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August 31, 2021

Product Demo – Eldorado

PSI-2021 May ASDE Batch 1

Agenda

- Meet our Team
- Our Journey
- Problem Statement
- Tech Stack
- Jira Stages
- Jira Dashboard
- Skill Level Indicator
- Application Flow
- System Design & Architecture
- Product Demo
- Jenkins Pipeline
- Performance NFRs
- Conclusion





Meet Our Team

POD 1 - Survivors



Rishabh



Saranya



Shaddam



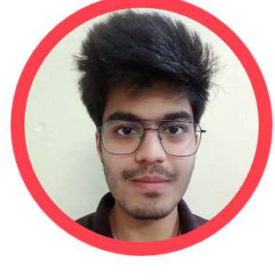
Aryushi



Meghna



Venu



Bhavesh

POD 2 - Intrepid



Sonal



Abhijeet



Faizan



Manthan



Narmatha



Nikhar



Samarth

POD 3 – Six Dots



Dheeraj



Munazza



Sanjeev



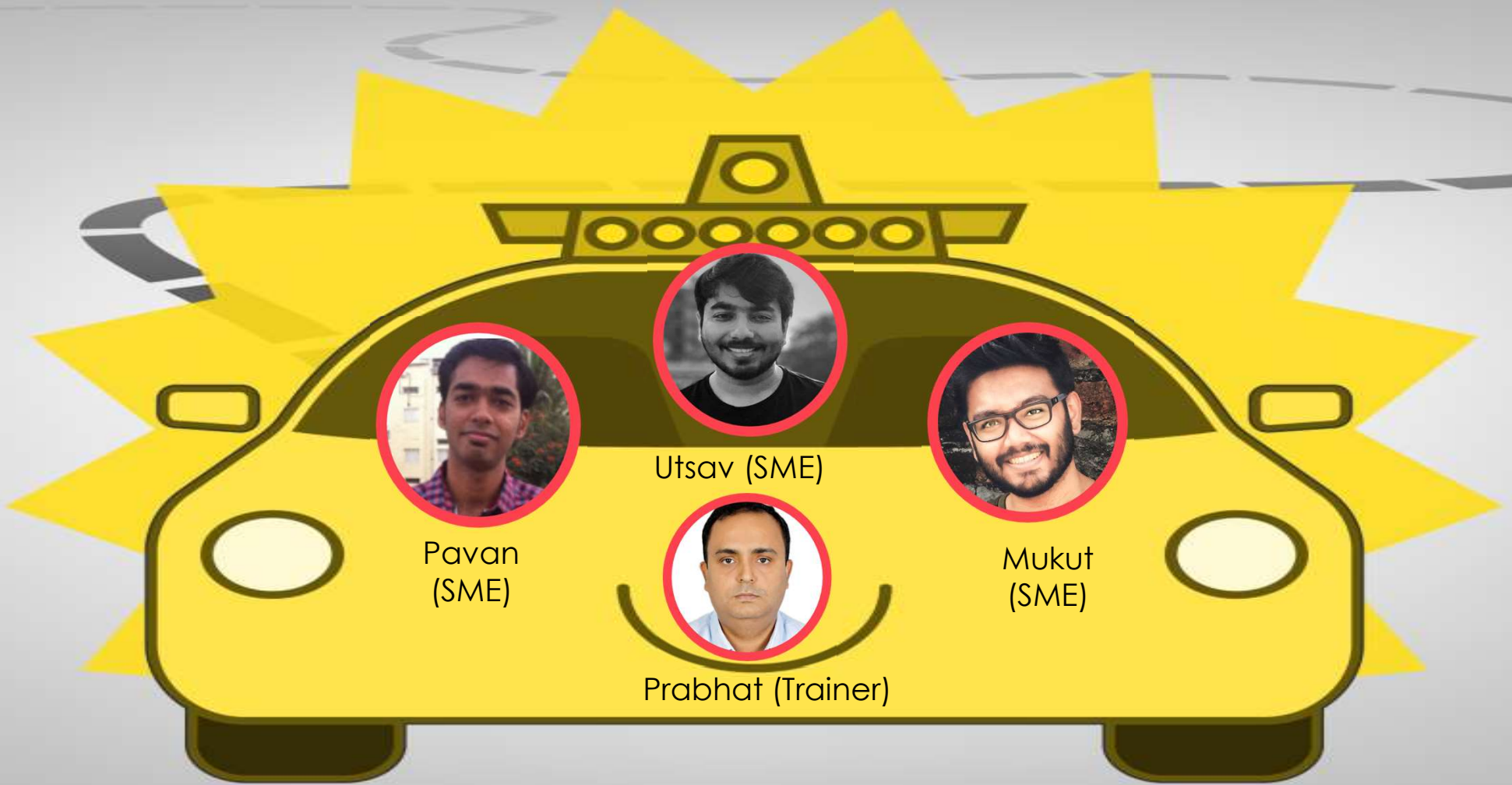
Sharad



Raghav



Ravinder



Pavan
(SME)



Utsav (SME)



Mukut
(SME)



Prabhat (Trainer)

A large white circle is centered on a solid red background. Inside the circle, the text "Our Journey" is written in a white, sans-serif font.

Our Journey



March 2021

*Self-Learning,
Exploration
Weekly Connect*





March 2021

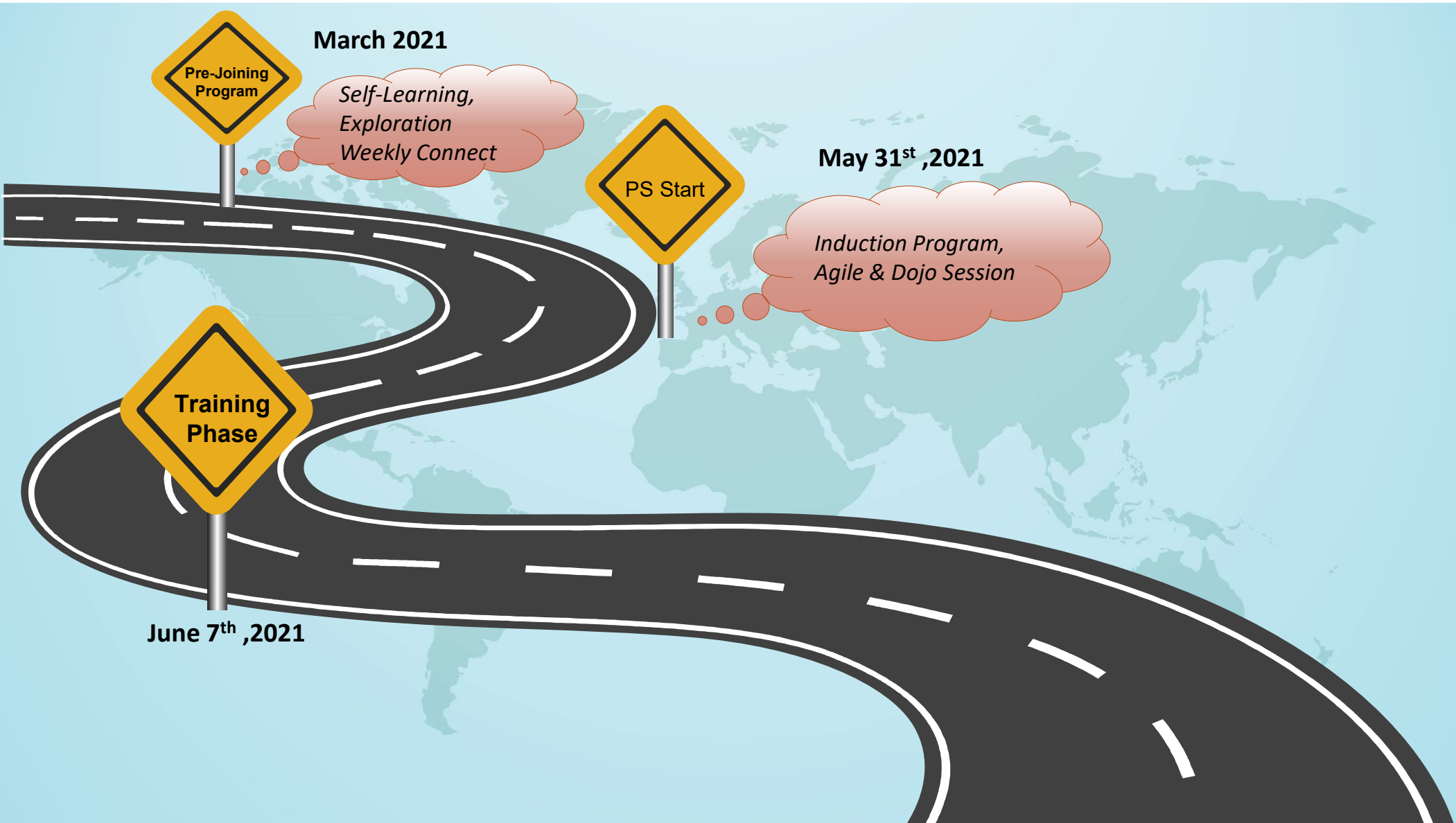
*Self-Learning,
Exploration
Weekly Connect*



