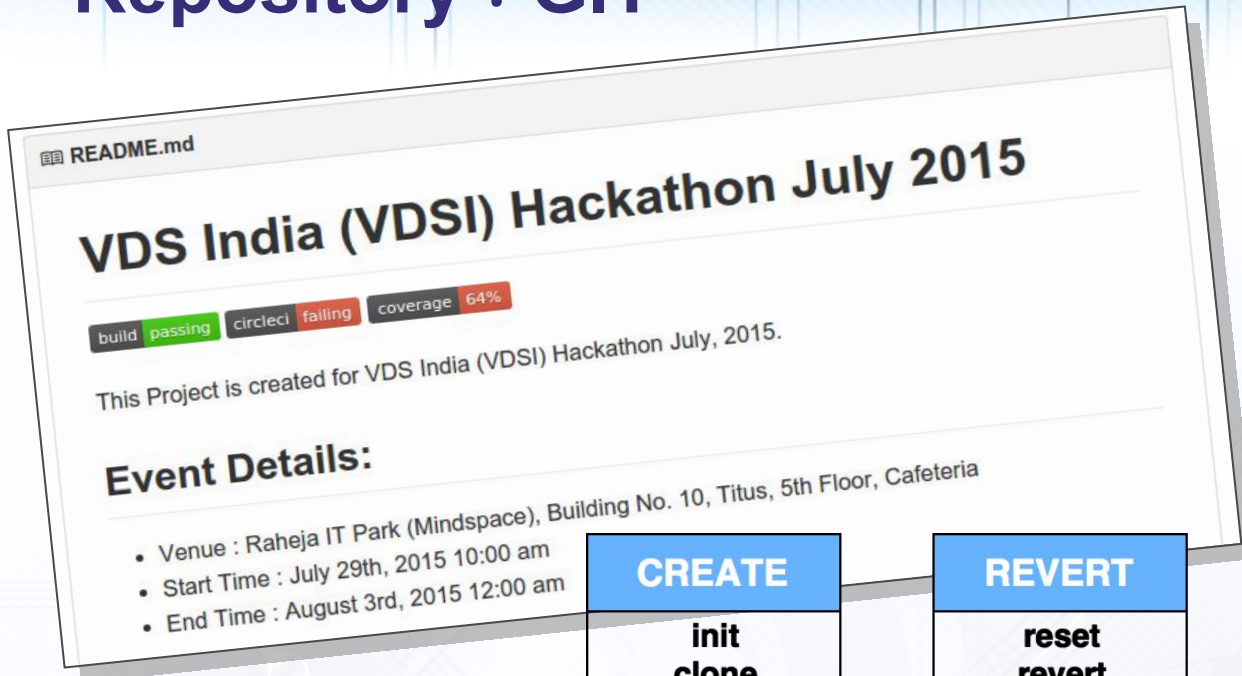
- a. Email
- b. Webhooks



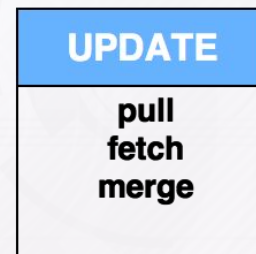
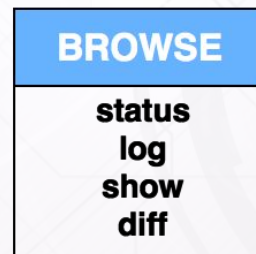
Continuous Integration (Architecture)



Repository : GIT



GIT Steps



GitHub



Continuous Integration : Travis CI

CurrentBranchesBuild HistoryPull RequestsSettings

✓

🔗

master Final touch ups

Abhishek Roychoudhury committed

52 passed
734f7a3

🕒 1 min 5 sec
📅 2 minutes ago

✓

🔗

master Final touch ups

Abhishek Roychoudhury committed

51 passed
b07cd5a

🕒 1 min 1 sec
📅 6 days ago

✓

🔗

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✓

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✓

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CurrentBranchesBuild HistoryPull RequestsSettings

General Settings

ON

Build only if .travis.yml is present

ON

Build pushes

ON

Limit concurrent jobs ? 1

OFF

Build pull requests

Environment Variables

repoToken

W39PHCH923Qj85F8u4EXDEyIVS!

