VDS India Hackathon 2015

Team : Code Avengers

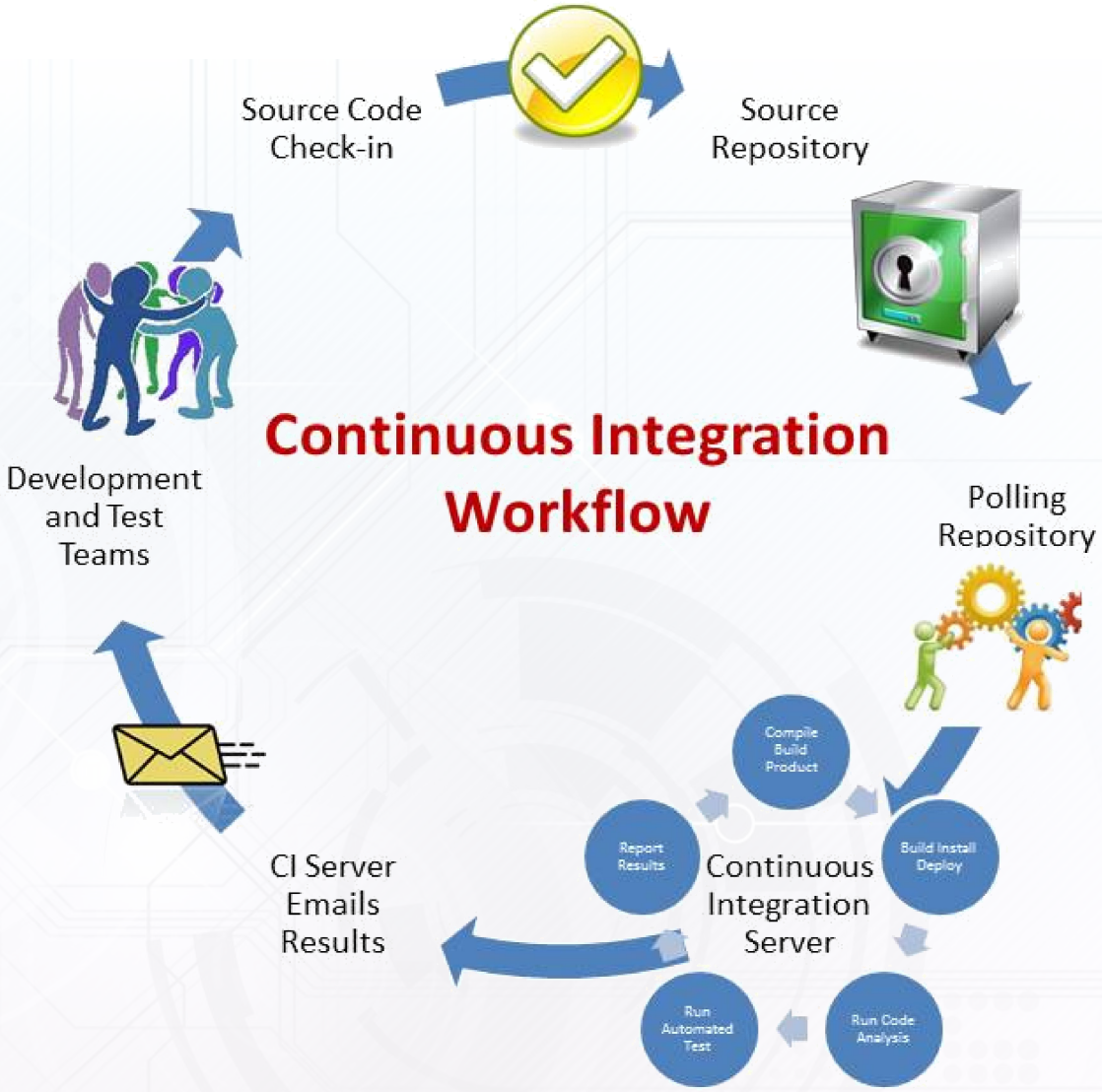
Continuous Integration (Vision)