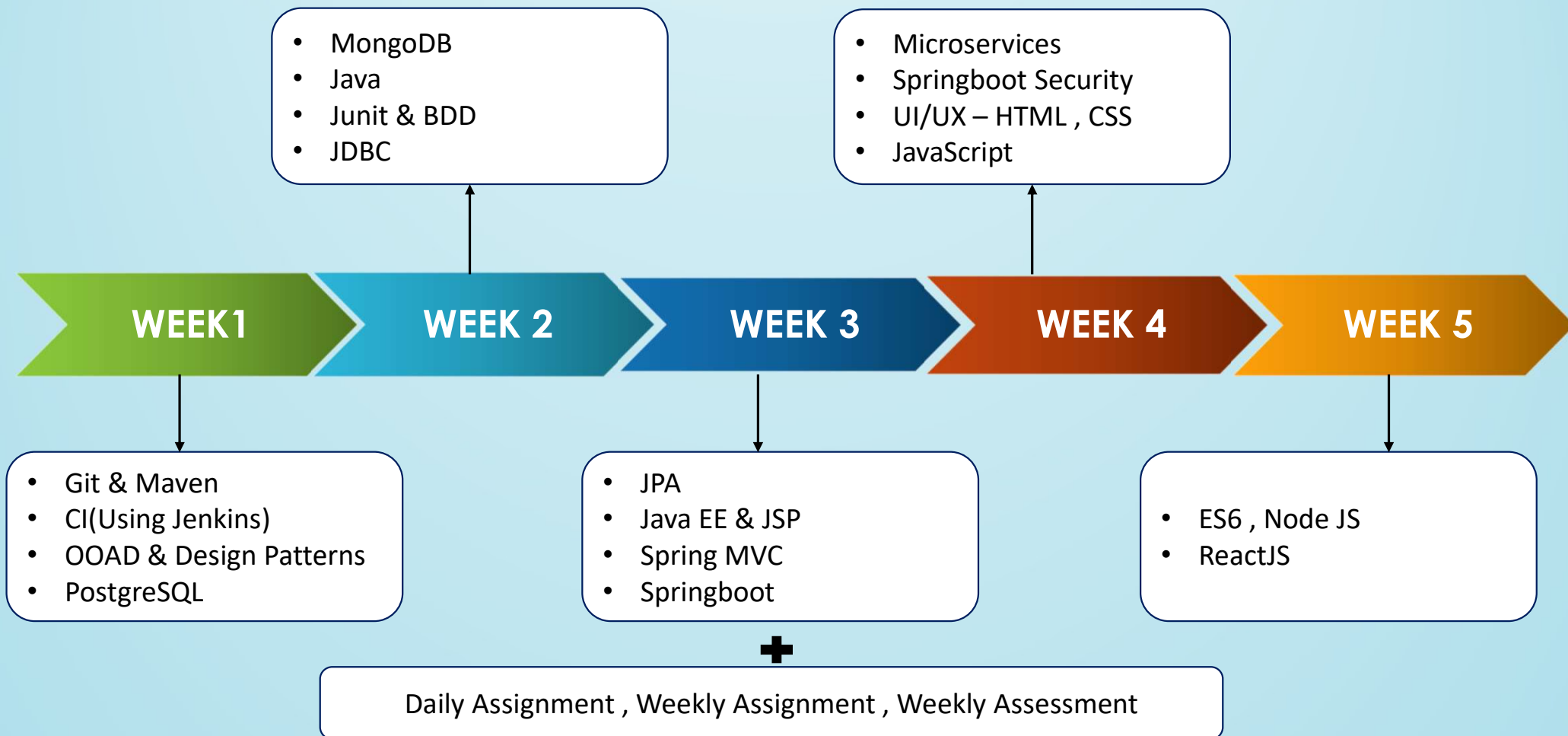
May 31st ,2021

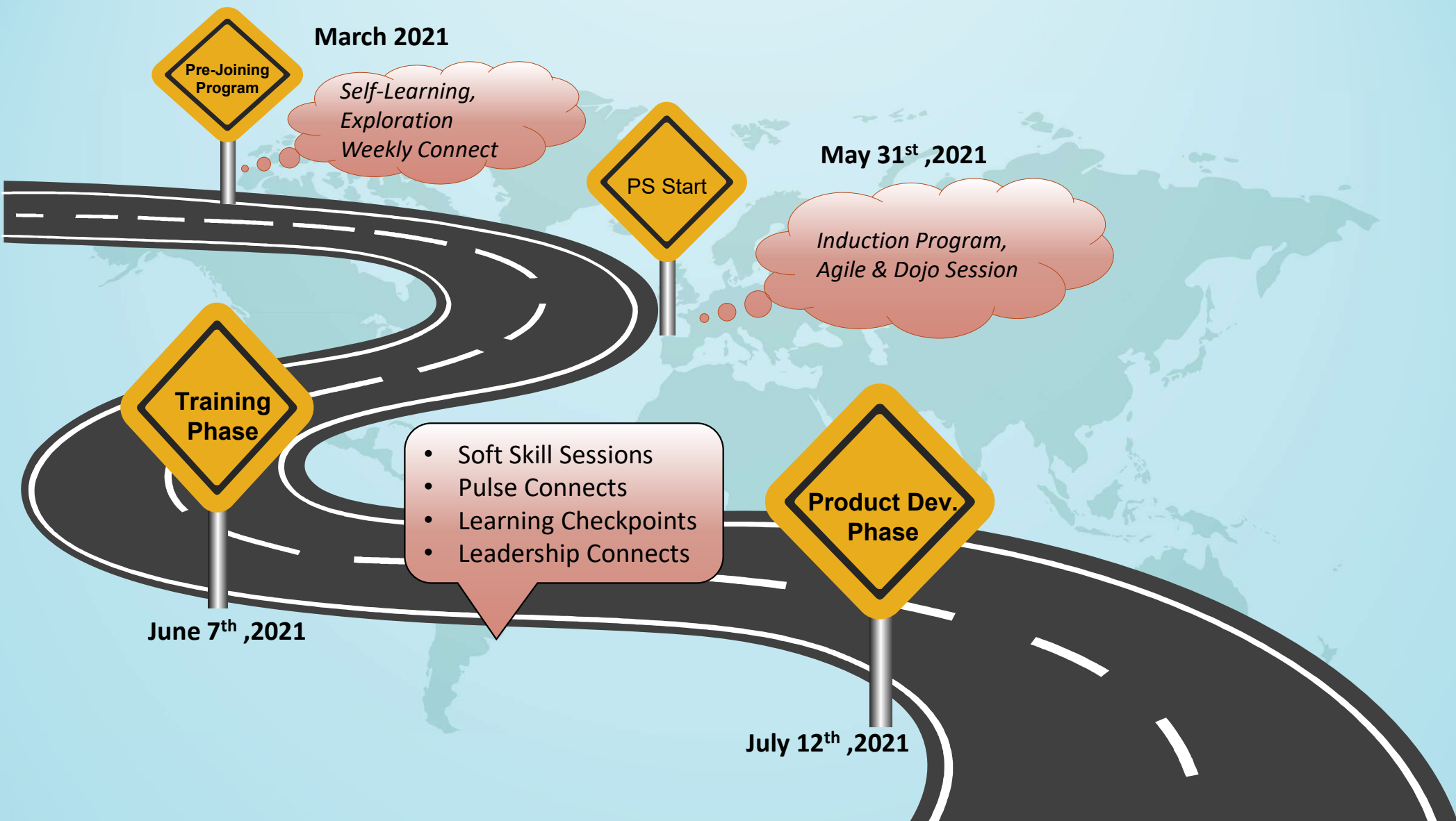
*Induction Program,
Agile & Dojo Session*



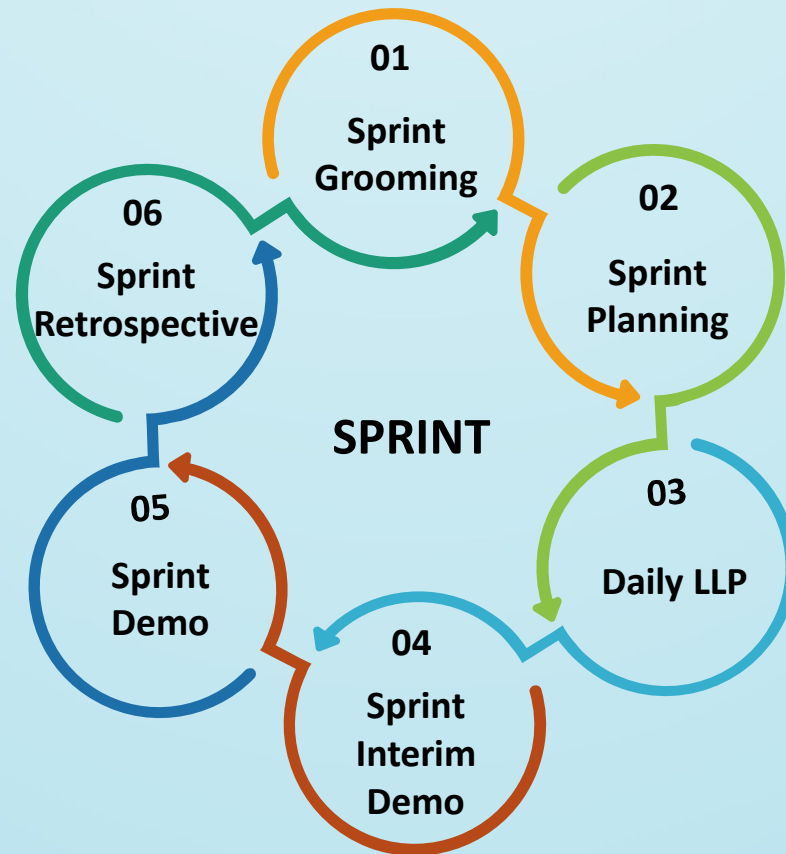


Training Phase





Stages in Sprint



Problem Statement

The El Dorado Company

- The client is an online retailer whose major customer base is in India along with China and Australia. Their current sales are through stores in these regions, an online website, and orders via emails.
- **Problem Faced:** These sales platforms run in silos with no data sharing which is resulting in sub-par customer experience and decline in sales.
- **Requirement:** fast, secure, and reliable website.
- They are planning to do a global launch which will do international shipping. They are expecting a 10 times growth.

Key Features:

Store Application (Customer facing)

Account

- Login
- Registration
- Support email verification
- Enforce password policies
- Build user profiles (name, email, addresses)
- Change Password, Forgot Password (support email verification)
- Password Expiry (every 90 days)
- Modify Account Details / User profile details like add/remove addresses
- Logout

Key Features:

Product Listing Page

- User can see a paginated view of available products with product thumbnails and price, name.
- User can search a product by name or description (Fuzzy search enabled)







Product Detail Page

- User can view a product in detail (name, description, price, available variations, product images, reviews & comments, user manual pdf or any attached documents)

Management Application (Admin)

Products

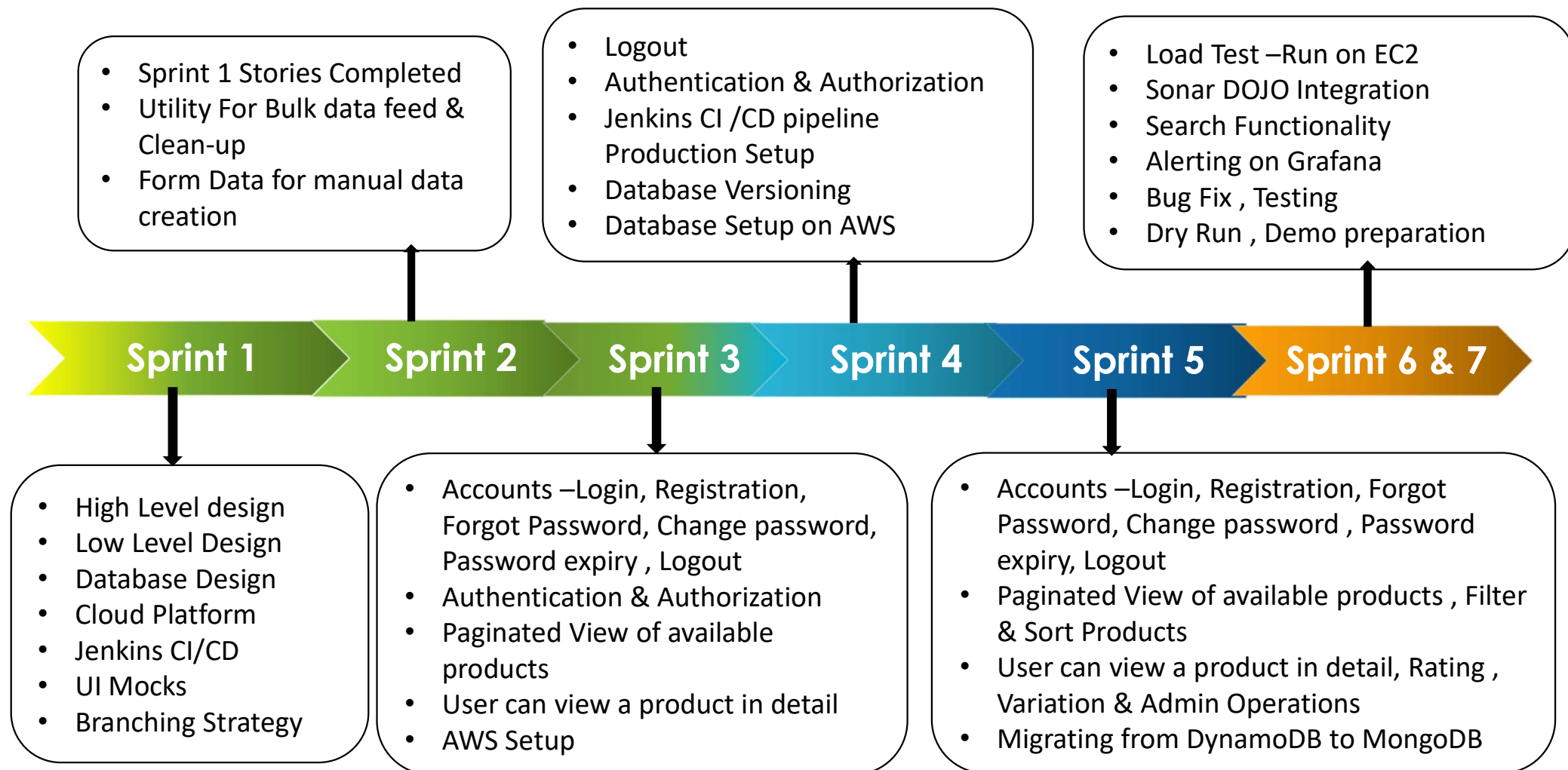
- Admins should be able to create product catalogues
- Create, remove, modify product line items

