

Software Engineering Processes and Tools

Project Milestone 3

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Overview

Introduction - Background

1. Individual contribution and retrospective
2. Sprint retros
3. Demo, CI/CD and Architecture discussion

Ted's Contribution

- Implementing state management for frontend.
- Implementing frontend integration code with backend.
- Deploying frontend to AWS.
- Refactoring code.

Ted's Retrospective

What have I learnt throughout the course ?

- Learn the value of communication when developing Software.
- Learn the practice of Scrum, ways of working, Sprint ceremonies.
- Set up CI/CD and writing unit tests.
- Frontend Framework: React.

Ted's Retrospective

What I need to work on ?

- Be more disciplined in using Jira.
- Distribute ticket more equally between team members.

Janidu's Contribution

- Implementing the static pages.
- Writing unit tests for those static pages.
- Code review.

Janidu's Retrospective

What have I learnt throughout the course ?

- Better understanding about software development methodologies and project management.
- Better understanding and practice of Scrum, ways of working as a team, Sprint events.
- writing unit tests.
- Frontend Framework: React.

Janidu's Retrospective

What I need to work on ?

- To stick to deadlines.
- Create more branches to implement features rather than working on one branch only.
- Review and Refactor my code before doing PRs in order to avoid CI fails.

Phu's Contribution

- Implementing the transaction microservice.
- Writing testing documentation: unit tests, acceptance test, browser test, ...
- Refactoring codes.
- Code review.

Phu's Retrospective

What have I learnt throughout the course ?

- Learn the practice of Scrum, Agile.
- AWS Services, Deployment setup.
- Setting up CI and conduct unit tests, integration test, acceptance test, ...
- BackEnd Framework: Spring boot.
- FrontEnd Framework: React.
- FrontEnd - BackEnd integration.

Phu's Retrospective

What I need to work on ?

- Be more discipline and communicative with team members.
- Understand CI more consistently

Edward's Contribution

- Migrated the database to RDS
- Setting up docker files for the microservices
- Deployment to AWS (ECR, ECS) via CI/CD pipelines using Github Action
- Documentations on docker, pipelines, and deployment

Edward's Retrospective

What have I learnt throughout the course?

- Agile software development process, scrum meetings, sprints, sprint retros, tickets
- How to develop microservices using the springboot framework
- Utilising package managers such as Maven
- Understanding how to use pipelines (CI/CD) to automate deployment and testing
- Deploying to AWS and how to utilise the different services provided

Edward's Retrospective

What do I need to improve?

- Use time more efficiently and start work earlier to meet deadlines more consistently
- Ask for more help from tutors when struggling instead of ruminating on problems alone and getting stuck for a long time on a single issue

Sprint retro

What worked well?

- Team member communication and availability for urgent meeting
- We have practiced Scrum effectively and complete all the user stories that we planned
- The ability to learn from our mistake from Sprint 0 and improve over time.

Sprint retro

What could be improved?

- Splitting user stories into much smaller tasks.
- Janidu to have less CI fails on his PR's.
- Constantly check for any new Pull Requests and review them.

Sprint retro

Things That Surprised Us?

- CI CD is complicated and tricky to fix
- CORS origin when deploying on AWS
- Microservices structure when deploying on AWS

