

2016 Open Source Software, Tutorial and Practice

한국정보과학회 오픈소스소프트웨어 연구회

<http://sigoss.github.io>

프로젝트 운영 및 관리 워크샵: 개발 프랙티스 워크샵

Agenda

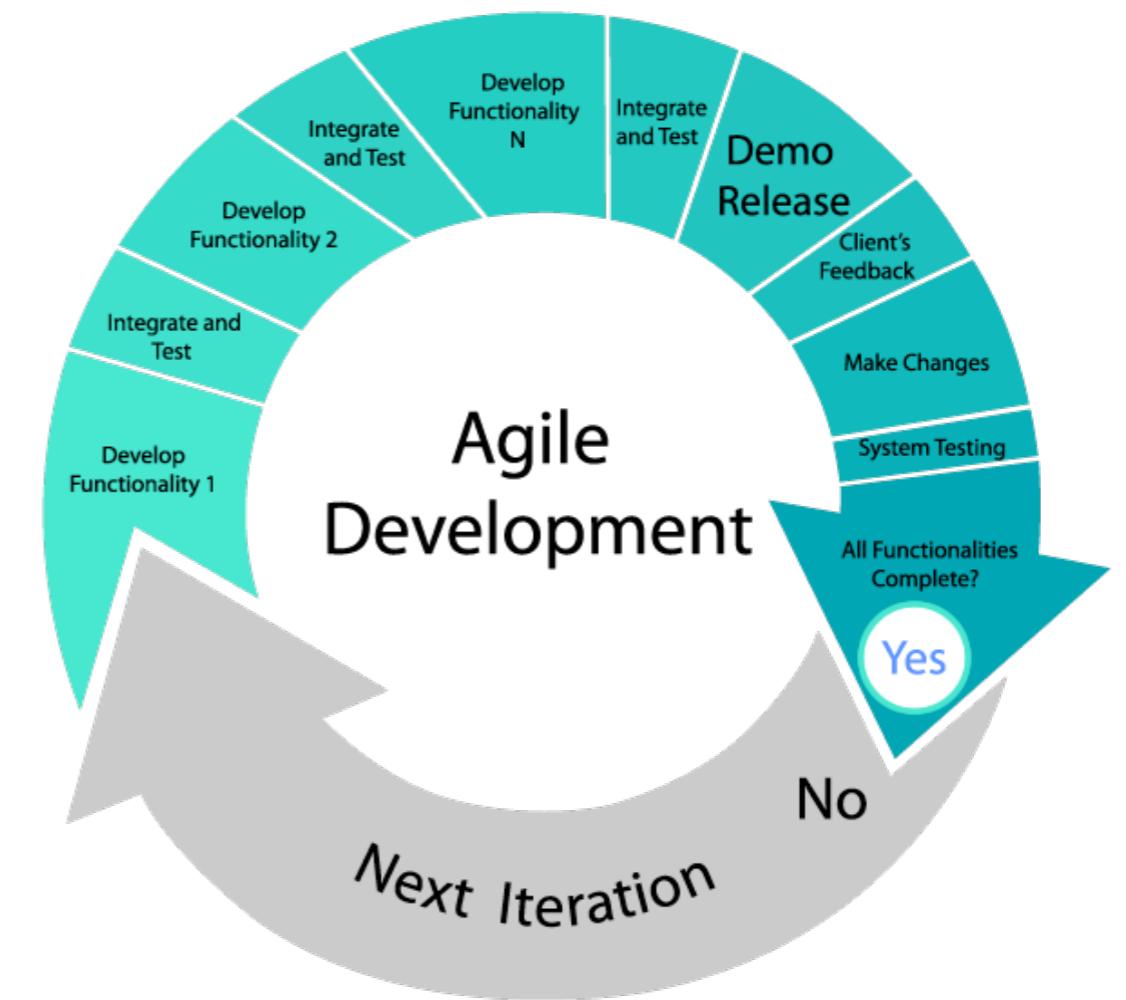
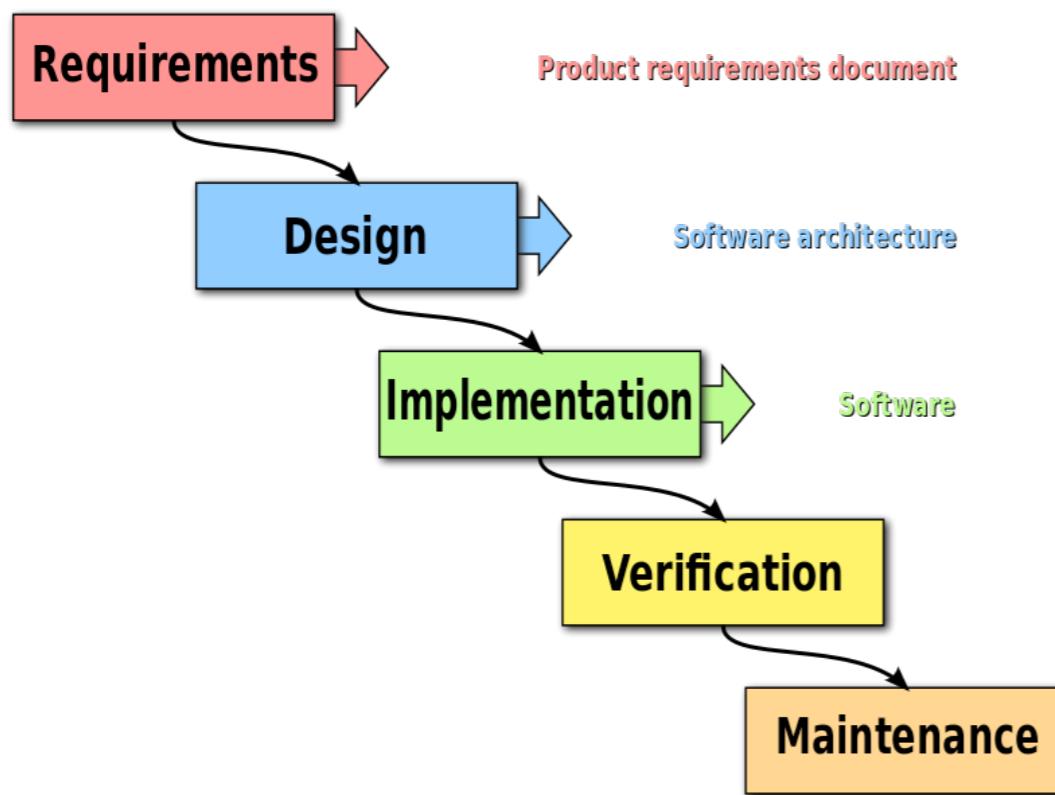
1. Overview
2. 프로젝트 셋업 및 Workflow 의 이해 (Git / Github)
3. PaSS 서비스를 이용한 서버 세팅
4. API 서버 & UI 개발 & 테스트
5. 빌드 및 배포 (Jenkins)
6. Issue Ticket, PR, Code Review & PR 정책