S.No.	NFRs & SLAs	Status
1.	Secure access over HTTPS/TLS (Encryption over wire)	
2.	Page view times < 3s	<u>1.6s</u>
3.	Response times < 3s, 1s	<u>80ms- 2.5s</u>
4.	Throughput - Req/Sec - 50, 100	<u>500-4500</u>
5.	Availability - 99.999	
6.	Concurrent user - 50, 100, 150...	<u>500-10000</u>
7.	Scalability of User Search per day - in an increasing trend (100,200, 400...)	5000
8.	Accessibility Responsive - supported view port 767px (Tablet and Desktop)	
9.	CI&CD Pipelines to be deployed via Jenkins Docker	
10.	Proper Error page should be displayed	
11.	Continuous failures shall be communicated at priority via alerts to the support teams to be acted upon"	

S.No.	Engg. PoV	Status
1.	100% method coverage	100%
2.	80% block/line coverage	85-90%
3.	Code Quality - 0 Blocker, Critical & Major issues reported by SonarQube, ESLint	✓
4.	Code Complexity, Memory profiling, Unit Test Reports, Monitoring & Alerting	✓

S.No.	Testing	Status
1.	Unit Testing	✓
2.	Cucumber BDD	✓
3.	Unit Test coverage FE > 70%	90 %

Product Development Phase



Tech Stack

Frontend	Backend	CI / CD	Database	AWS Services	Agile Tools
   	    	 Jenkins   	   	    	  

▶ Started, But not continued

Jira Stages

Grooming

- Acceptance Criteria
- NFRs
- Story Explained by SME
- DOR/DOD



Testing

- Code review
- Unit Testing
- Performance Testing
- Load Testing



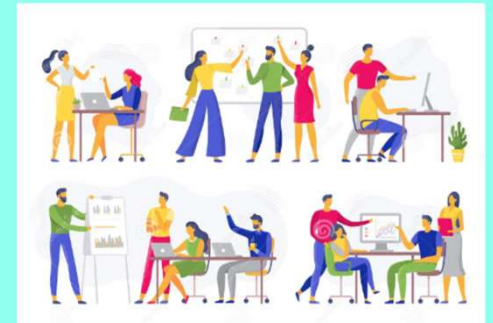
Analysis

- Problem Statement review
- Requirement Analysis



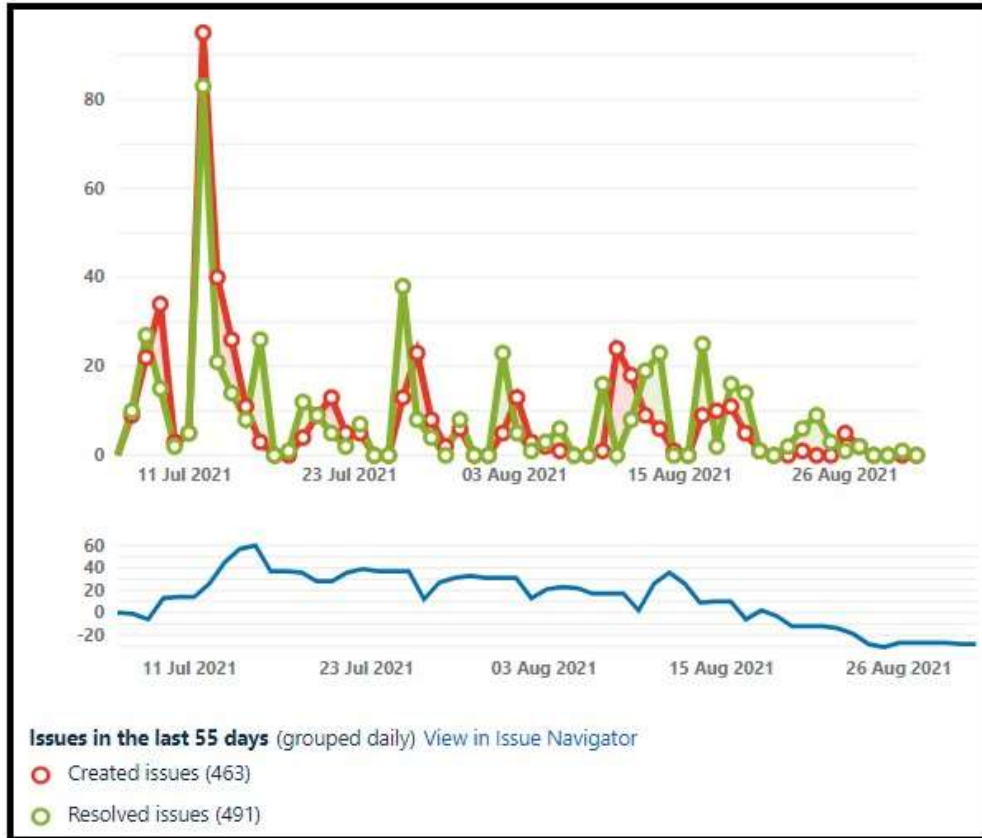
Development

- Build
- Commit
- Peer Review
- Integrate



Jira Dashboard

Created Vs Resolved

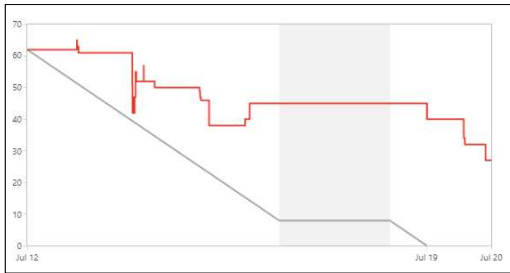


Sprint	OPEN	CLOSED	DROPPED	T:
Batch 1 - Prod Phase Sprint 7	0	34	0	34
Batch 1 - Prod Phase Sprint 6	0	58	4	62
Batch 1 - Prod Phase Sprint 5	0	126	0	126
Batch 1 - Prod Phase Sprint 4	0	130	0	130
batch 1 - Prod Phase Sprint 3	0	123	0	123
Prod Phase Sprint 2	0	88	0	88
Prod Phase Sprint 1	0	224	0	224
Training Sprint 5	0	210	0	210
Training Sprint 4	0	242	0	242
Training Sprint 3	0	514	0	514
Training Sprint 2	0	252	0	252
Training Sprint 1	0	132	0	132
None	14	6	0	20
Total Unique Issues:	14	1517	4	1535

Grouped by: Status

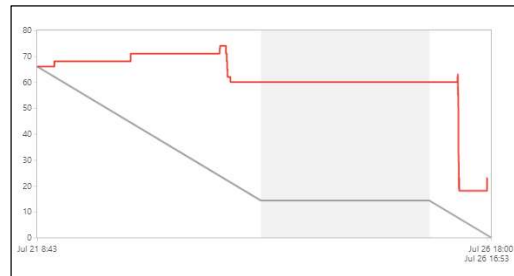
Showing 13 of 13 statistics. [Show less](#)

Sprint Reports



Sprint 1

Goal - Design Documentation



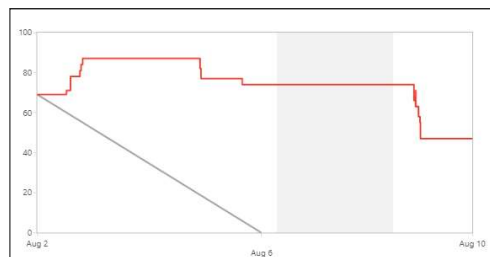
Sprint 2

Goal - Sample CI/CD pipeline setup , Cloud platform ,HLD,LLD, Bulkdata , login, logout & registration , data input by admin



Sprint 3

Goal - Authorization & Authentication, Login & Logout, Registration, Forget Password



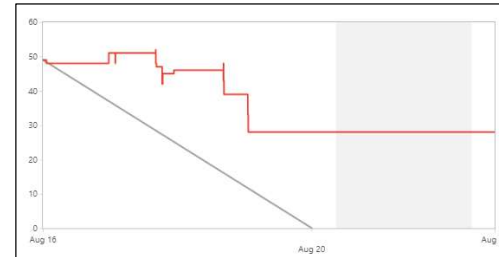
Sprint 4

Goal - By end of the sprint, all services should be running end to end in the prod/dev environment.



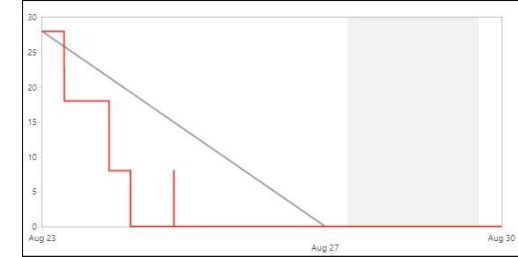
Sprint 5

Goal - Search Functionality should be complete, user profile update story should be complete, NFRs should be all met.



Sprint 6

Goal - Product Search and NFRs are met.