1. **Deliverables:**
    a. Source code
    b. Unit Test Case

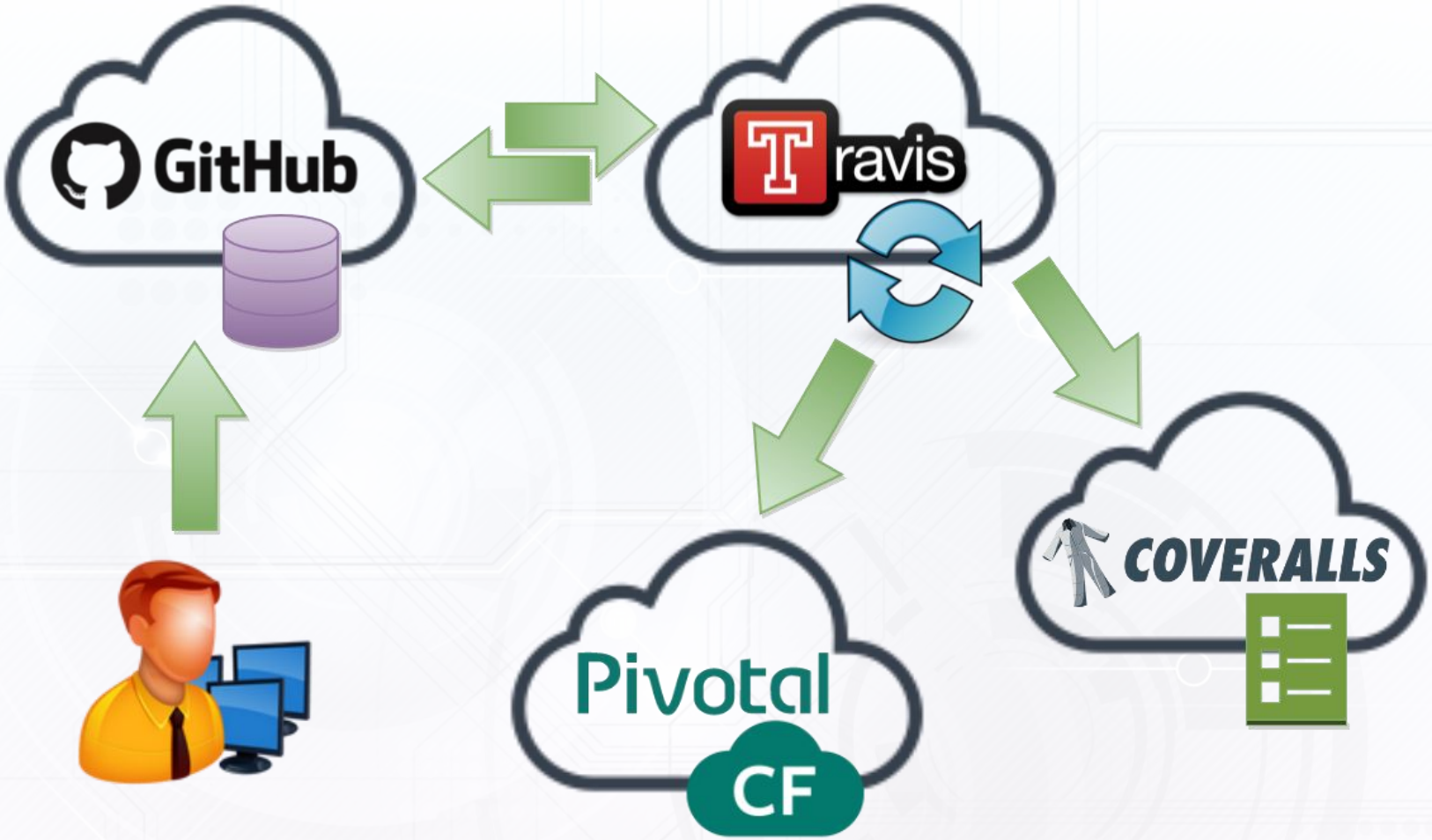
2. **Repository:**
    a. Github

3. **Continuous Integration:**
    a. Build
    b. Test Execution
    c. Code Metrics
    d. Deployment