1. Overview

1. Agile
2. Open Source Platform
3. Git & Workflow
4. DevOps (Jenkins / Node)

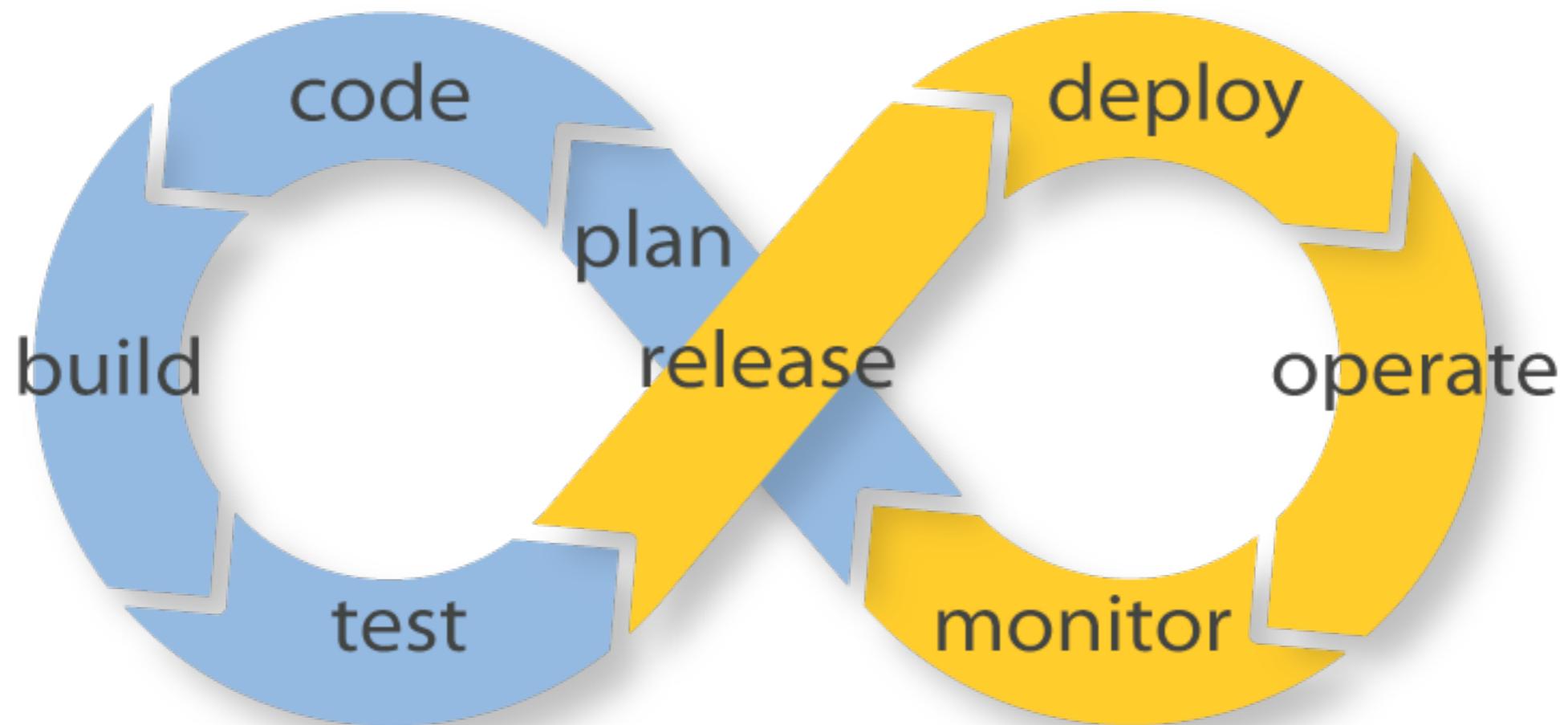
1. Overview

#Waterfall vs. Agile



1. Overview

#DevOps



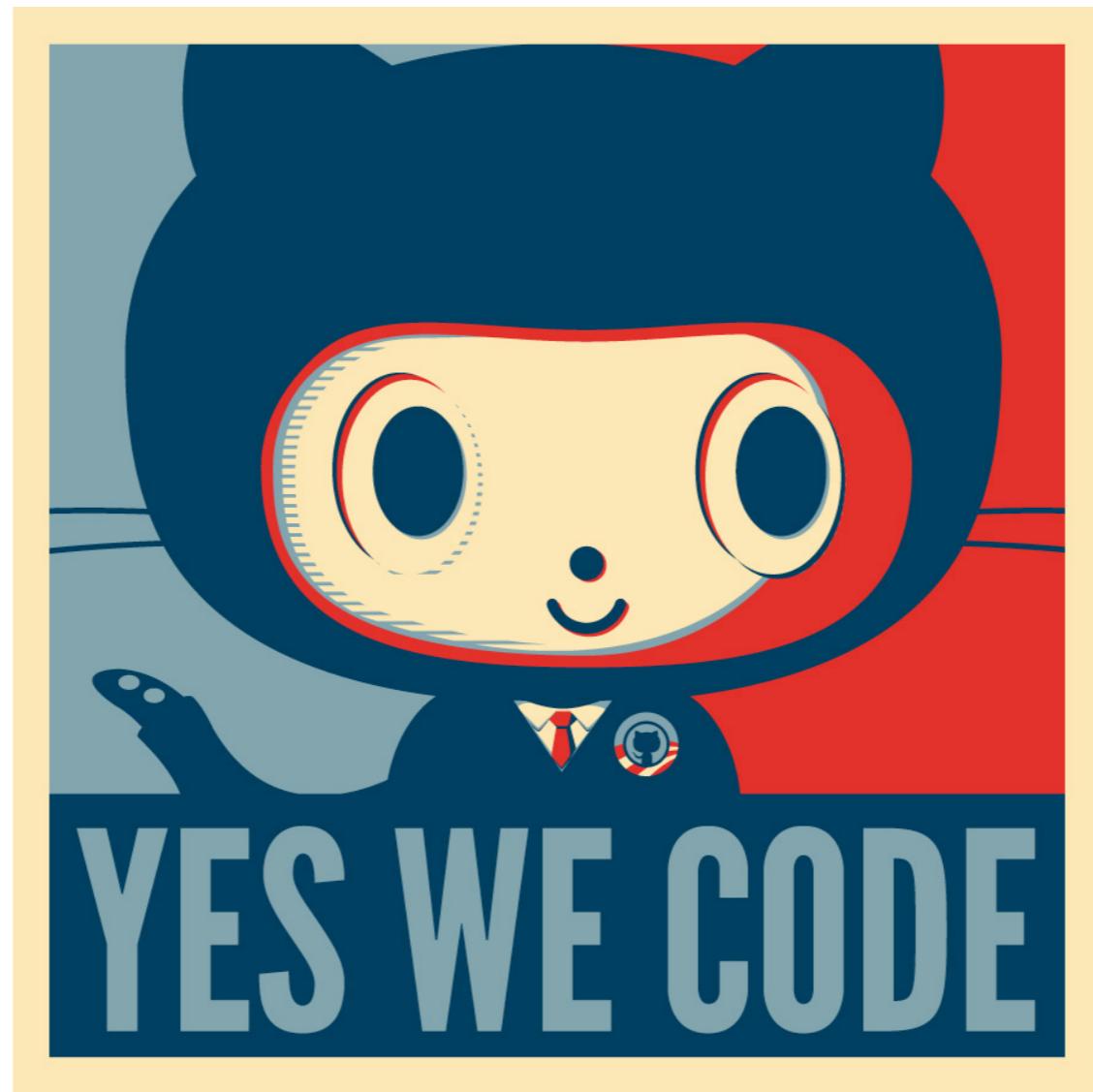
1. Overview

#Keyword

Software Engineering
Programming Language
Library, Framework
Software Design Pattern