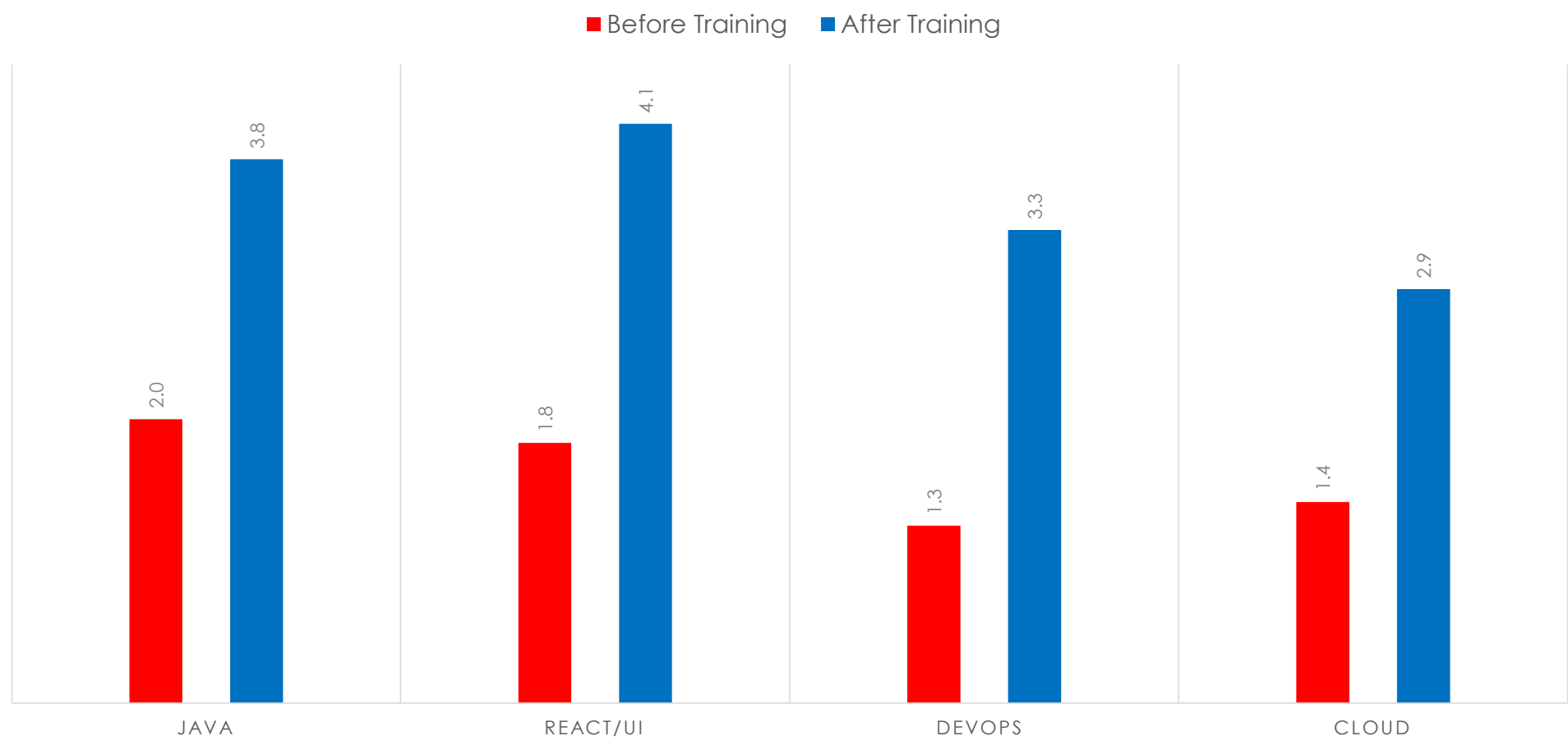


Sprint 7

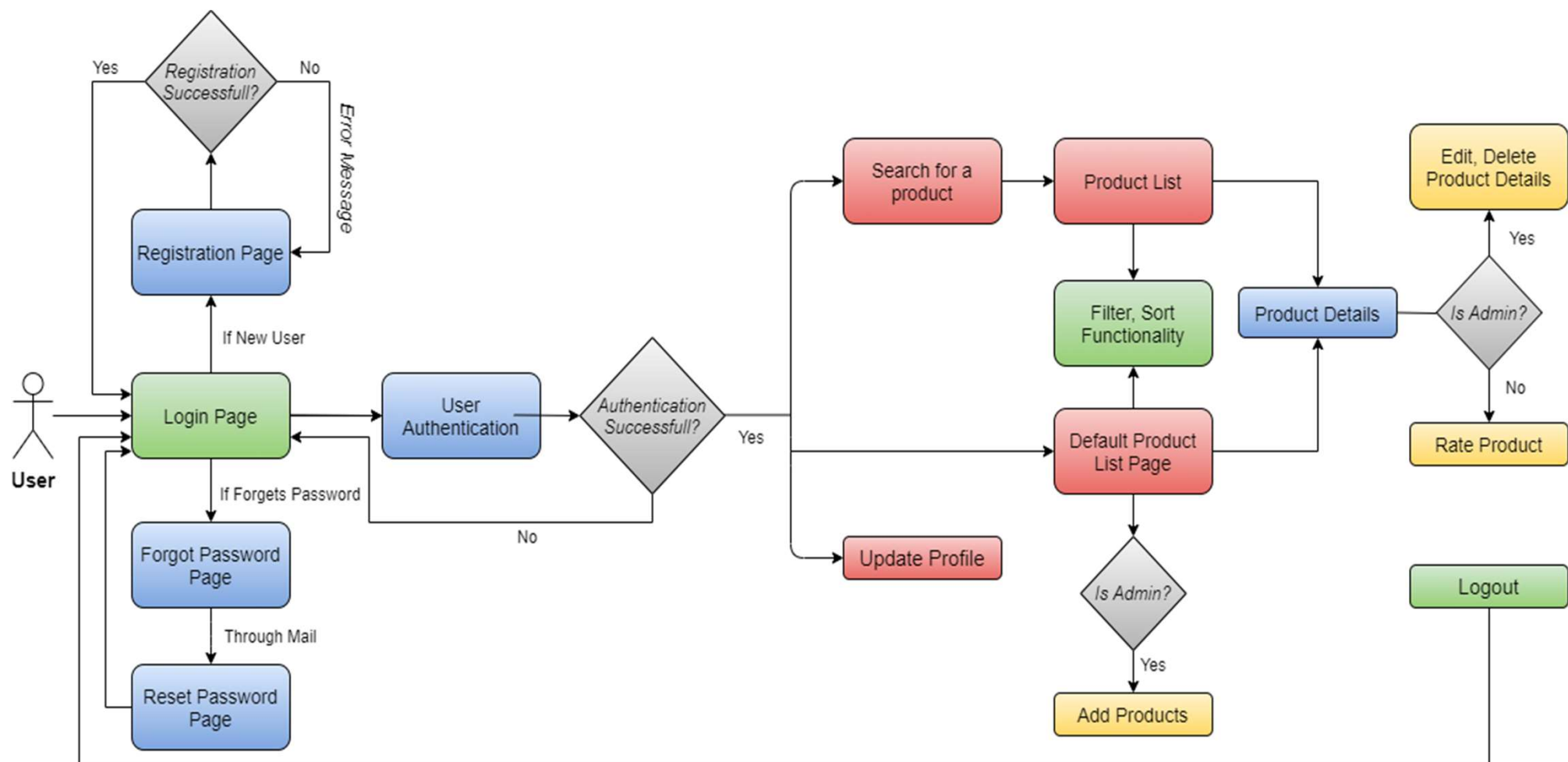
Goal - Finished Demo PPT, All bugs Fixed, Code frozen, NFRs met, Product search functionality complete