🗑

Name

Value

OFF

Display value in build log

Add



Travis CI

Code Metrics : Coveralls

COVERALLS

REPOS

UPDATES

PRO SIGN UP

DOCS

BLOG

AROYCHOUDHURY

SIGN OUT

! BADGE YOUR REPO: VERIZONHACKATHON2015

coverage 64%

We detected this repo isn't badged! Grab the embed code to the right, add it to your repo to show off your code coverage, and when the badge is live hit the refresh button to remove this message.

BADGE URLS ▼

REFRESH

AROYCHOUDHURY / VERIZONHACKATHON2015

64%

BRANCH: MASTER ▼

NOTIFICATIONS

CHANGE SOURCE

GITHUB REPO

LATEST BUILDS

BUILD	BRANCH	COVERAGE	COMMIT	COMMITTER	TYPE	TIME	VIA
#52	master	64.48	Final touch ups	aroychoudhury	push	about 2 hours ago	travis-ci
#51	master	64.48	Final touch ups	aroychoudhury	push	02 Aug 2015	travis-ci
#50	master	64.48	Correcting Map file	aroychoudhury	push	02 Aug 2015	travis-ci
#49	master	64.48	Finishing touches to Final Product	aroychoudhury	push	02 Aug 2015	travis-ci
#48	master	64.48	Finishing touches to Final Product	aroychoudhury	push	02 Aug 2015	travis-ci

REPO STATS

64.48% COVERED

380 OF 581 RELEVANT LINES COVERED

LANGUAGES

HTML, JAVASCRIPT, CSS, JAVA, PHP

REPO ADDED

01 AUG 2015

TOTAL FILES

27

BUILDS

12

LAST BUILD

#52 ↻

JOBS

12

LAST JOB

#1 ↻

LAST COMMIT


Final touch ups

README BADGE

coverage 64%

BADGE URLS ▼

Deployment : Pivotal CloudFoundry

**Pivotal Web Services**

abhishek.org > development

abhishek.roychoudhury@... ▼

ORG

abhishek.org ▼

SPACES

development

Marketplace


Docs

Support

Tools

Blog

Status

**Pivotal CF**


SPACE

development

1 Running
0 Stopped
0 Down

Overview [Edit Space](#)