1. Overview

#Open Source



1. Overview

#Cloud

Parse

The Cloud Application Platform



DigitalOcean

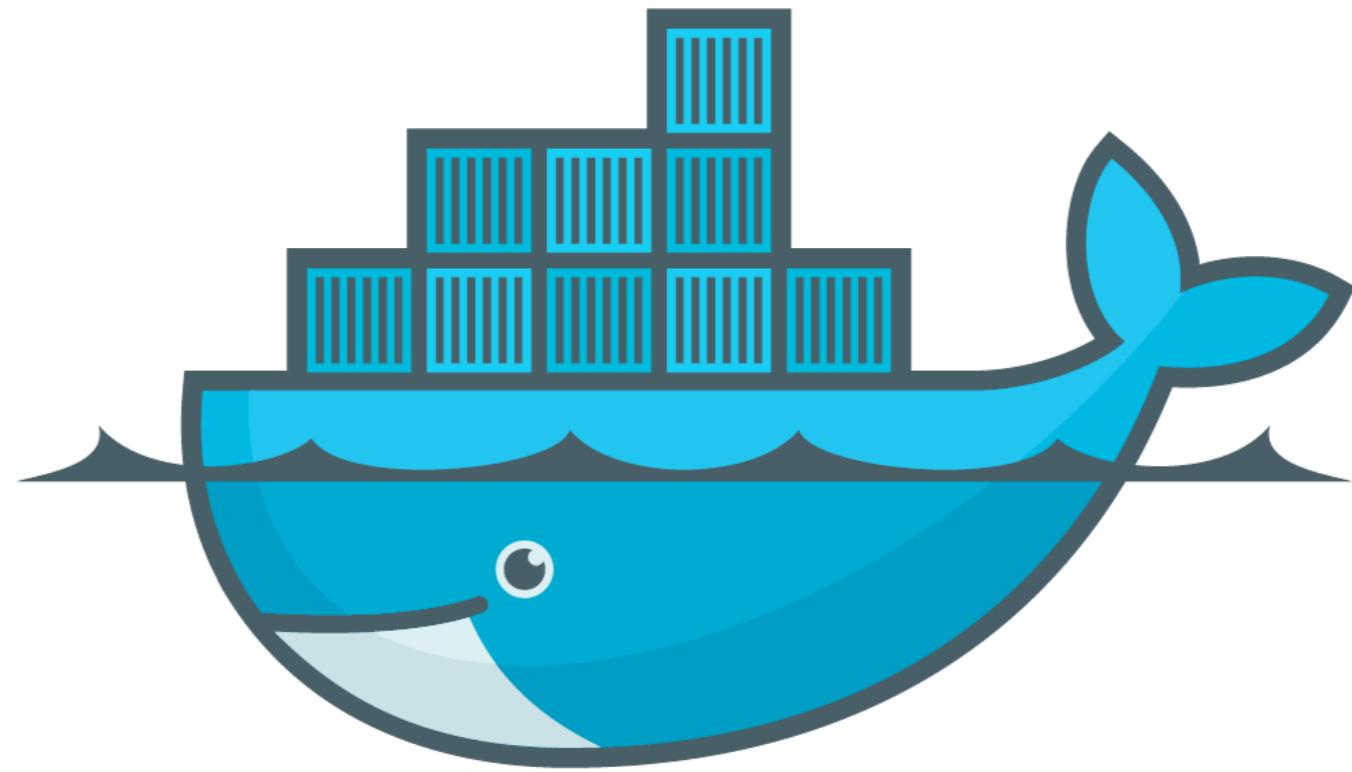


Microsoft Azure



1. Overview

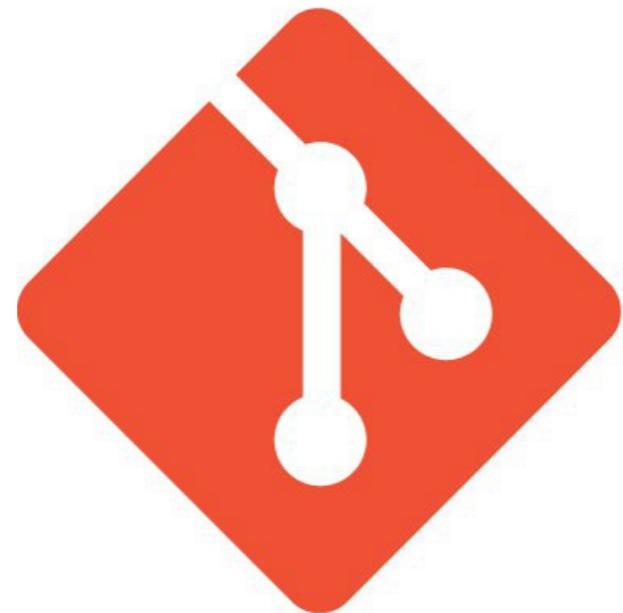
#Virtualization vs. Container



docker

1. Overview

#Git



git

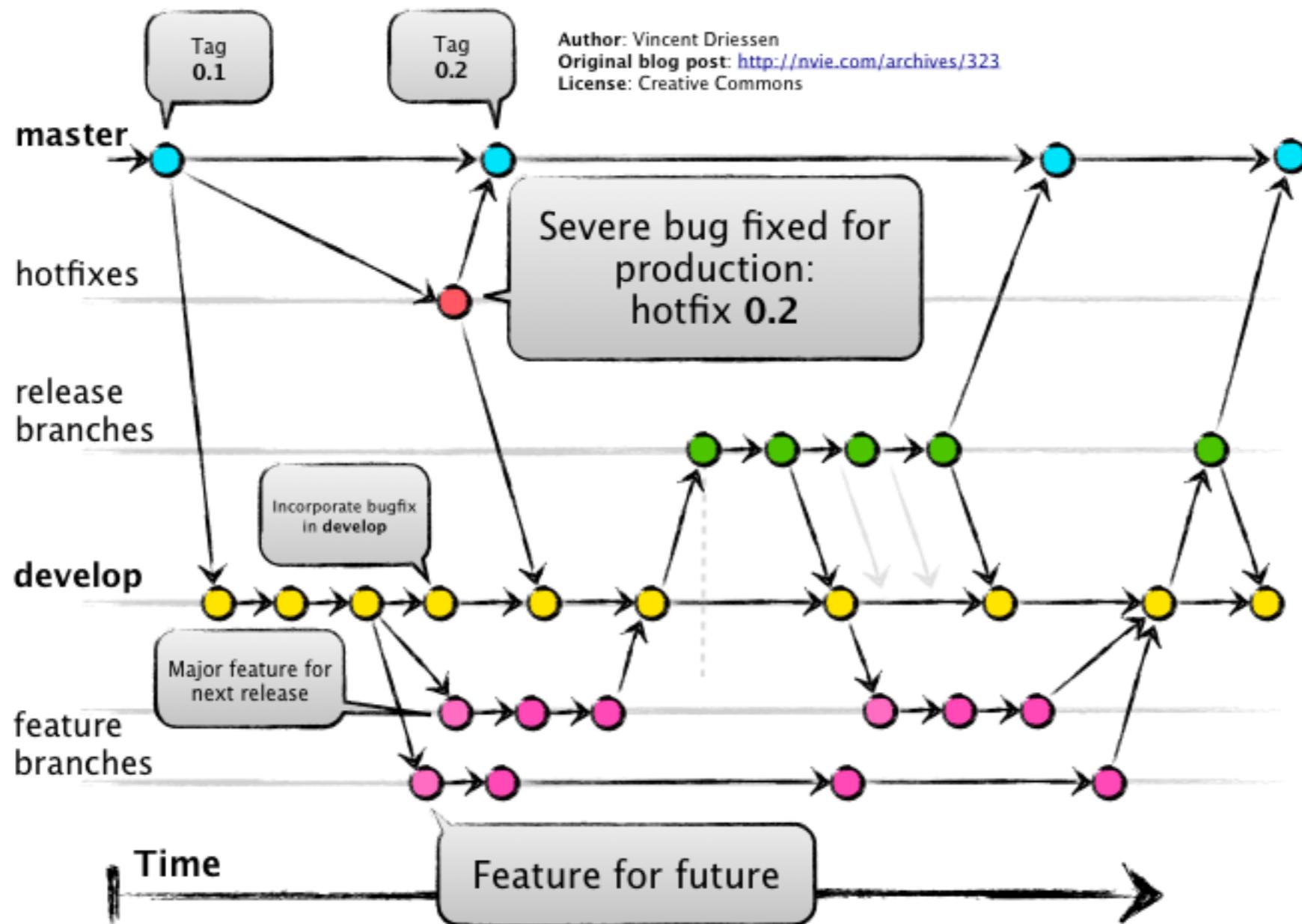


Atlassian



1. Overview

#Git Workflow



1. Overview

#CI:Continuous Integration



Jenkins

1. Overview

#Javascript & Node & ECMA 2015



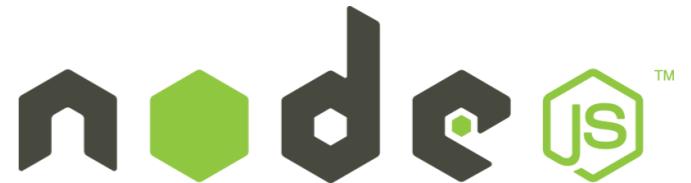
1. Overview

#Example Service

February 2016							
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
		1	2	3	4	5	
31		11a Acell 커뮤니티 데이 2p Acell 커뮤니티 데이 2:30p 과제 리뷰 @Nir 4p 대만 컨퍼런스콜 @C	11a 피카 Y @Susie 12p 브랜드카드 디테일 2p 사업 미팅 @벤 3p 컨퍼런스콜 @ Susie	10a 미팅 @벤 11a 면접 @ann 2p G 셀 개발자 미팅 @e 3p 디바이스 식별자 정체 5p UFO 인터뷰 @ann	10a 사업 미팅 @벤 11a 컨퍼런스콜 @ Susie 11:30a 브랜드카드 스터디 12p A/B 셀 정기회의 (정기회의) 2p BM실 예이전시 미팅 4p 미팅 @벤 5p 씨랩 인터뷰 @엔	10a 조이 면접 @Paul 10:30a 조이 면접 @Pa 12p A/B 셀 정기회의 (정기회의) 2p BM실 예이전시 미팅 4p 미팅 @벤 5p 씨랩 인터뷰 @엔	
	7	8	9	10	11	12	