Skill Level Indicator

Understanding Before Training Vs After Training

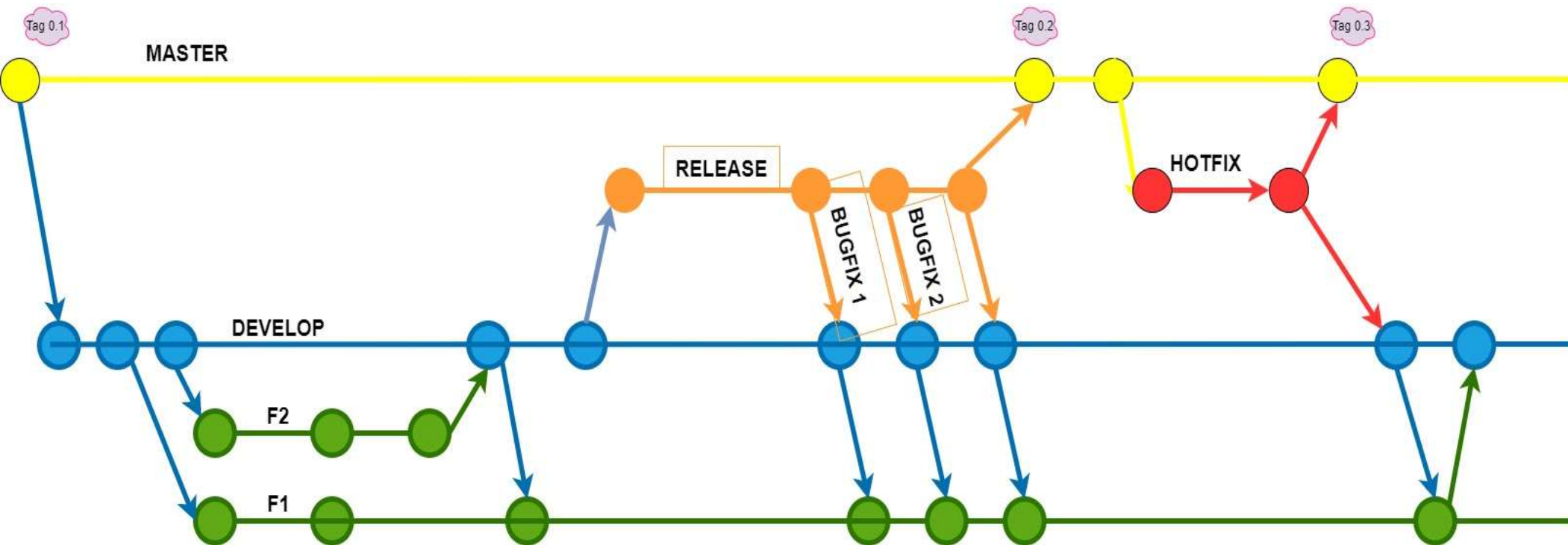


Application Flow

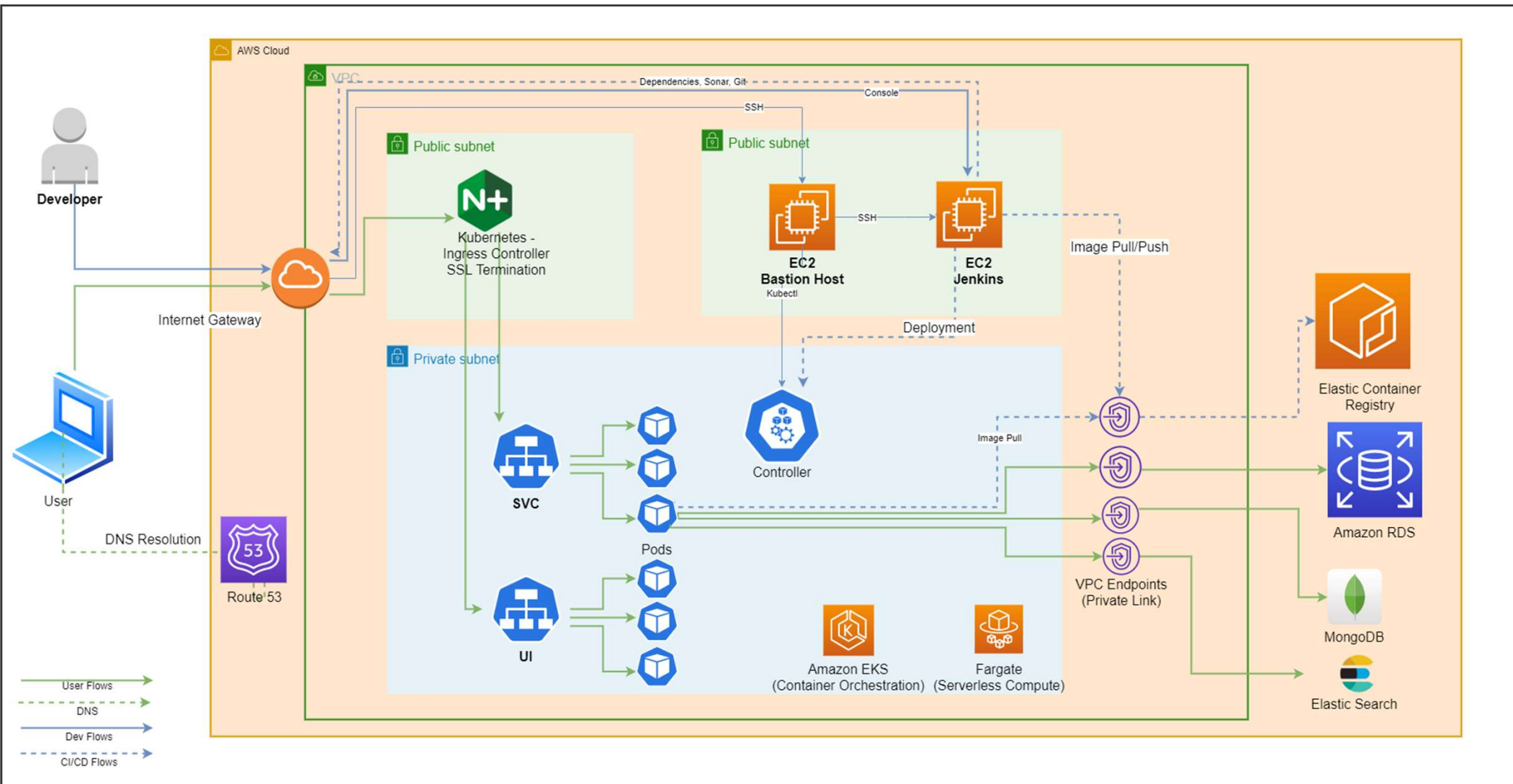


System Architectures

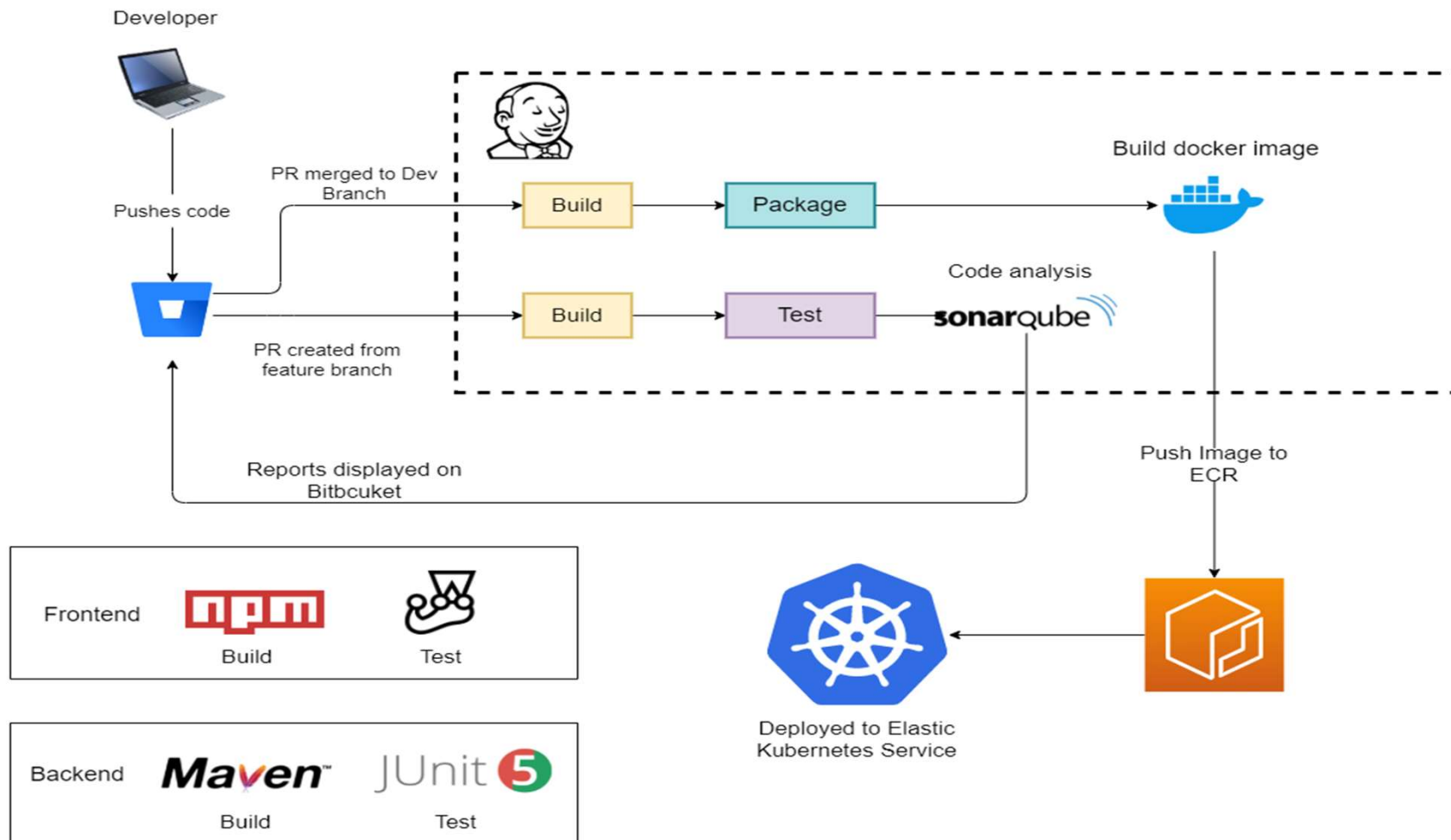
Branching Strategy



AWS Architecture



Deployment Flow



Product Demo

<https://eldorado-shop.net/>

Jenkins Pipeline



Disable Project



Recent Changes

Stage View

Average stage times:
(Average full run time: ~1min 42s)

#137

Aug 23 11:42

3 commits

Declarative: Checkout SCM	Declarative: Tool Install	Compile	Test	Create JAR	SonarQube Analysis	Quality Gate	Building Our Image	Push Image	Deploy Image
3s	71ms	6s	16s	14s	27s	1s	2s	6s	2s
1s	60ms	6s	14s	13s	27s	648ms (paused for 1s)	2s	6s	2s

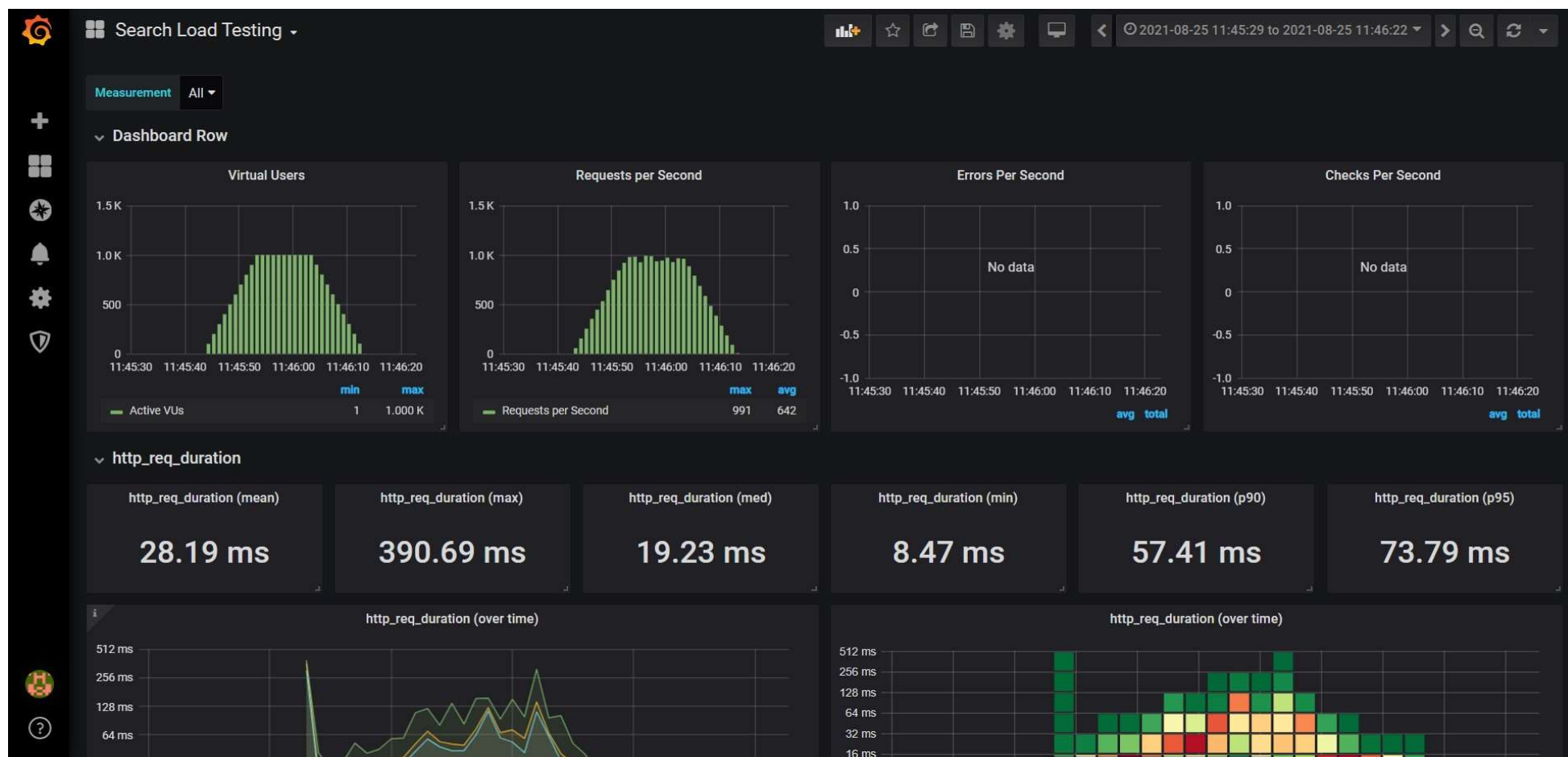
Performance NFRs

Load Test Results:

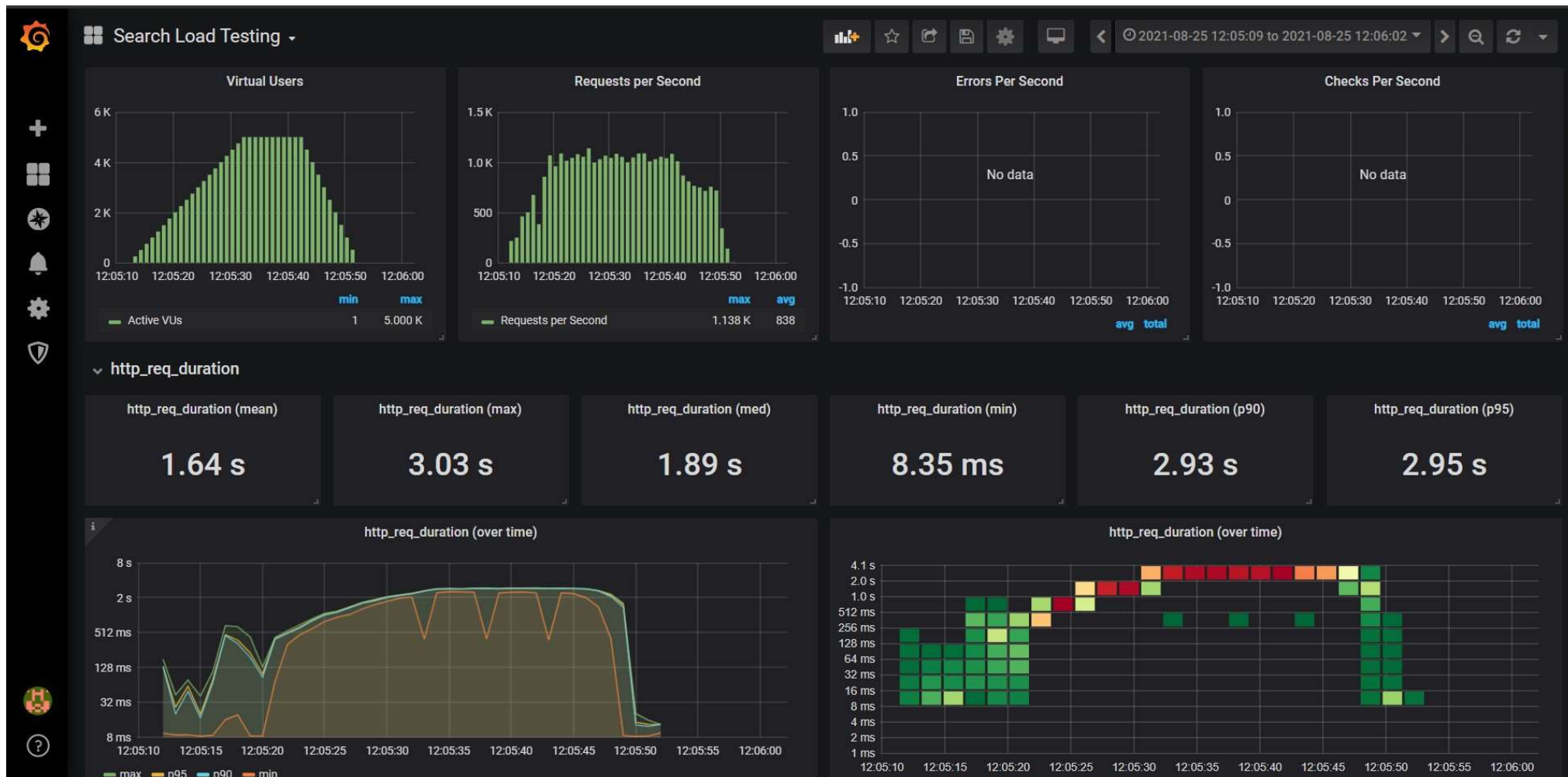
	Virtual users	Throughput	Avg. Response Time	95 th Percentile
Search	1000	991	28.19 ms	73.79 ms
	5000	1138	1.64 s	2.95 s
Suggestion	600	589	36.81 ms	98.04 ms
	2500	595	1.57 s	2.95 s
Product Details	2500	2490	32.63 ms	121.03 ms
	10000	4421	1.44 s	2.58 s



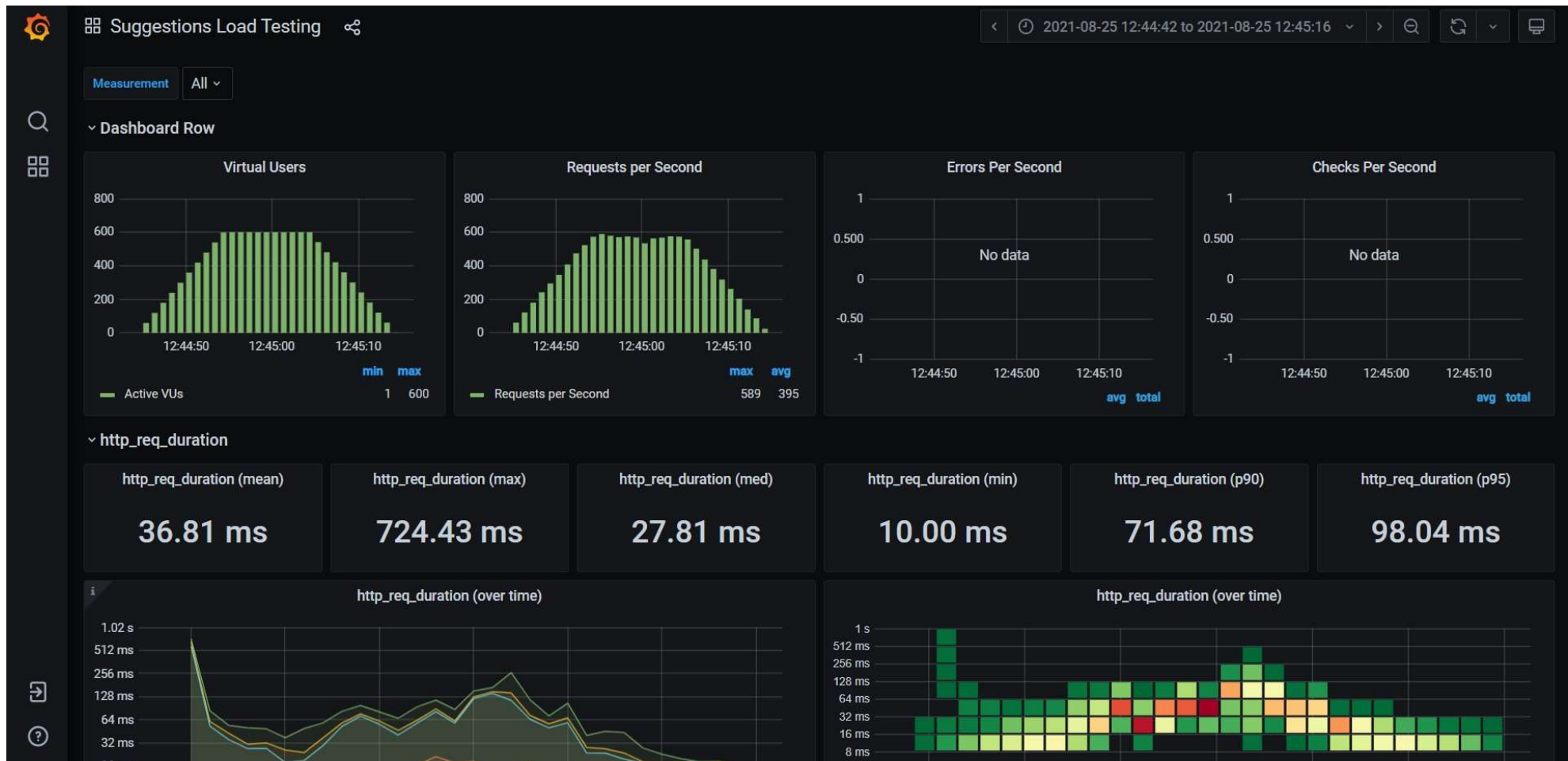
K6 Load testing - Search API (1000 VU 35s)



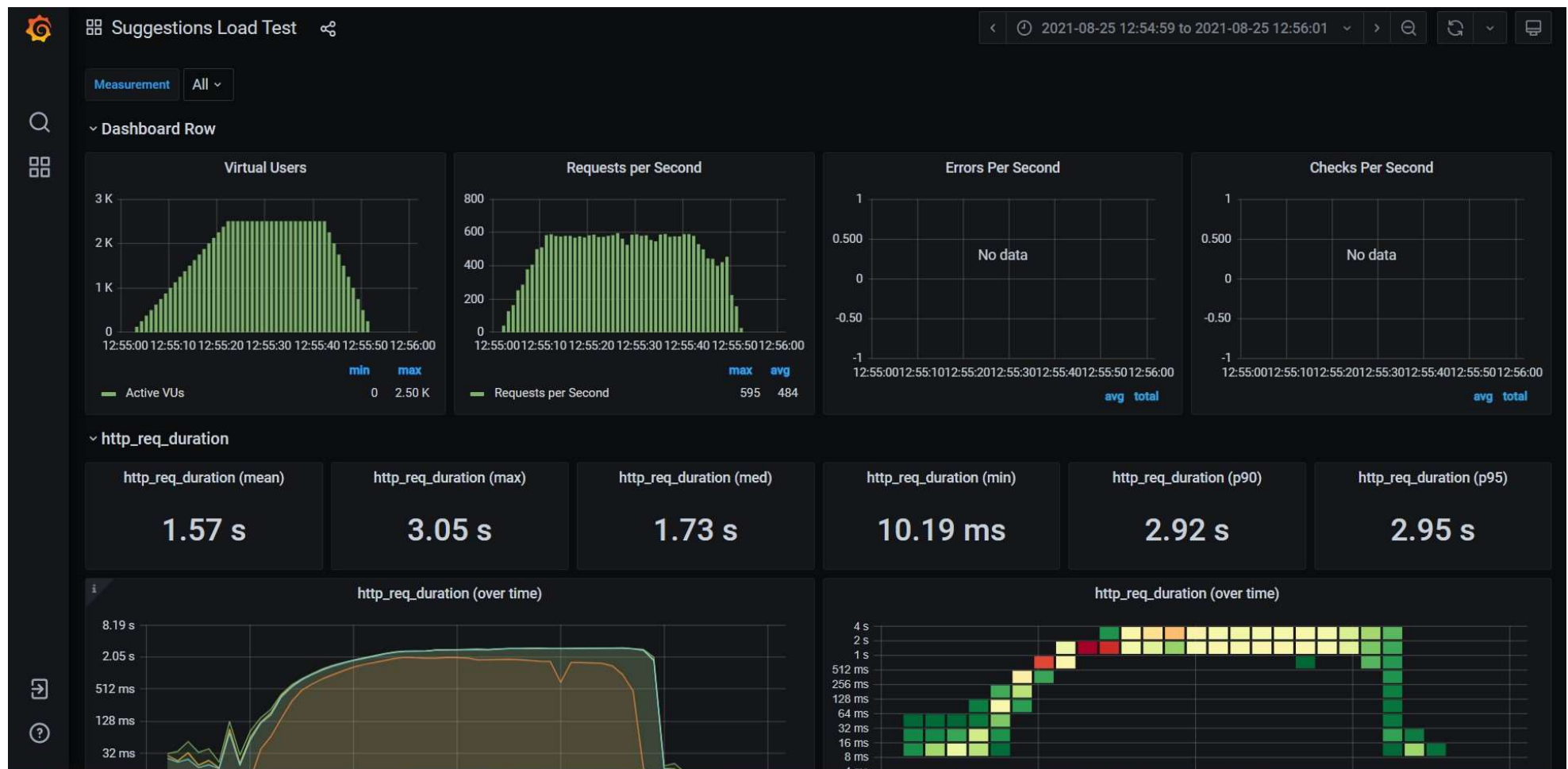
K6 Load testing - Search API (5000 VU for 45s)