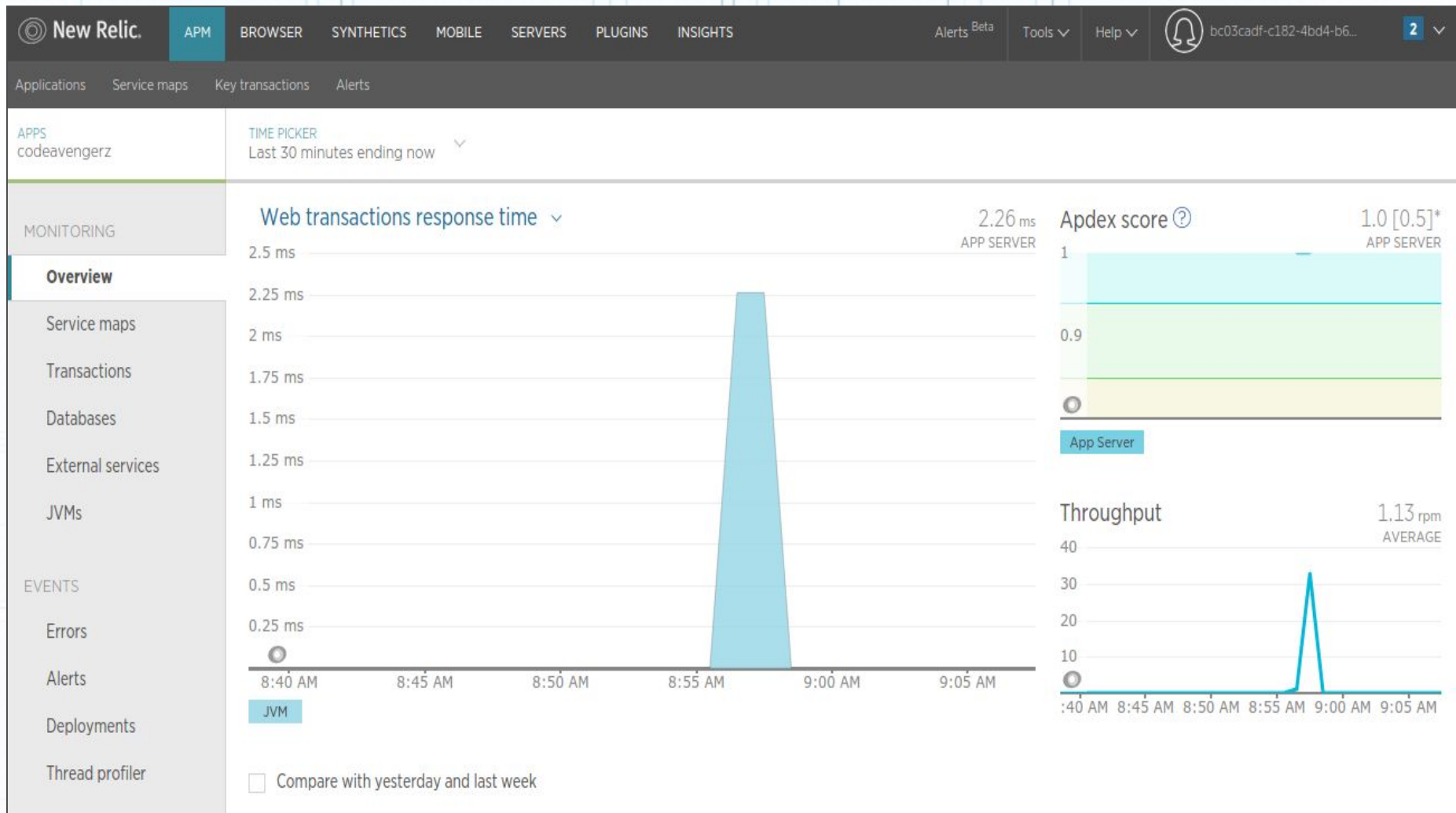
APPLICATIONS [Learn More](#)

STATUS	APP	INSTANCES	MEMORY
	codeavengerz http://codeavengerz.cf...	1	512MB >

SERVICES [Add Service](#)

SERVICE INSTANCE	SERVICE PLAN	BOUND APPS
newrelic Manage Documentation Support Delete	New Relic Standard	1

Monitor : New Relic



Continuous Integration (Links)

Repository:

- Github - <https://github.com/aroychoudhury/VerizonHackathon2015>

Continuous Integration:

- Travis CI - <https://travis-ci.org/aroychoudhury/VerizonHackathon2015>
- Circle CI - <https://circleci.com/gh/aroychoudhury/VerizonHackathon2015>

Deployment:

- Pivotal CF - <https://console.run.pivotal.io>

Metrics:

- Coveralls - <https://coveralls.io/github/aroychoudhury/VerizonHackathon2015>



GitHub



Travis CI



COVERALLS

Tools

Image Manipulation:

- Pixlr - <https://pixlr.com/editor/>
- Image Optimizer - <http://www.imageoptimizer.net/Pages/Home.aspx>

HTML Editing:

- Best Online HTML Editor - <http://bestonlinehtmleditor.com/>

DB Diagram:

- Vertabelo - <https://www.vertabelo.com/>

Diagrams:

- Draw IO - <http://draw.io>

Code Metrics:

- Google Code Pro - Eclipse Plugin

The background is a complex, abstract digital illustration. It features a network of glowing blue and white lines that resemble circuit traces or data paths. These lines are interconnected by small, bright yellow and white circular nodes. The overall color palette is a gradient of purples, blues, and whites, creating a high-tech, futuristic atmosphere. In the lower half, the title text is centered.