					10a C-lab 기획자 인터뷰 11a 컨퍼런스콜 @ Susie 3p 사업 미팅 @벤	13	
14	15	16	17	18	19	20	
	11a 서버장비구매 & IS 11a 서버장비구매 & IS 1p A셀 커뮤니티데이 @	11a 피카 Y @ Susie 2p 사업 미팅 @벤	4p 작가 인터뷰 @엔	2p 사업 미팅 @벤			
21	22	23	24	25	26	27	
		11a 피카 Y @ Susie 2p 사업 미팅 @벤					
28	29	1	2	3	4	5	
		11a 피카 Y @ Susie					
6	7	8	9	10	11	12	



JavaScript



<https://github.com/ibare/OpensourceDevTutorial>

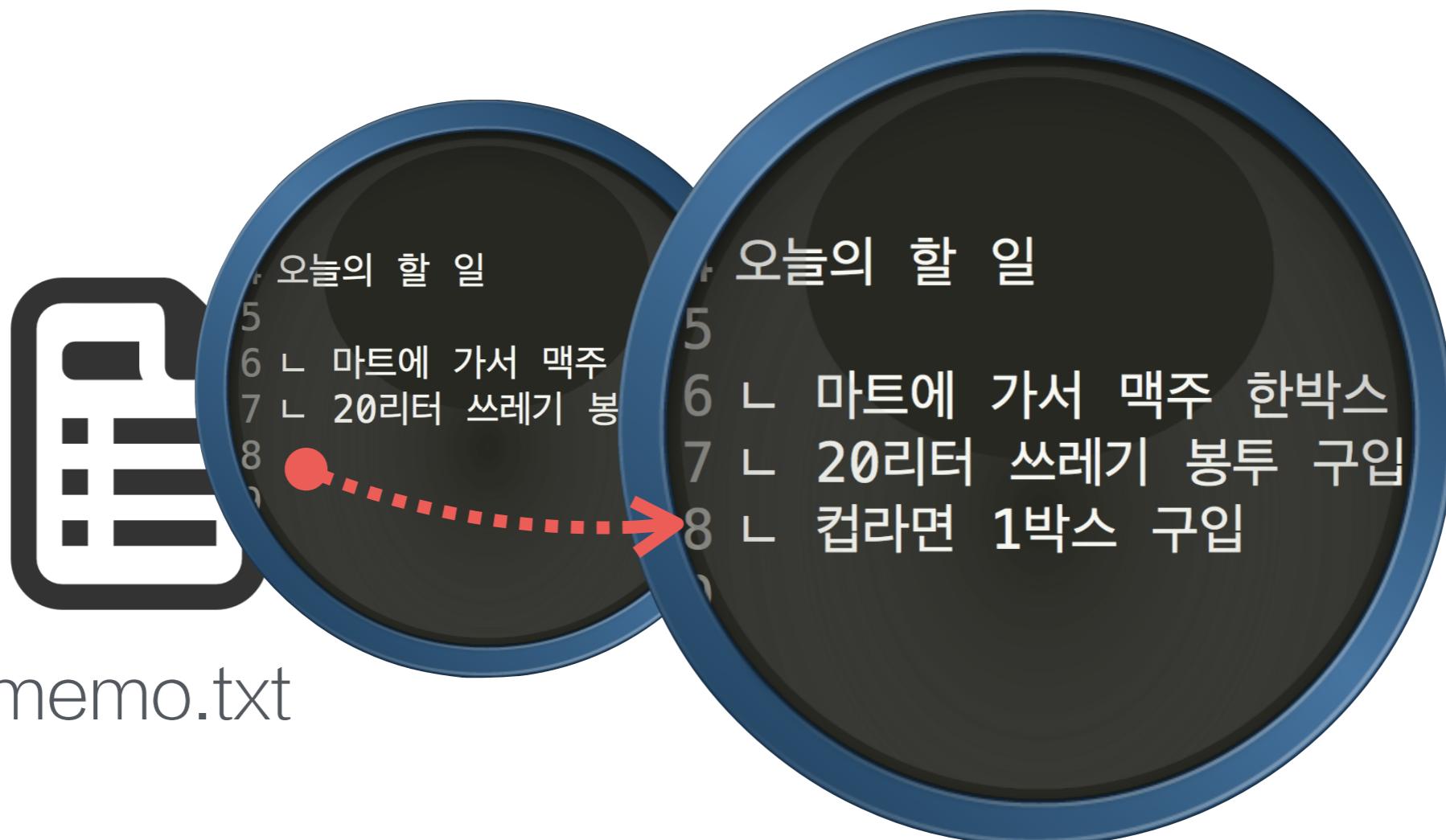
2. 프로젝트 셋업 및 Workflow 의 이해

1. Git

2. Tutorial

2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Change History



memo.txt

“컵라면 1박스 구입”이라는 수정이 발생

2. 프로젝트 셋업 및 Workflow의 이해

#Git - Commit

commit 3



2014년 7월 10일 17:00

컵라면 구매 할 일 추가

@홍길동



memo.txt

오늘의 할 일

- 5
- 6 ↘ 마트에 가서 맥주 한박
- 7 ↘ 20리터 쓰레기 봉투 구입
- 8 ↘ 컵라면 1박스 구입
- 9

commit 2

2014년 7월 9일 10:03

쓰레기 봉투 구매 할 일 추가

@홍길동



memo.txt

오늘의 할 일

- 5
- 6 ↘ 마트에 가서 맥주 한박스
- 7 ↘ 20리터 쓰레기 봉투 구입
- 8
- 9

commit 1

2014년 7월 6일 12:42

맥주 구매 할 일 추가

@홍길동



memo.txt

오늘의 할 일

- 5
- 6 ↘ 마트에 가서 맥주 한박
- 7
- 8

2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Commit [File Tree]