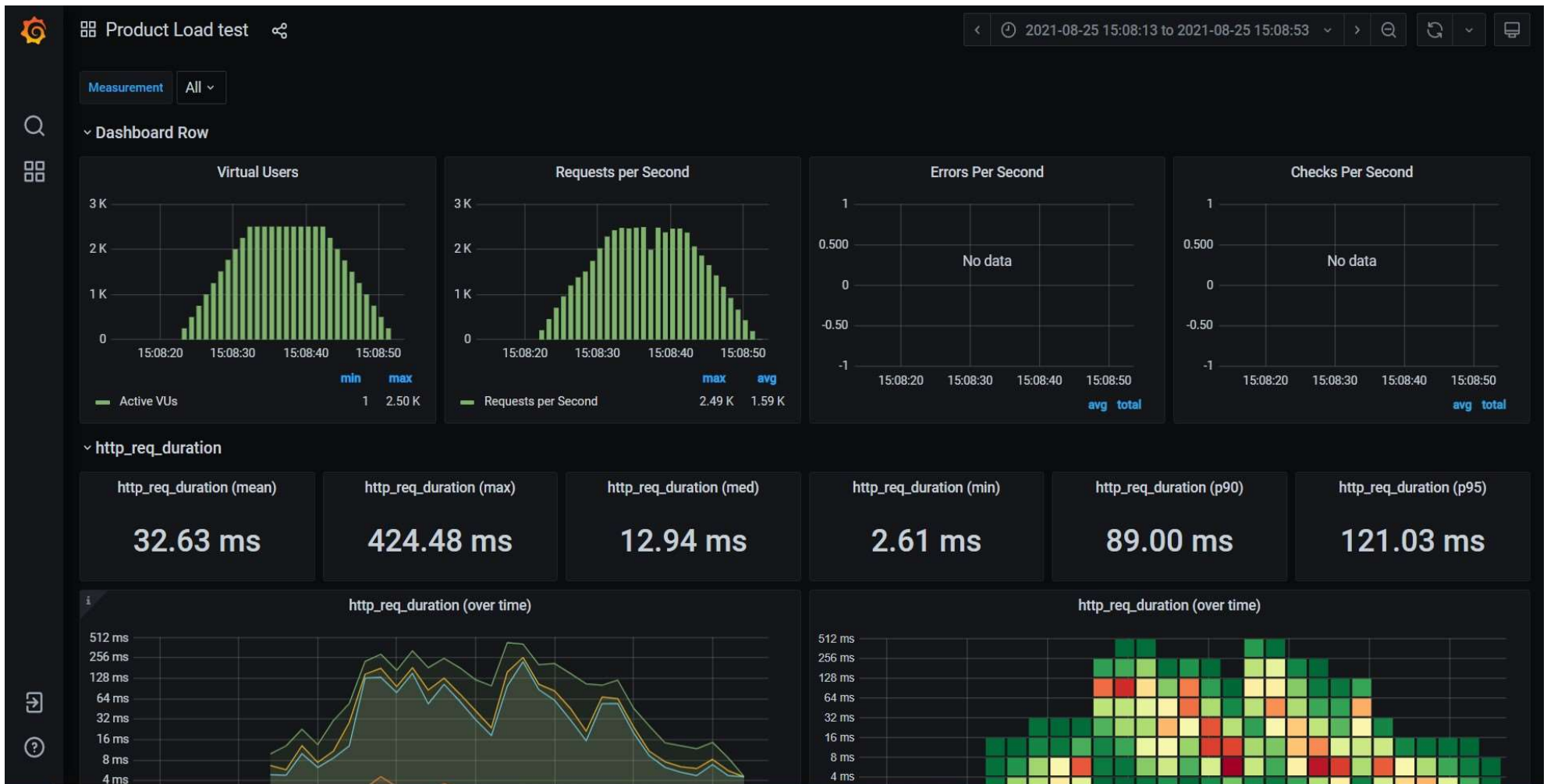
K6 Load testing – Suggestions API (600 VU for 30s)



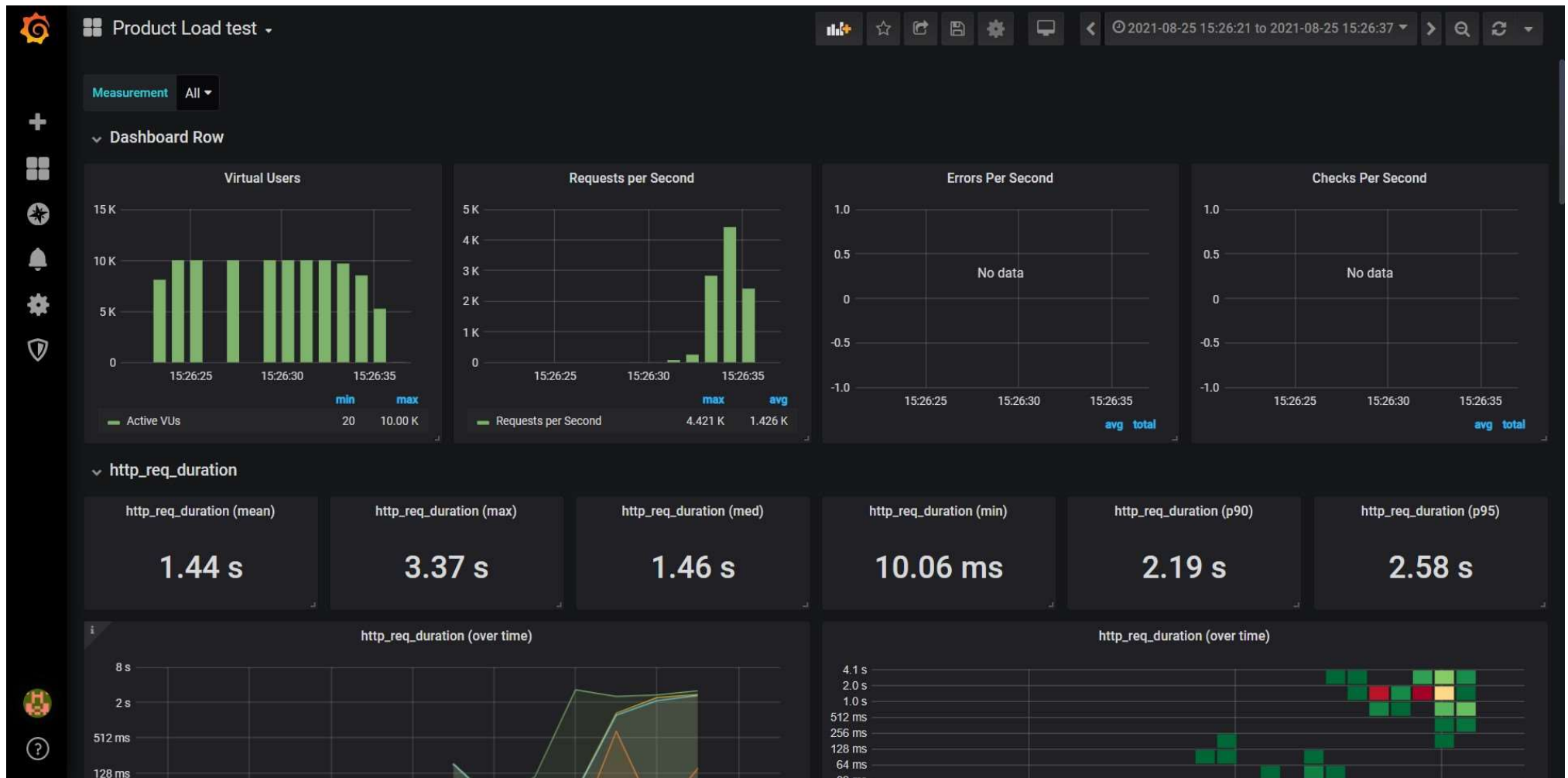
K6 Load testing – Suggestions API (2500 VU for 45s)



K6 Load testing(Product)Details API (2500 VU for 30s)



K6 Load testing(Product)Details API (10000 VU for 10s)



Lighthouse report (Page-render 1.6s)

The image shows a web browser window with the 'El Dorado' website on the left and a Lighthouse performance report on the right. The website has a teal header with a shopping bag icon and the text 'El Dorado'. Below the header is a 'Sign In' section with fields for 'Email' and 'Password', a 'LOGIN' button, and links for 'Forgot password?' and 'New to El Dorado? Sign Up'. The footer includes social media icons and a copyright notice '© 2021 Copyright: eldorado.com'.

The Lighthouse report is for the URL 'https://eldorado-shop.net/'. It shows five categories: Performance (89), Accessibility (90), Best Practices (93), SEO (100), and Progressive Web App (PWA). A legend indicates that scores of 90-100 are green, 50-89 are yellow, and 0-49 are red. The 'Performance' section is expanded, showing a score of 89 and a list of metrics:

Metrics	
First Contentful Paint	1.3 s
Speed Index	1.3 s
Largest Contentful Paint	1.3 s
Time to Interactive	1.6 s
Total Blocking Time	80 ms
Cumulative Layout Shift	0

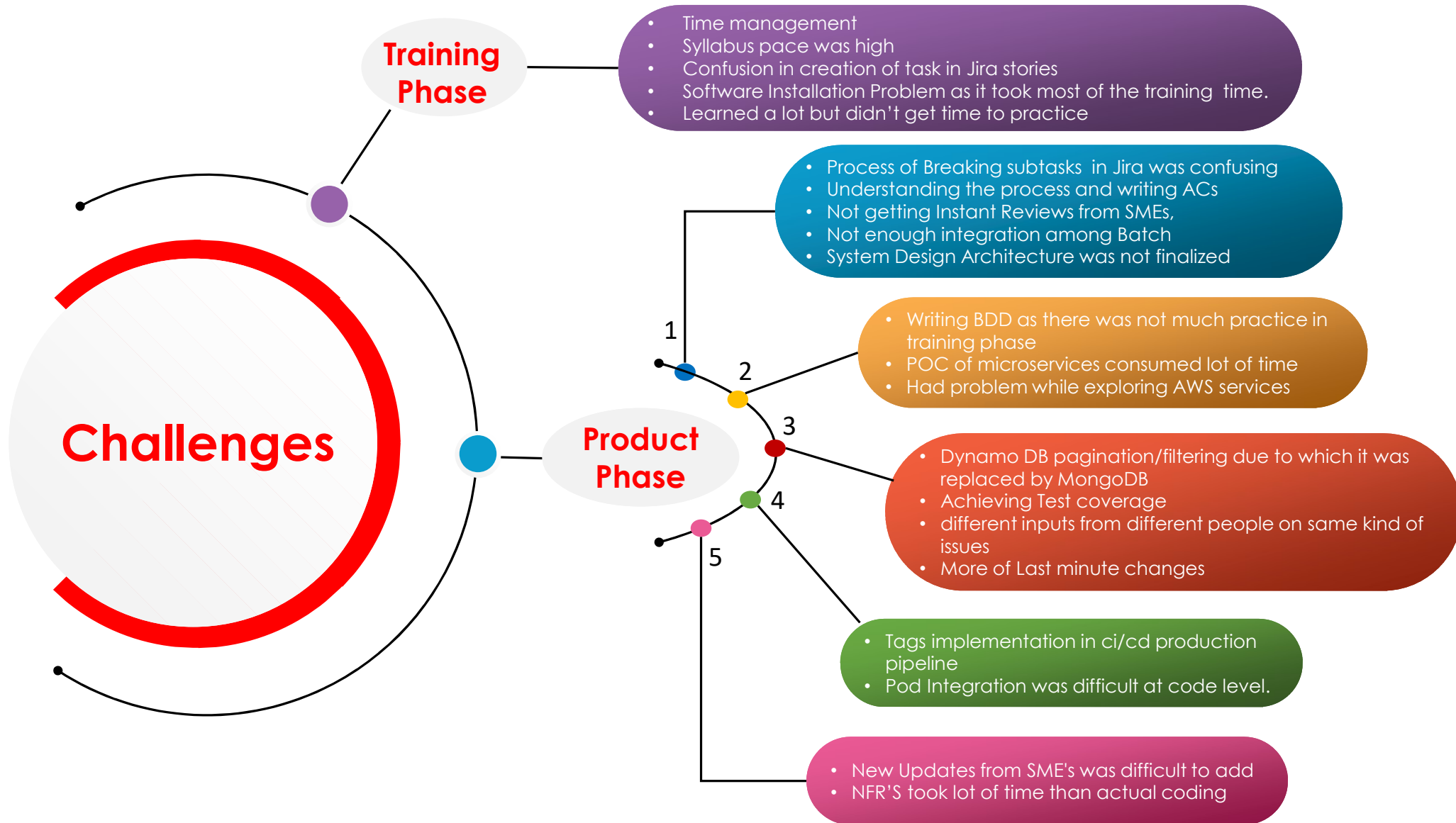
Values are estimated and may vary. The [performance score is calculated](#) directly from these metrics. [See calculator.](#)