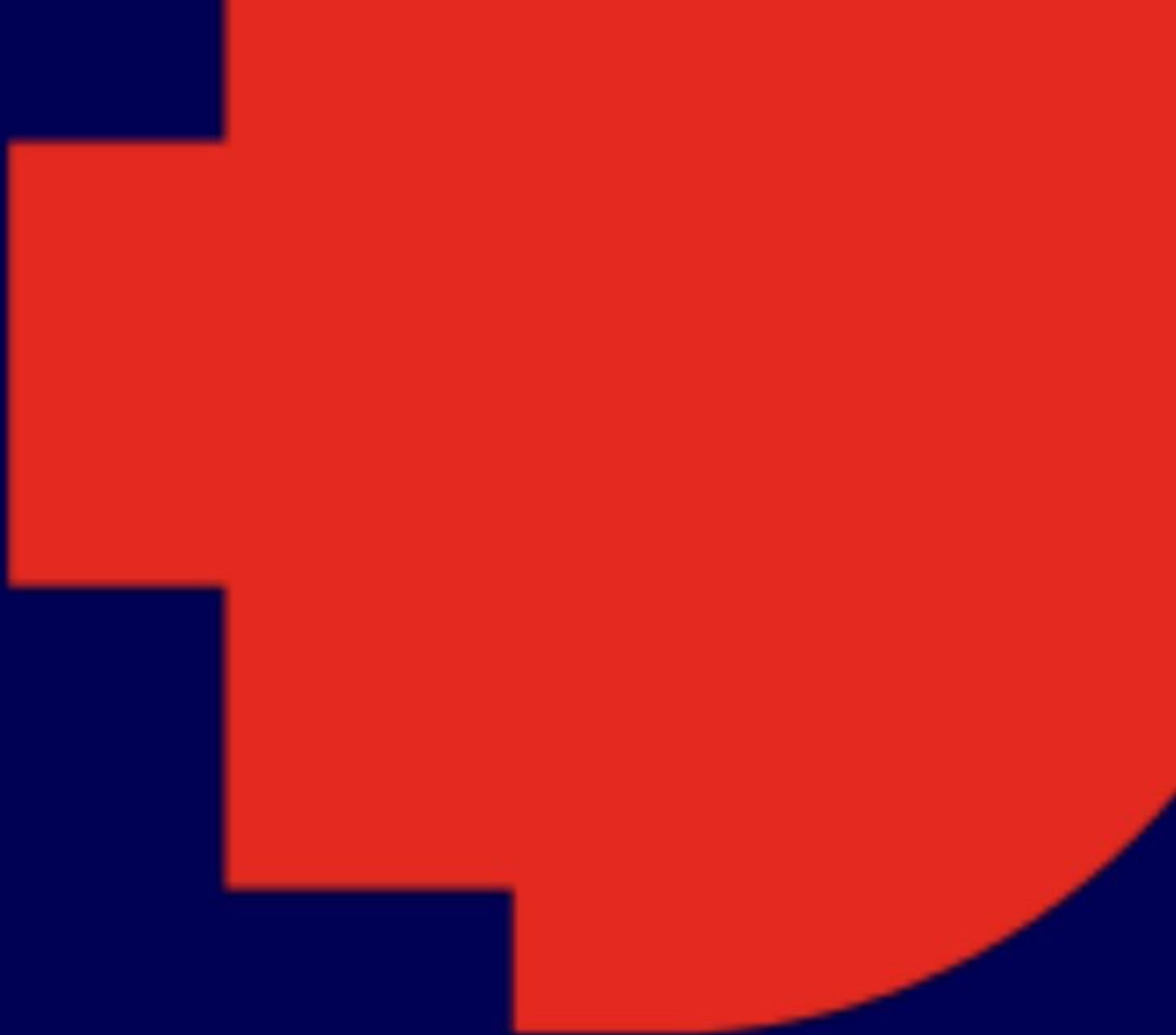


Sprint retro

Lessons Learned

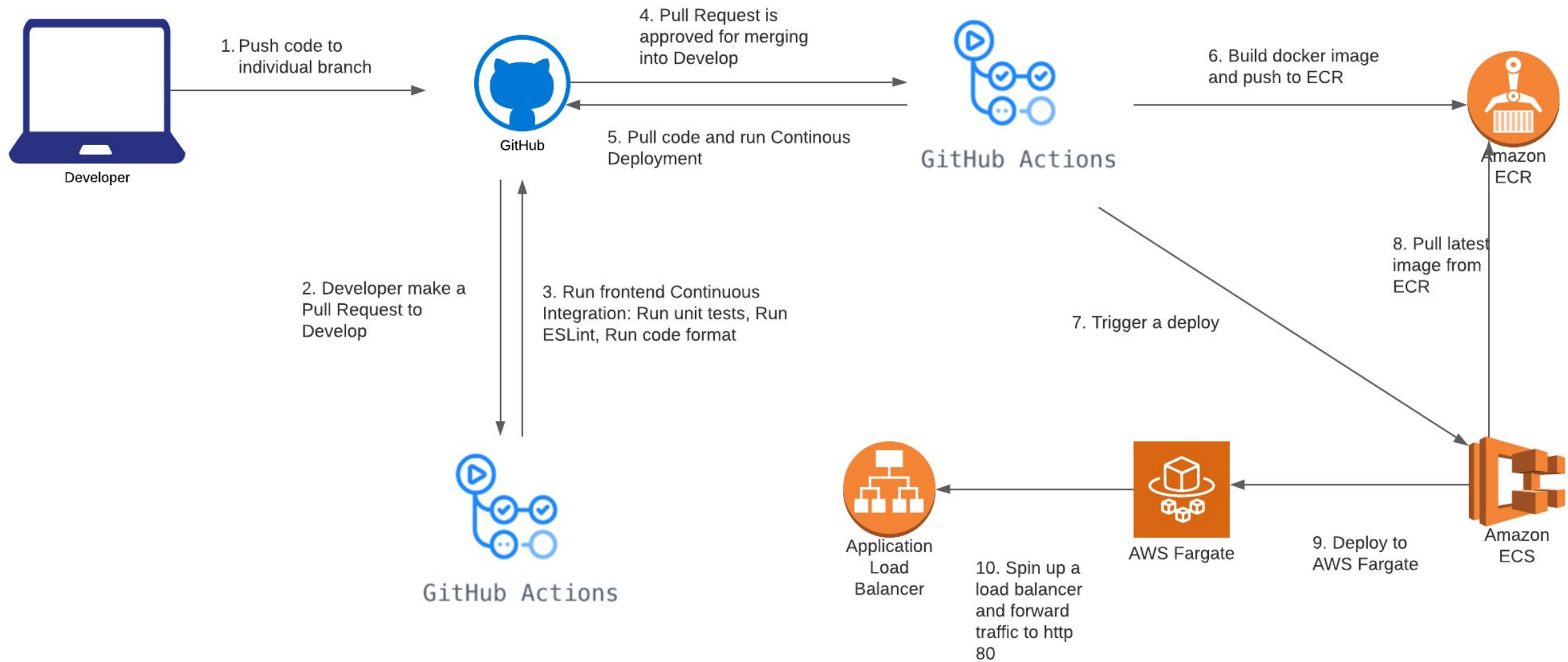
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Conclusion



Demo

CI/CD Frontend



Question and answers
**Thank you for your
attention!**