commit 3



2014년 7월 10일 17:00

수,목,금 교육 시간 수정

@홍길동



수요일.txt 목요일.txt 금요일.txt

commit 2

2014년 7월 9일 10:03

수요일 학습 내용 추가

@홍길동



수요일.txt

commit 1

2014년 7월 6일 12:42

월,화 자율 학습 일정 추가

@홍길동



월요일.txt 화요일.txt

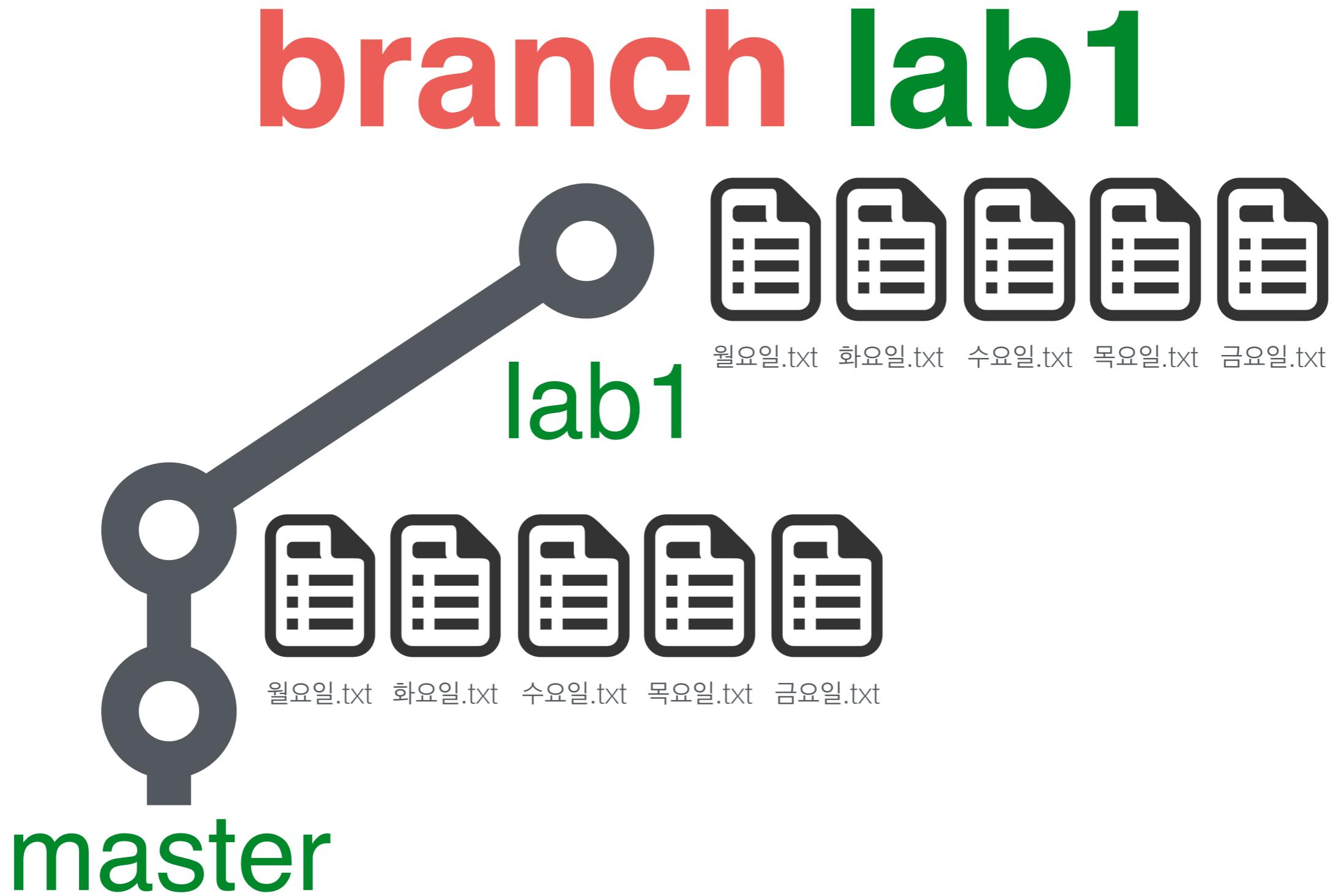
2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Branch



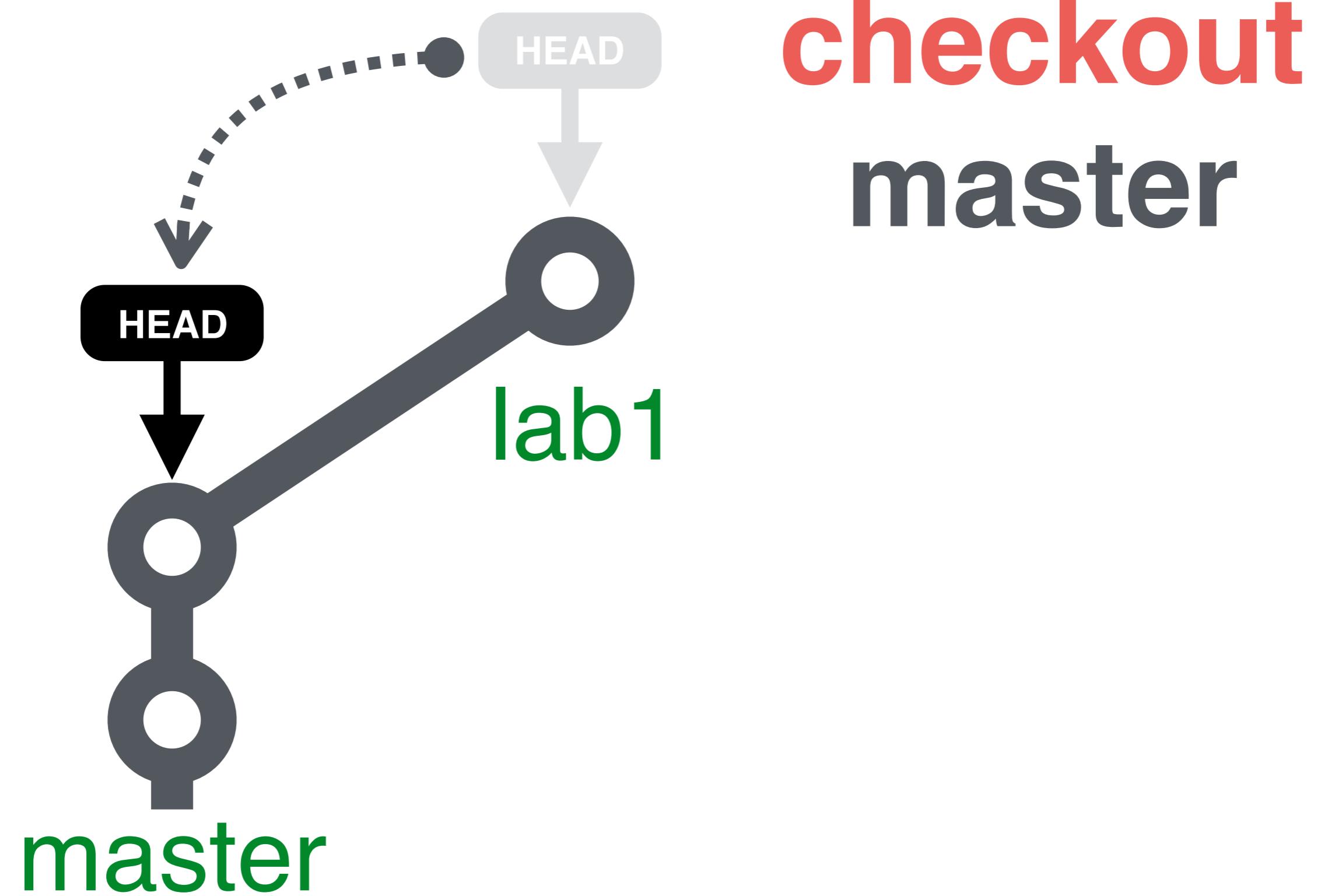
2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Branch