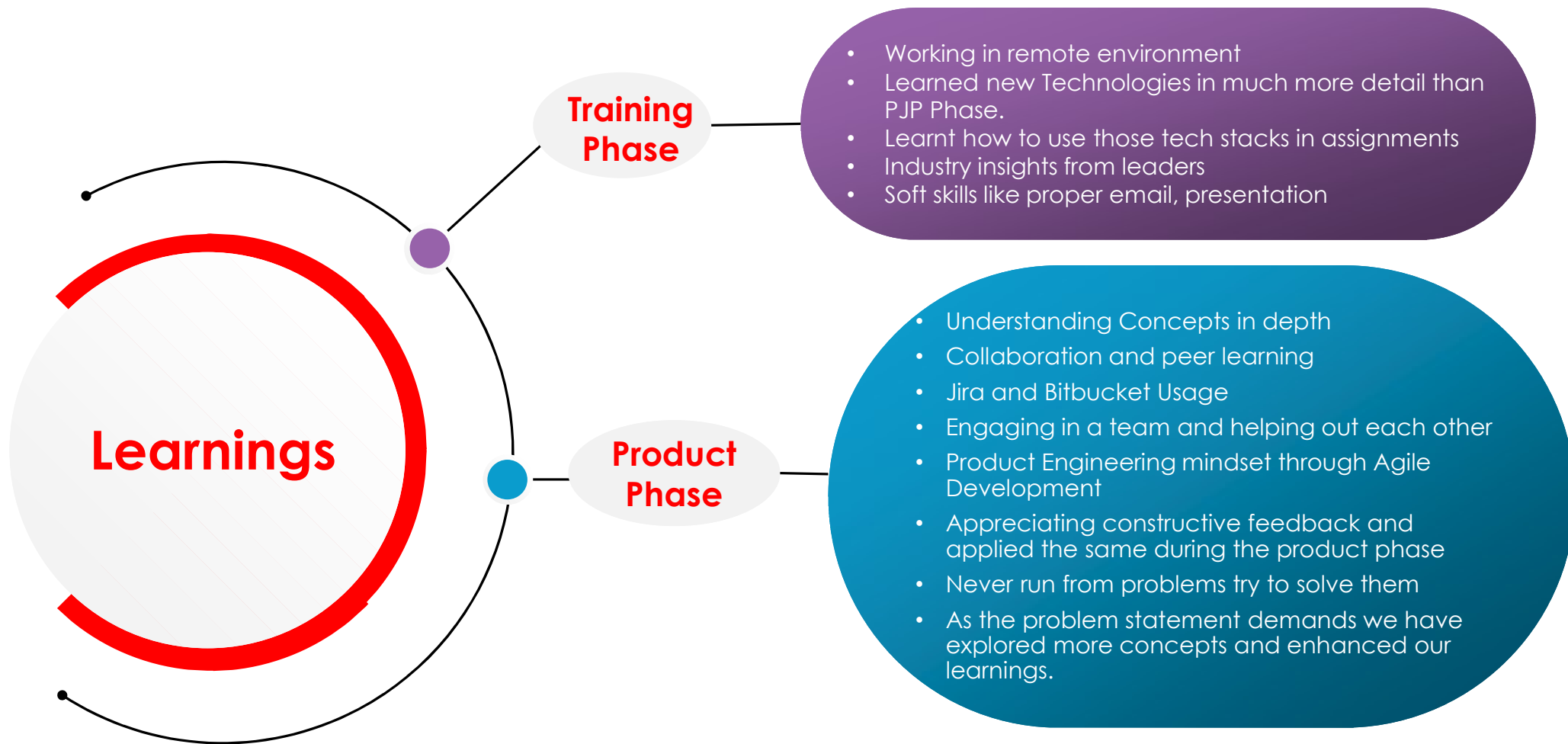
[View Original Trace](#)

References

- Eldorado Website : <https://eldorado-shop.net/>
- Bitbucket Repositories:
 - ✓ UI – <https://tools.publicis.sapient.com/bitbucket/projects/PSMS/repos/productphase-ui/browse>
 - ✓ Auth Service – <https://tools.publicis.sapient.com/bitbucket/projects/PSMS/repos/productphase-authservice/browse>
 - ✓ User Service – <https://tools.publicis.sapient.com/bitbucket/projects/PSMS/repos/productphase-userservice/browse>
 - ✓ Product Service – <https://tools.publicis.sapient.com/bitbucket/projects/PSMS/repos/productphase-productservice/browse>
 - ✓ Search Service – <https://tools.publicis.sapient.com/bitbucket/projects/PSMS/repos/productphase-searchservice/browse>
- Confluence Page – <https://tools.publicis.sapient.com/confluence/display/PSMS>
- Grafana Dashboard – <http://a54ef20ba026d4f4da98511fb540aa29-834541859.us-east-1.elb.amazonaws.com/>
(Username: admin , Password: SuperSecretPassw@rd99)

Conclusion





Achievements



- Learned to code for both frontend and backend as well as test for both
- Confidence and Morale increased, Self planning, Made new friends, Financial Freedom
- Learned how to show our daily work with Jira
- Learnt to work as a team
- Confidence while presenting our work and asking doubts to seniors
- First hands-on experience in building an end-to-end product and meeting the required NFRs
- Product Engineering mindset
- how to articulate the words in Virtual Connect
- Expression of our ideas clearly according to the situation
- Adapted to handle pressure and meet deadlines

Learned to code for both frontend and backend as well as test for both

Confidence and Morale increased, Self planning, Made new friends, Financial Freedom

Learned how to show our daily work with Jira

Learnt to work as a team

Confidence while presenting our work and asking doubts to seniors

First hands-on experience in building an end-to-end product and meeting the required NFRs

Product Engineering mindset

how to articulate the words in Virtual Connect

Expression of our ideas clearly according to the situation

Adapted to handle pressure and meet deadlines

Testimonials from Trainees



Dheeraj

They gave us confidence. This virtual training was well organized throughout the entire journey and learning checkpoints. SMEs and all people were very friendly and helped us a lot. Whatever we learned in terms of tech stack as well as at the communication level, we will make sure that we will carry them forward and keep improving ourselves.



Malladi Venu Gopal

There were quite some ups and downs but being able to tackle them was the best part, which I have learnt during this training. Got exposure to real time entities and to an extent how real time projects are handled. I'd like to thank everyone who helped me throughout this phase and looking forward to a greater experience in the coming days.



Mohammad Faizan

The journey so far has been great .It was full of surprises ,challenges and great learnings. I got to know really awesome concepts and technology in the last three months. Trainers and SMEs were great and guided us in different aspects of this journey to the best of their knowledge and experience. If I compare the version of myself to the version before training the difference is huge in terms of experience, knowledge and learnings



Sharad Rai

It was once told to me to be a Software Engineer you just need to have a good internet connection with Stack Overflow and GitHub but the day when I joined this place my myth was broken. Here each day brought different circumstances and I had the opportunity to make decisions on my own and learn from both my successes and failures. This was a worthwhile experience and I feel that it has prepared me well for my professional career. I thank everyone who was involved in the preparation and execution of this phase.

Testimonials from SMEs



Mukut Bhattacharjee

This has been a great journey. I had got to relive my initial days of my career and it felt great to impart whatever I could do to the fellow trainees. I would want to thank the entire L&TD team, the trainers and my fellow colleagues to make this training program possible.



Utsav Tulsyan

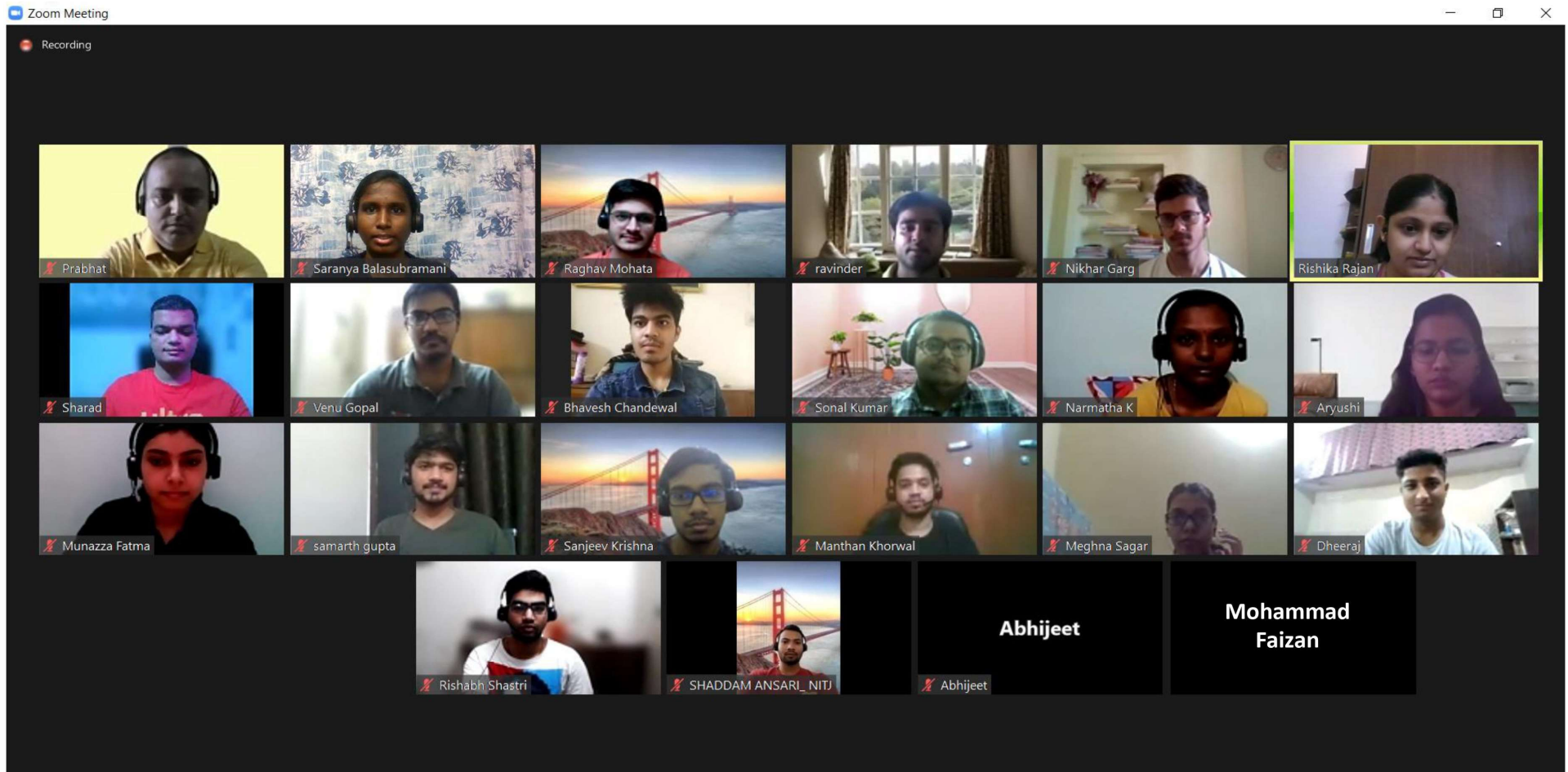
Having gone through training program myself, It was very exciting to be part of the trainer group. Apart from contributing to the program, I also got to know a lot about what goes into the program from a very different perspective. It was a great learning experience for me.



Pavan Kulkarni

It was very exciting to be part of the trainer team. Apart from contributing to the program, Its learning experience to me as well with freshers, I also got to know a lot about what goes into the program from a very different perspective.

Signing off!!



A Bigger Journey Begins!!

thank you