4. **Monitoring:**
    a. Email
    b. Webhooks



Continuous Integration（Architecture）



Repository : GIT

README.md

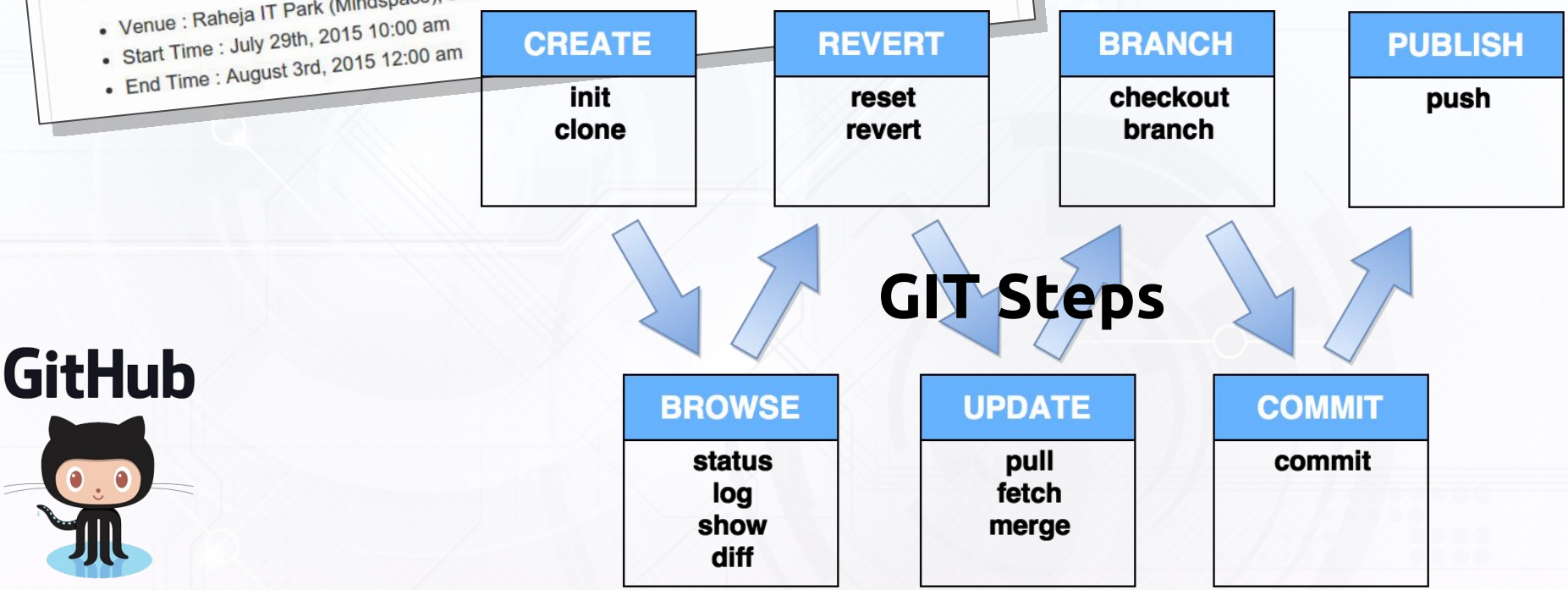
VDS India (VDSI) Hackathon July 2015

build passing | circleci failing | coverage 64%

This Project is created for VDS India (VDSI) Hackathon July, 2015.

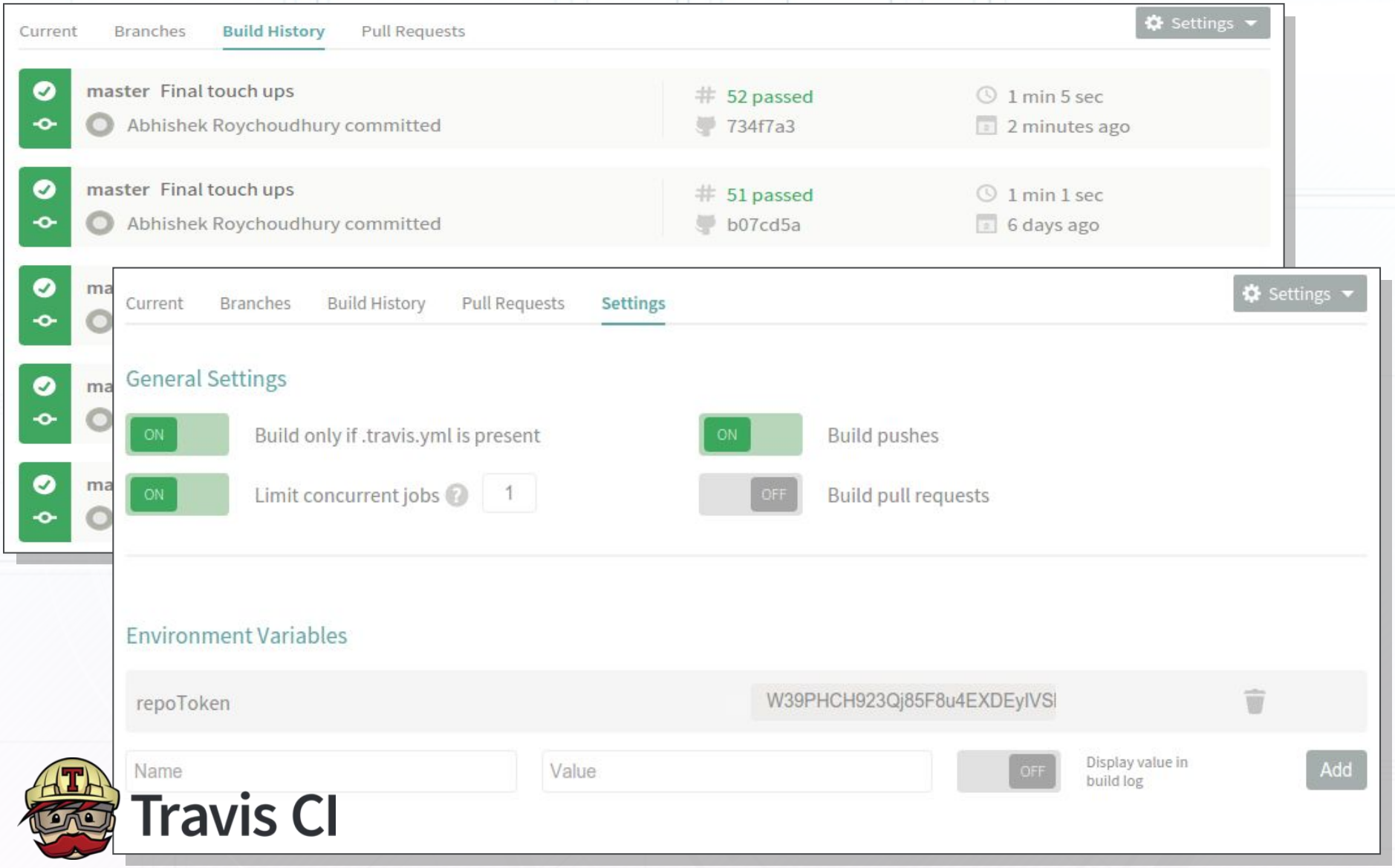
Event Details:

- Venue : Raheja IT Park (Mindspace), Building No. 10, Titus, 5th Floor, Cafeteria
- Start Time : July 29th, 2015 10:00 am
- End Time : August 3rd, 2015 12:00 am



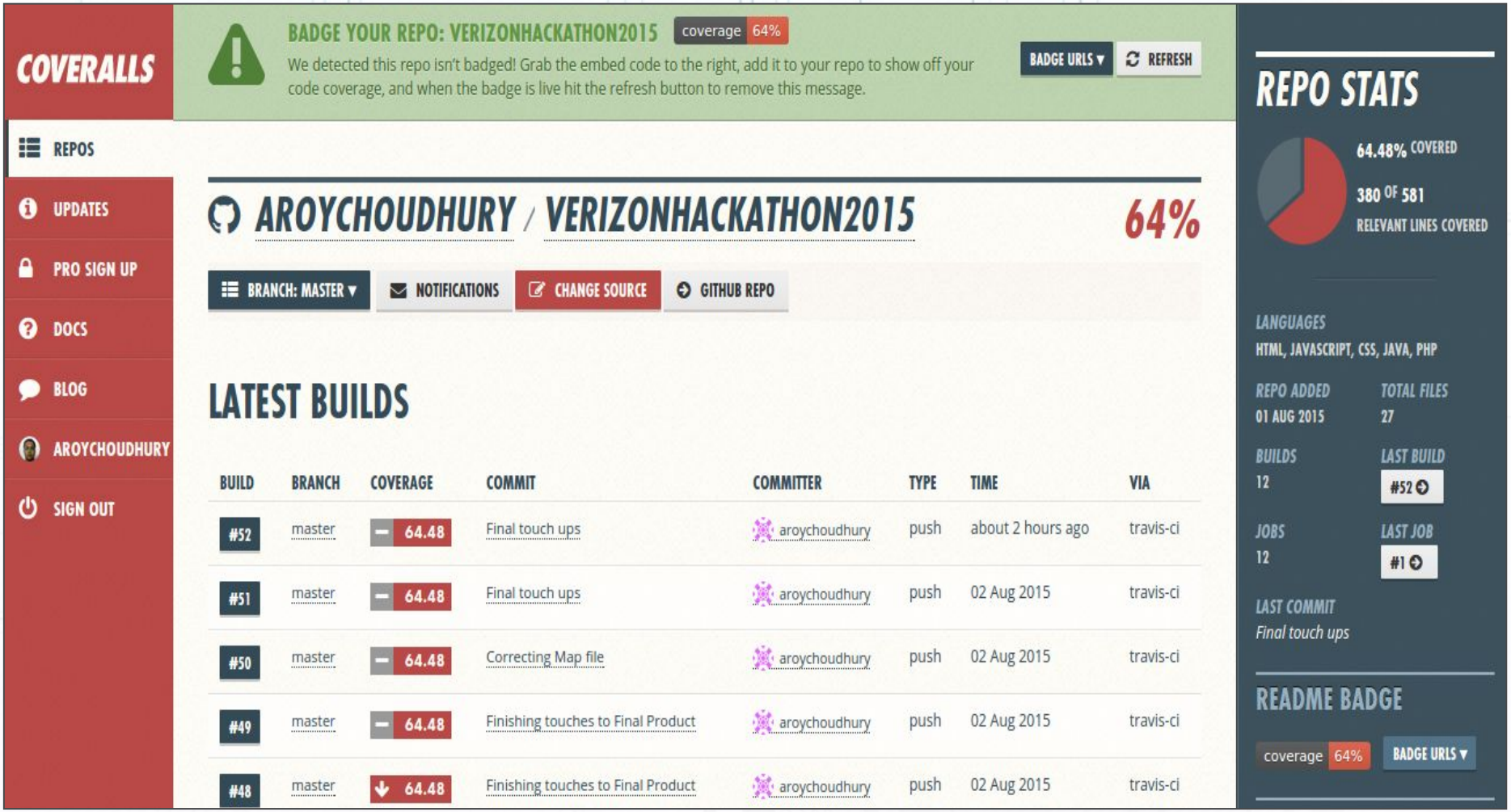