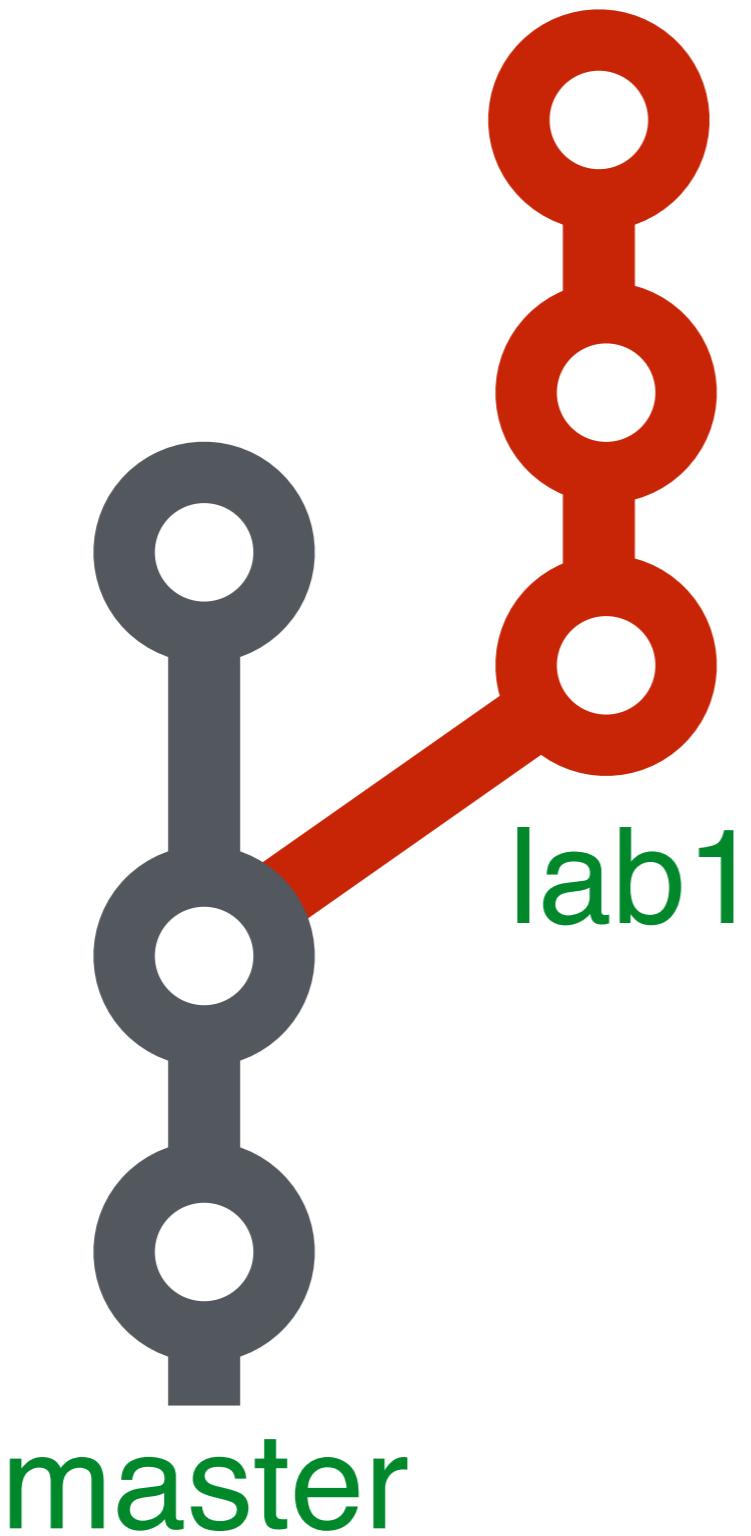
2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Checkout



2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Delete Branch



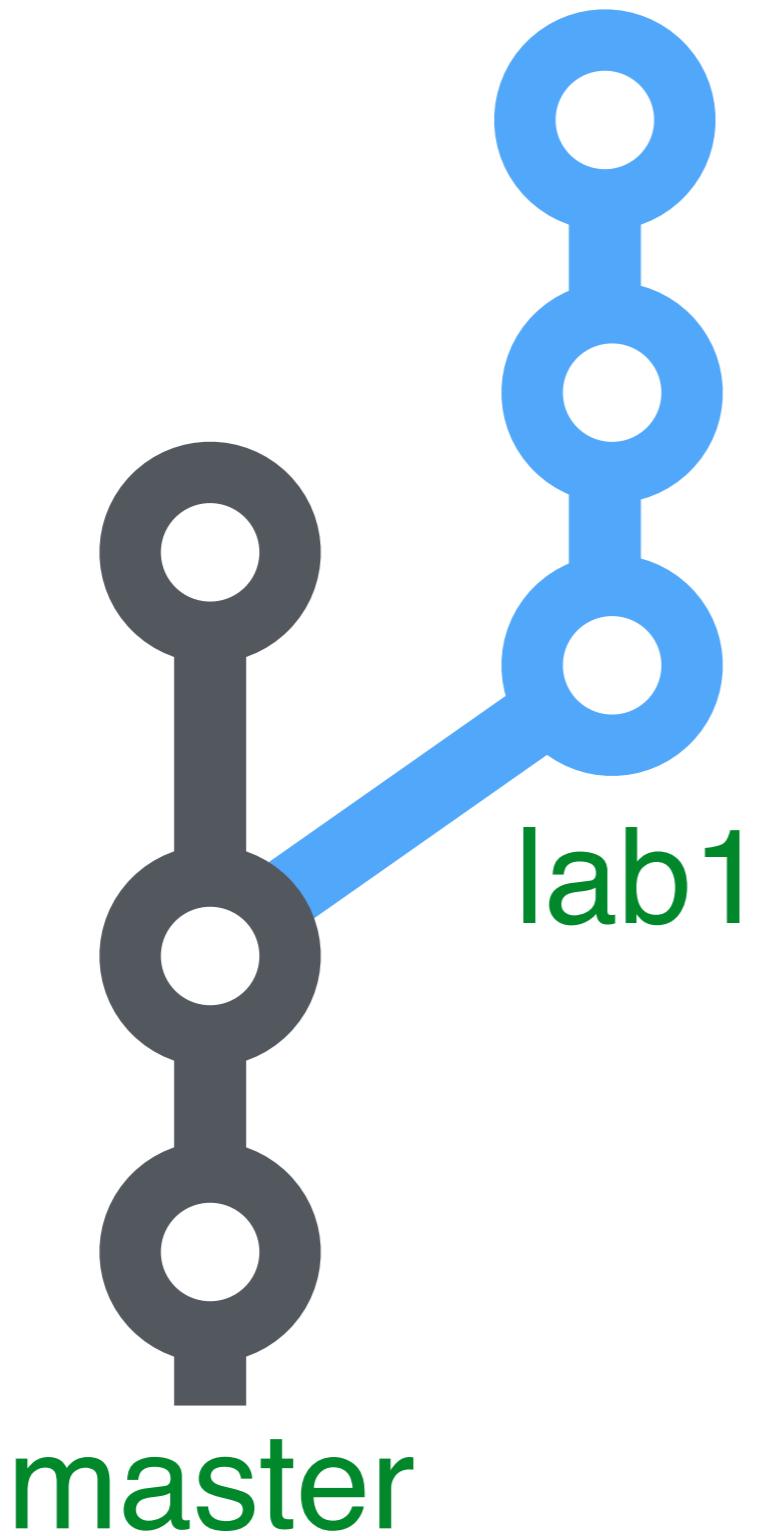
실험 실패

lab1에서 진행했던 실험이 예상과 달리 필요없는 작업이 되었다. 어떻게 하면 될까?