Map Dash : an analytics system

A Code Avengers Initiative

Map Dash

Map Dash (*Map Analytics Dashboard*) is an attempt to add Geographic Context to data analytics. This is an attempt to provide more insight to data such as - *Population base across Cities, Accidents within Urban & Rural Areas, Customer Spread across Regions* etc.

The below sections provide more information of MapDash system.

1. Features:

- a. Data integration with Google Maps
- b. Charting capability on the Geographic data
- c. Mobile first UI design and implementation (Bootstrap/jQuery)
- d. Robust Spring Driven Backend Architecture
- e. jUnit Based automated Unit Testing capabilities [via Continuous Build]
- f. Code Metrics Generation capabilities [via Continuous Build]

2. Best Practices:

- a. Architecture and Database Schema design diagrams
- b. Java Docs for all Public and Protected methods
- c. Metrics Data generated as part of Development process

Architecture Design

Spring Components used:

- JDBC Template (Spring JDBC)
- Rest Controller (Spring MVC)
- Java Config (Spring Core)
- Bean Injection (Spring Core)
- Transaction Management (Spring AOP)
- Unit Testing (Spring Test)

Logging:

- SLF4j - Log4j

Hibernate:

- Hibernate 4

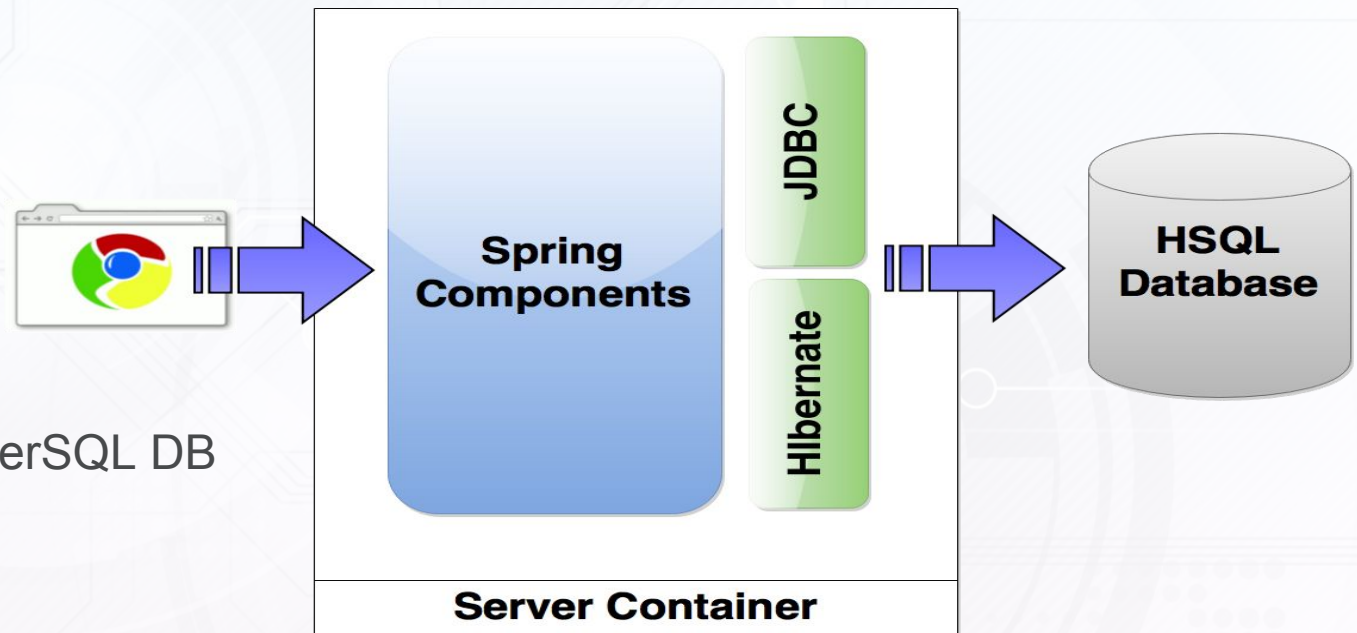
Database:

- In memory HyperSQL DB

spring

HyperSQL

HIBERNATE



Database Design

LOCATION_MASTER:

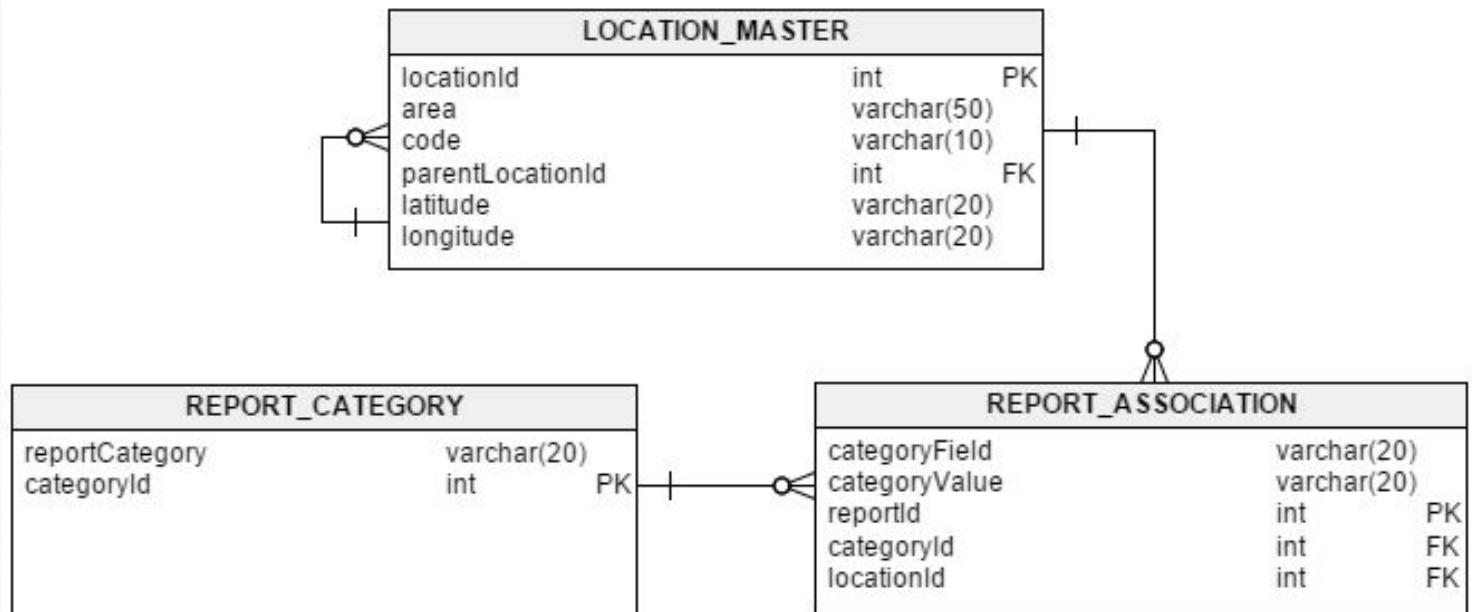
- Location data and details

REPORT_CATEGORY:

- Data Categories and other details

REPORT_ASSOCIATION:

- Associations between Locations & Categories



Looking Ahead

Looking ahead, we see a lot more that we can do with this application.

1. More Features:

- a. Integration with Enterprise Data Processing systems
- b. Creating plugins for common Databases/Big Data Systems
- c. Add dynamic data uploading functionality
- d. Allow greater interactivity to the user leveraging Google Maps plugin
- e. Create HTML widgets (similar to *MakeMyTrip* widgets we see on webpages)

2. Achieve More Best Practices:

- a. 85% Test Coverage
- b. Greater Code/Comment Ratio
- c. Introduce a MVC Framework for future UI work

Map Dash (Links)

Application:

- <http://codeavengerz.cfapps.io/maps.html>

Java Docs:

- <http://codeavengerz.cfapps.io/docs/index.html>

Metrics:

- <http://codeavengerz.cfapps.io/metrics/metrics.html>

Team Blog:

- <http://codeavengerz.cfapps.io>



Any
Questions?

Thank you !!!!!