GitHub

Continuous Integration : Travis CI



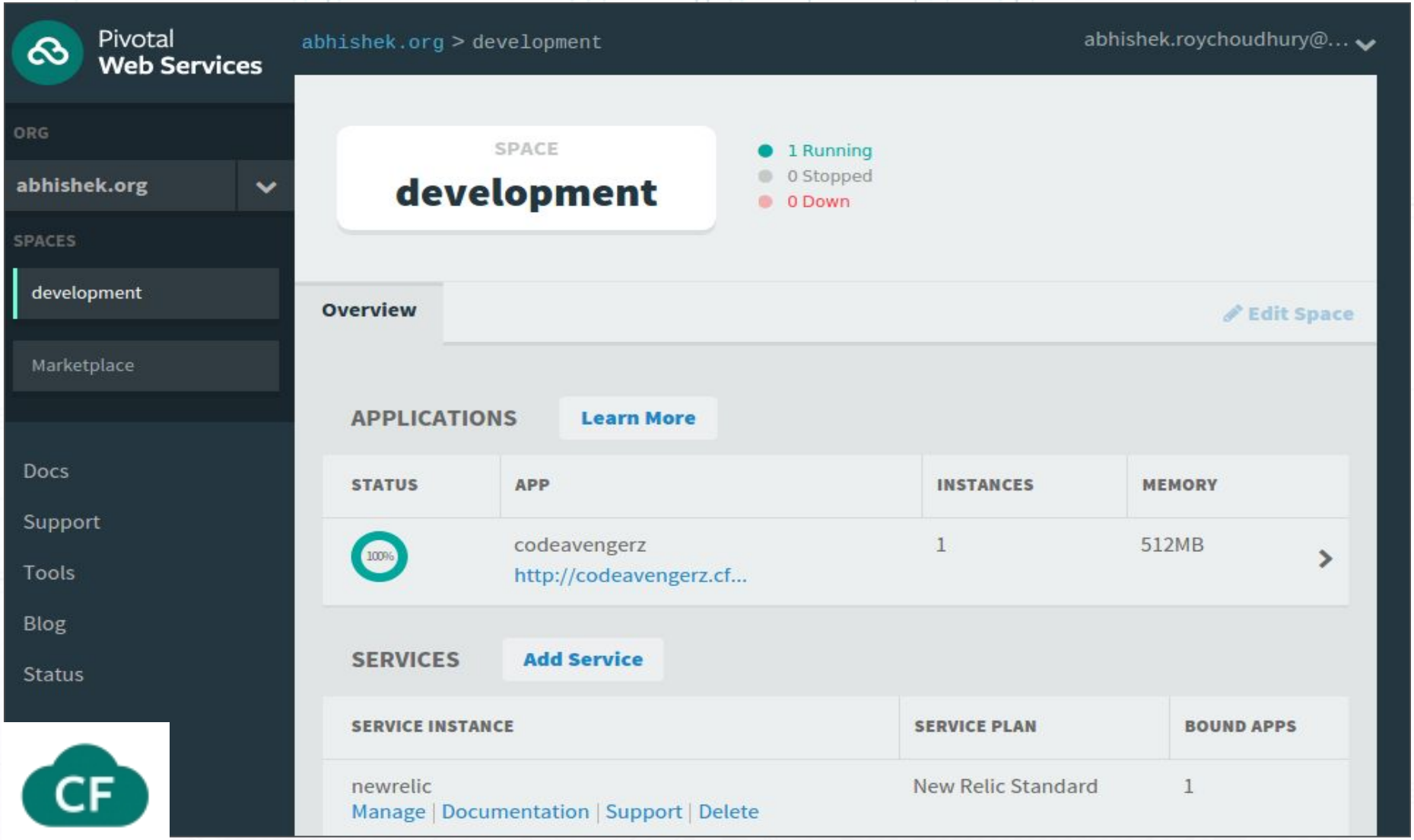
Travis CI

Code Metrics : Coveralls



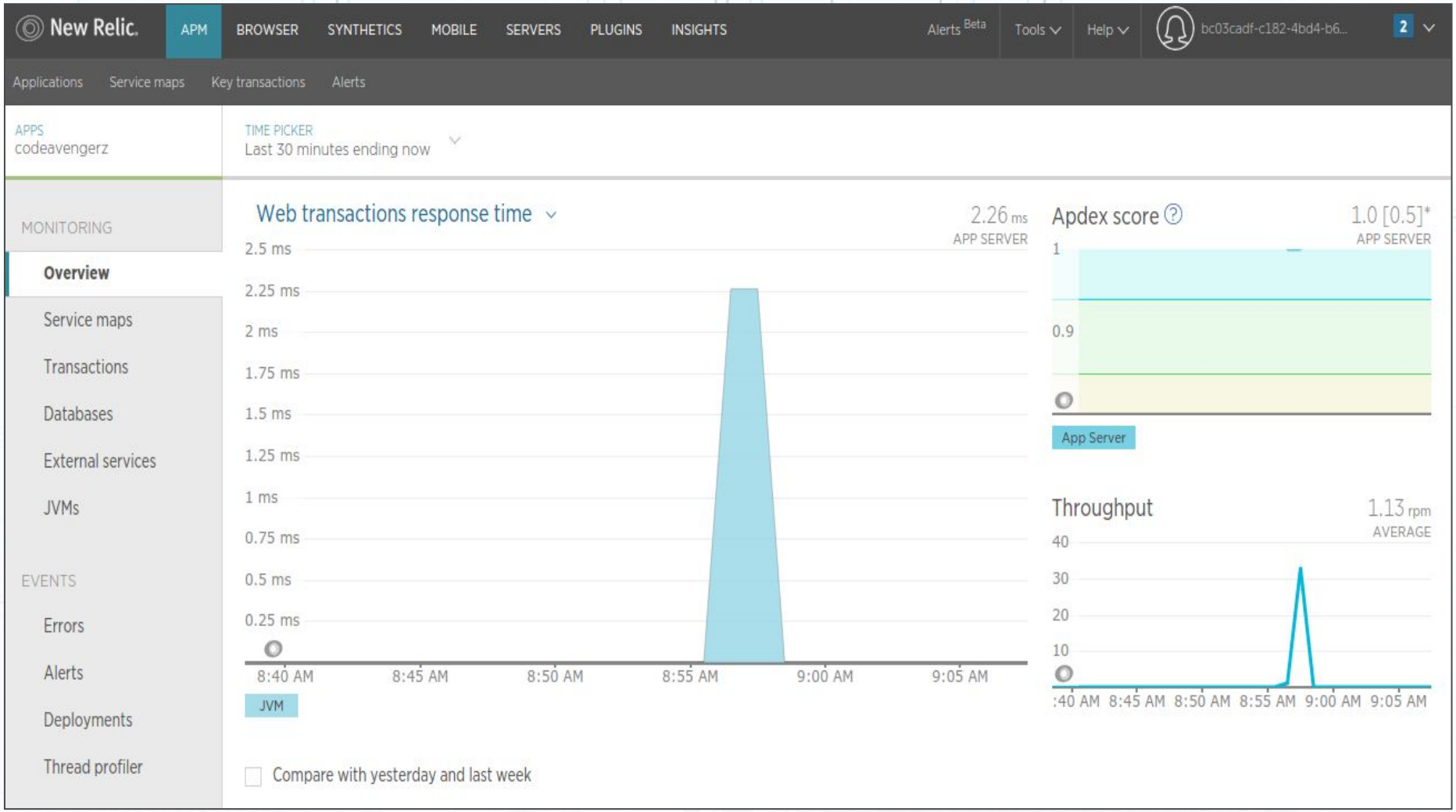
COVERALLS

Deployment : Pivotal CloudFoundry



CF
Pivotal CF

Monitor : New Relic



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

Travis CI

circleci

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:

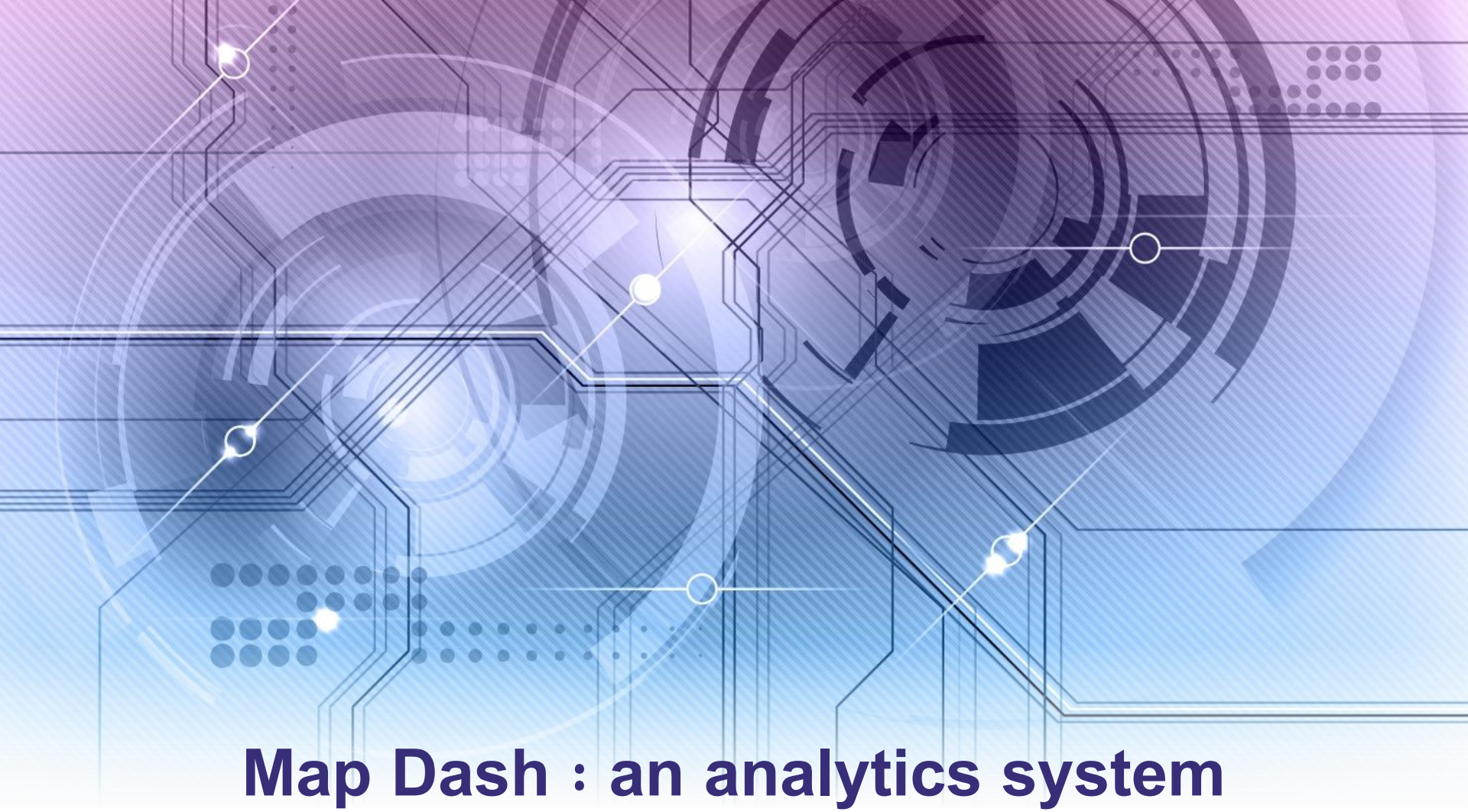
- Vertabelo - https://www.vertabelo.com/

Diagrams:

- Draw IO - http://draw.io

Code Metrics:

- Google Code Pro - Eclispe Plugin



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:

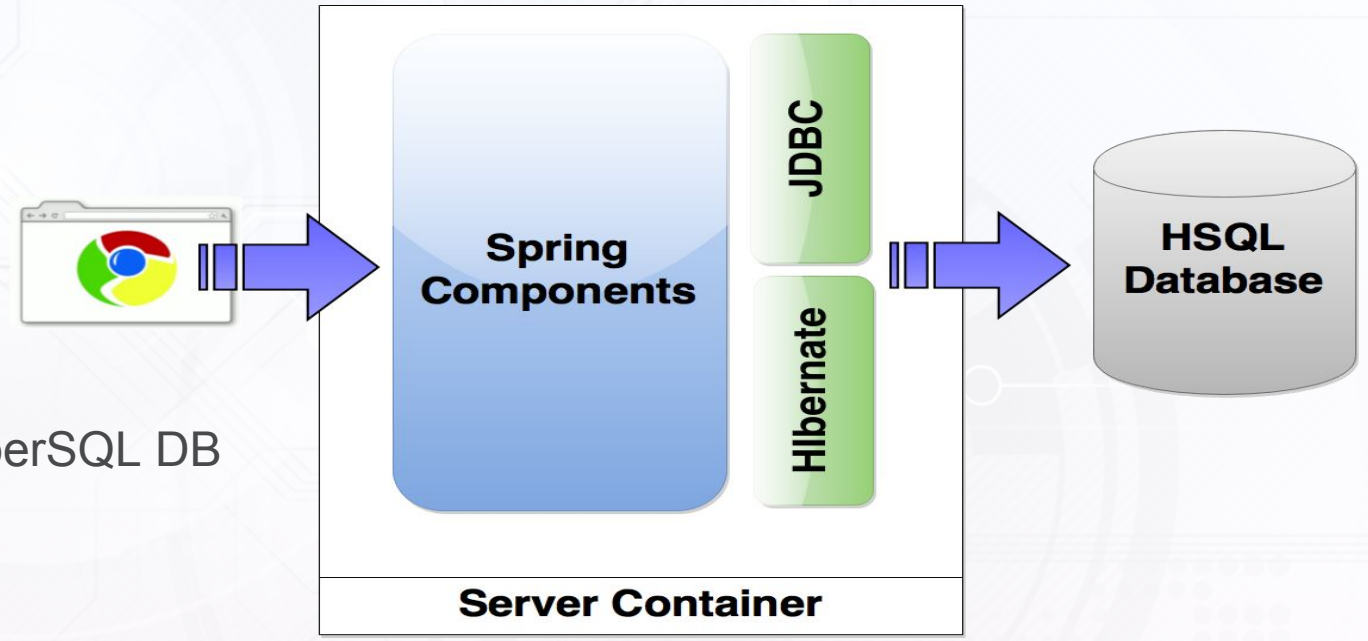
- SLF4j - Log4j

Hibernate:

- Hibernate 4

Database:

- In memory HyperSQL DB



Database Design

LOCATION_MASTER:

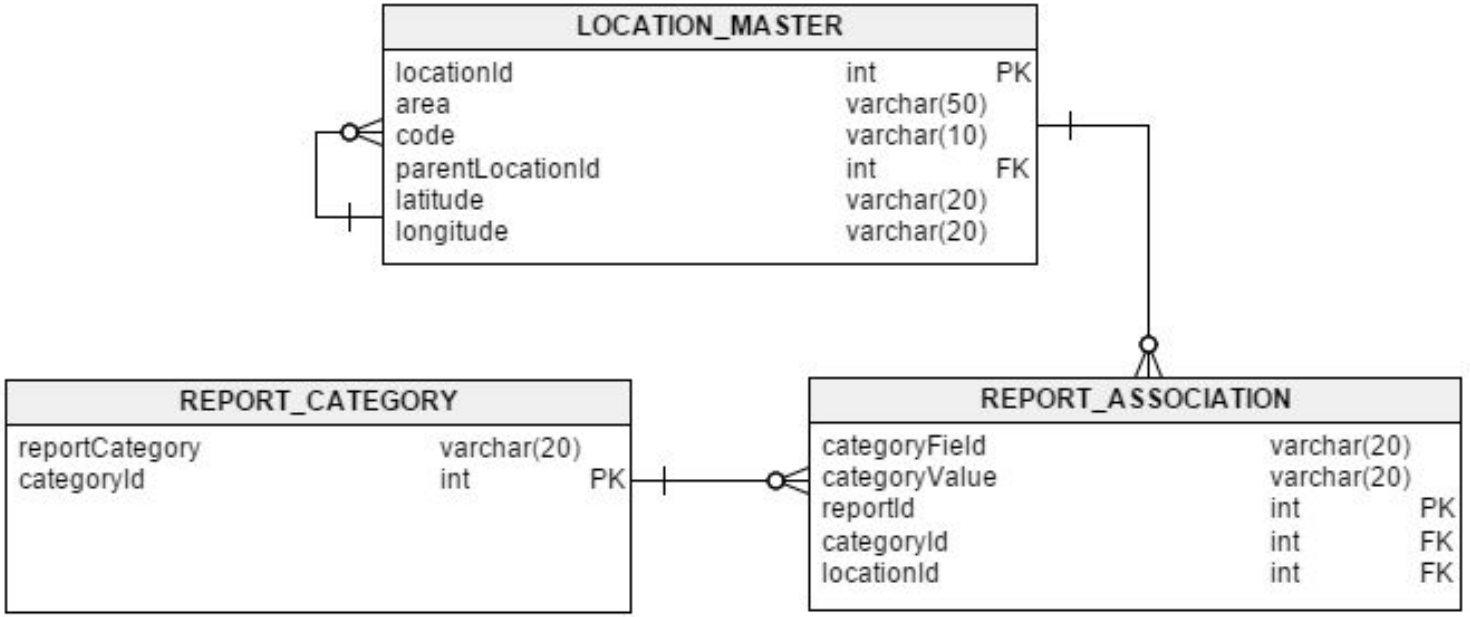
- Location data and details

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

Thank you !!!!!