master로 이동 후 lab1 브랜치를 삭제한다. lab1의 모든 기록이 제거된다. 기록 보관 차원에서 삭제하지 않아도 아무 문제 없다

2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Merge



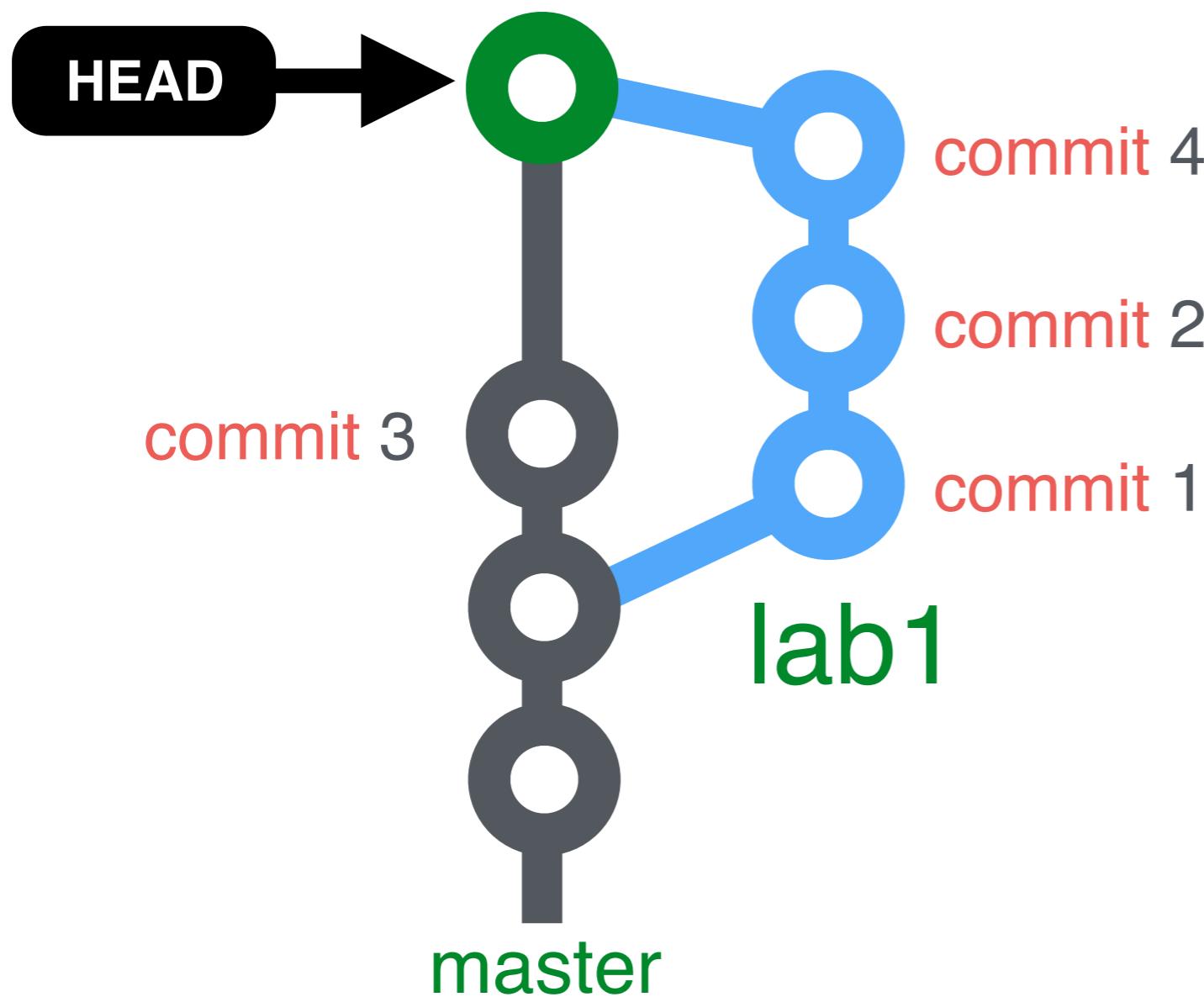
실험 성공

lab1에서 진행했던 실험이 성공적으로 끝났다. 실험의 결과를 master 브랜치에 옮기려한다. 어떻게 하면 될까?

lab1 브랜치의 내용을
마스터 브랜치와 병합
(merge) 한다.

2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Merge



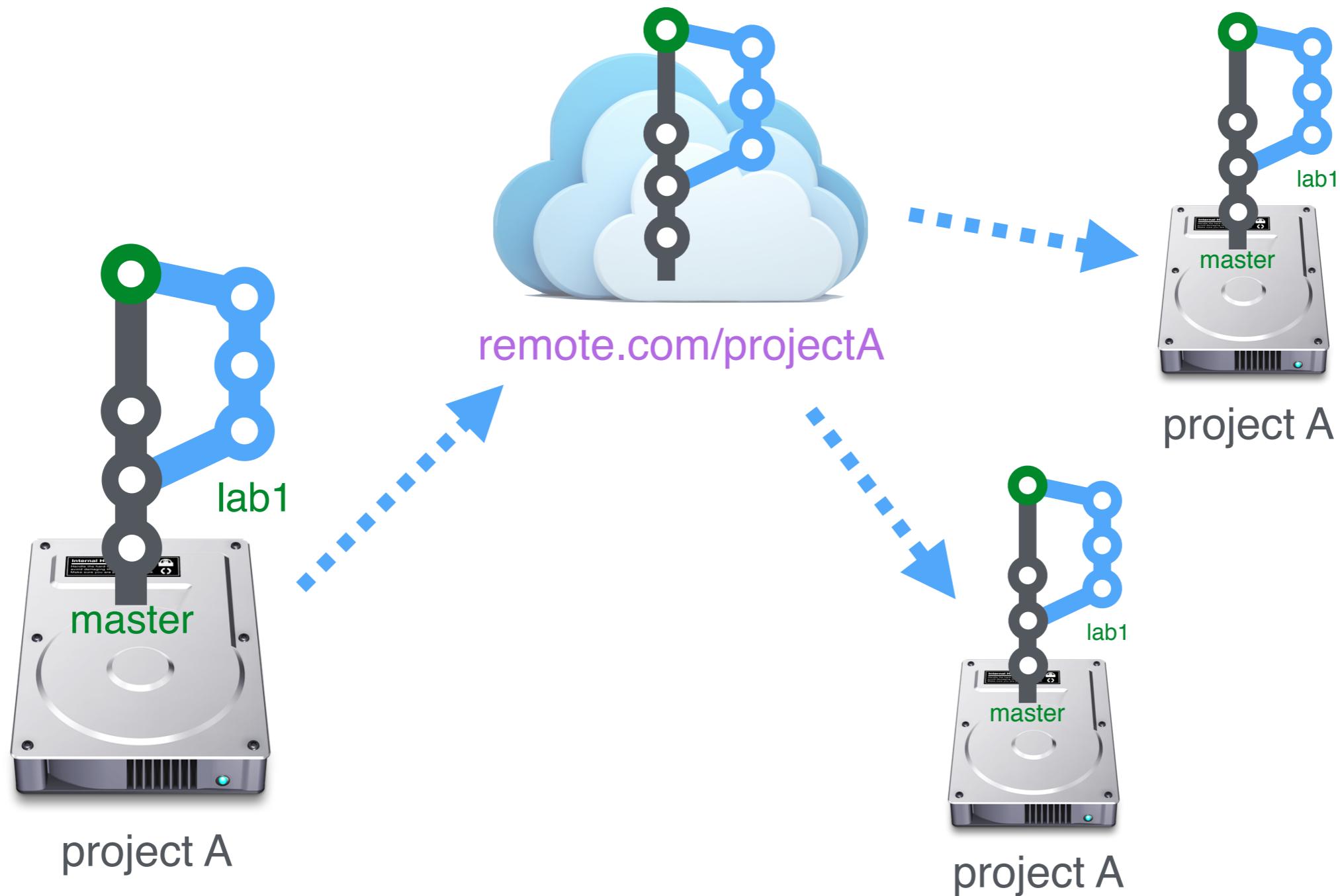
병합 결과

master 브랜치에 lab1 브랜치를 병합하면 git 은 lab1 브랜치의 내용과 master 브랜치의 commit 3 의 내용을 포함하여 두 브랜치를 병합한다

변경 내용에 따라 파일 내용이 변경되고 때론 파일이 삭제될 수도 있으며 추가될 수도 있다.

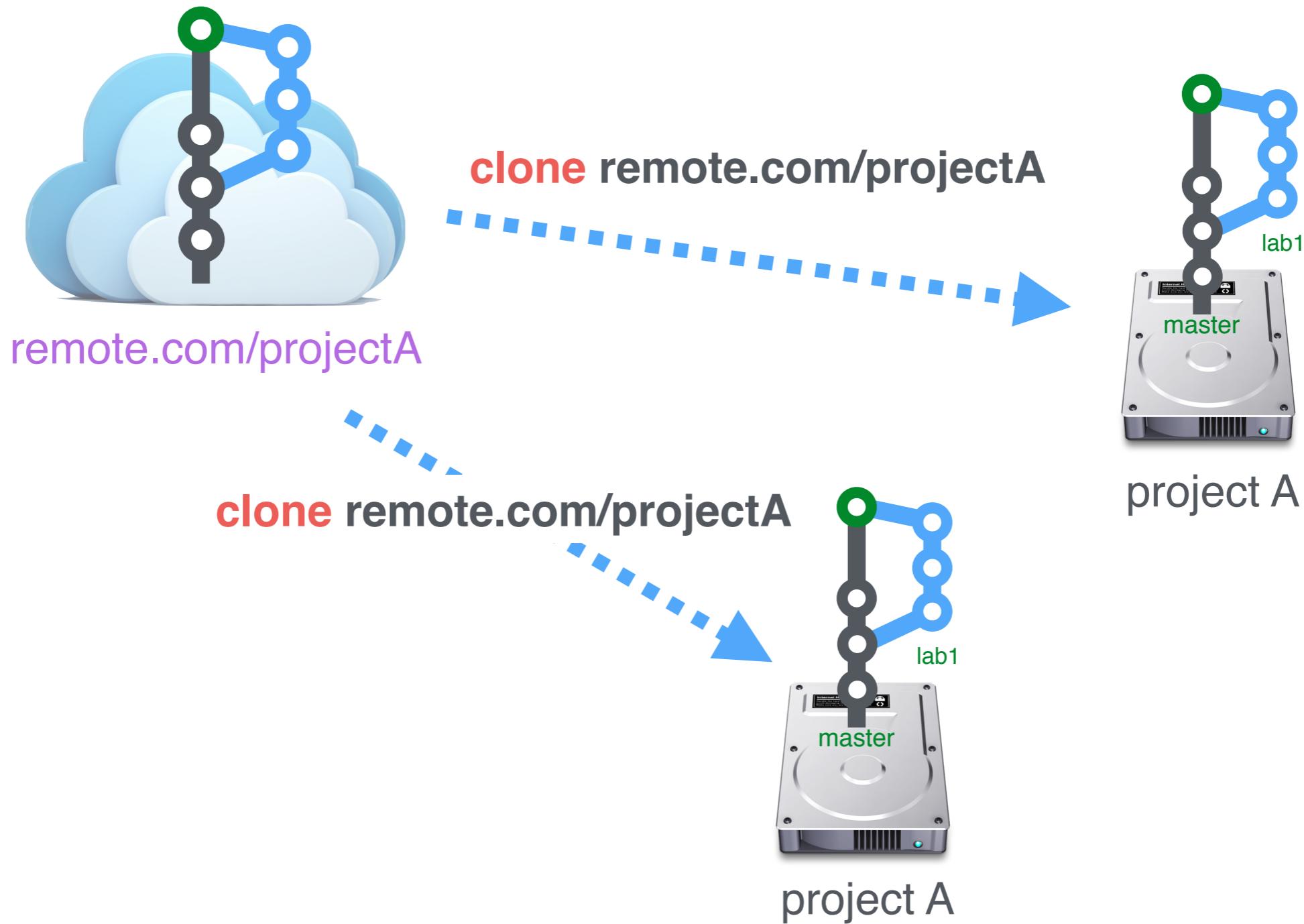
2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Remote Repo



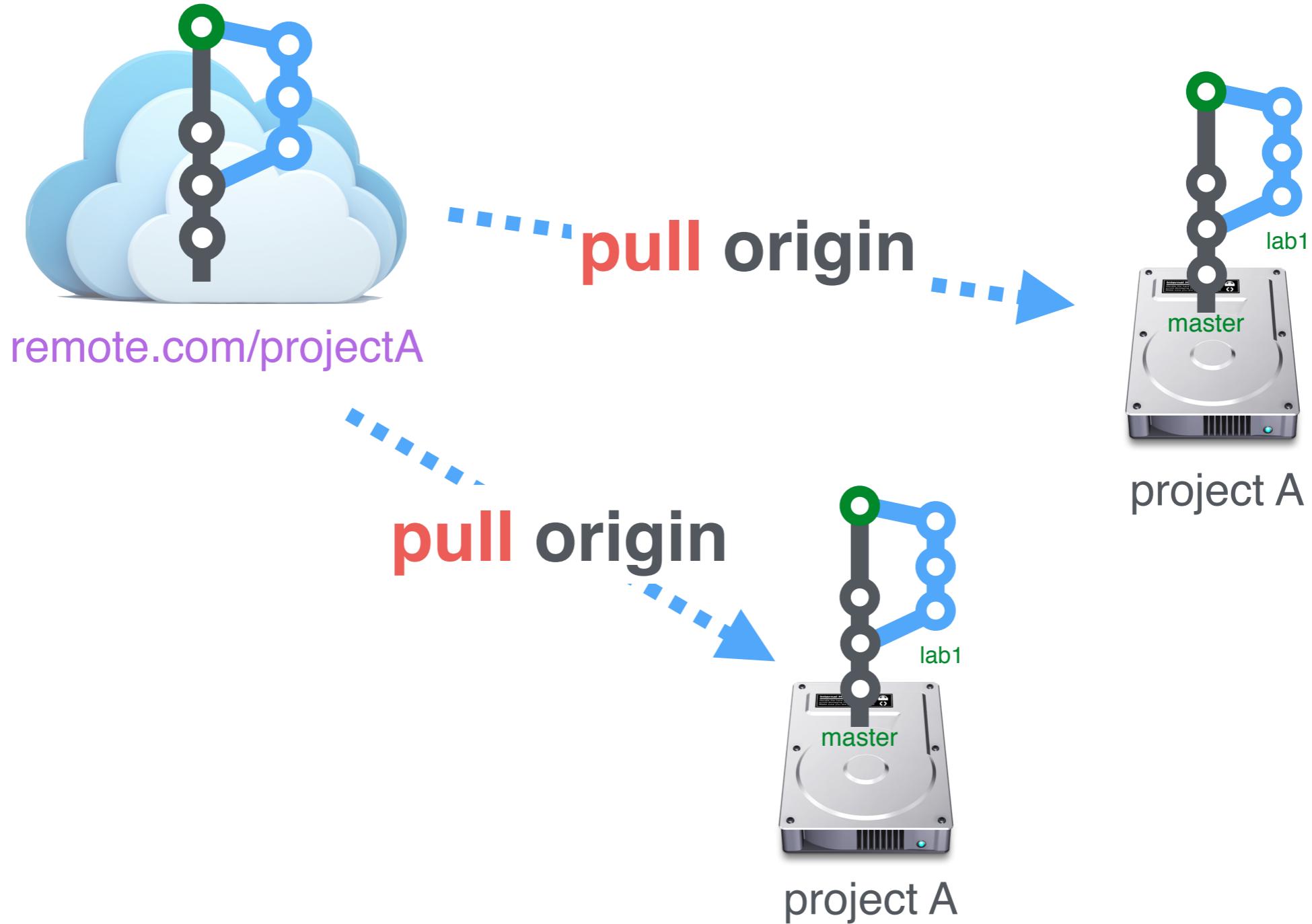
2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Clone



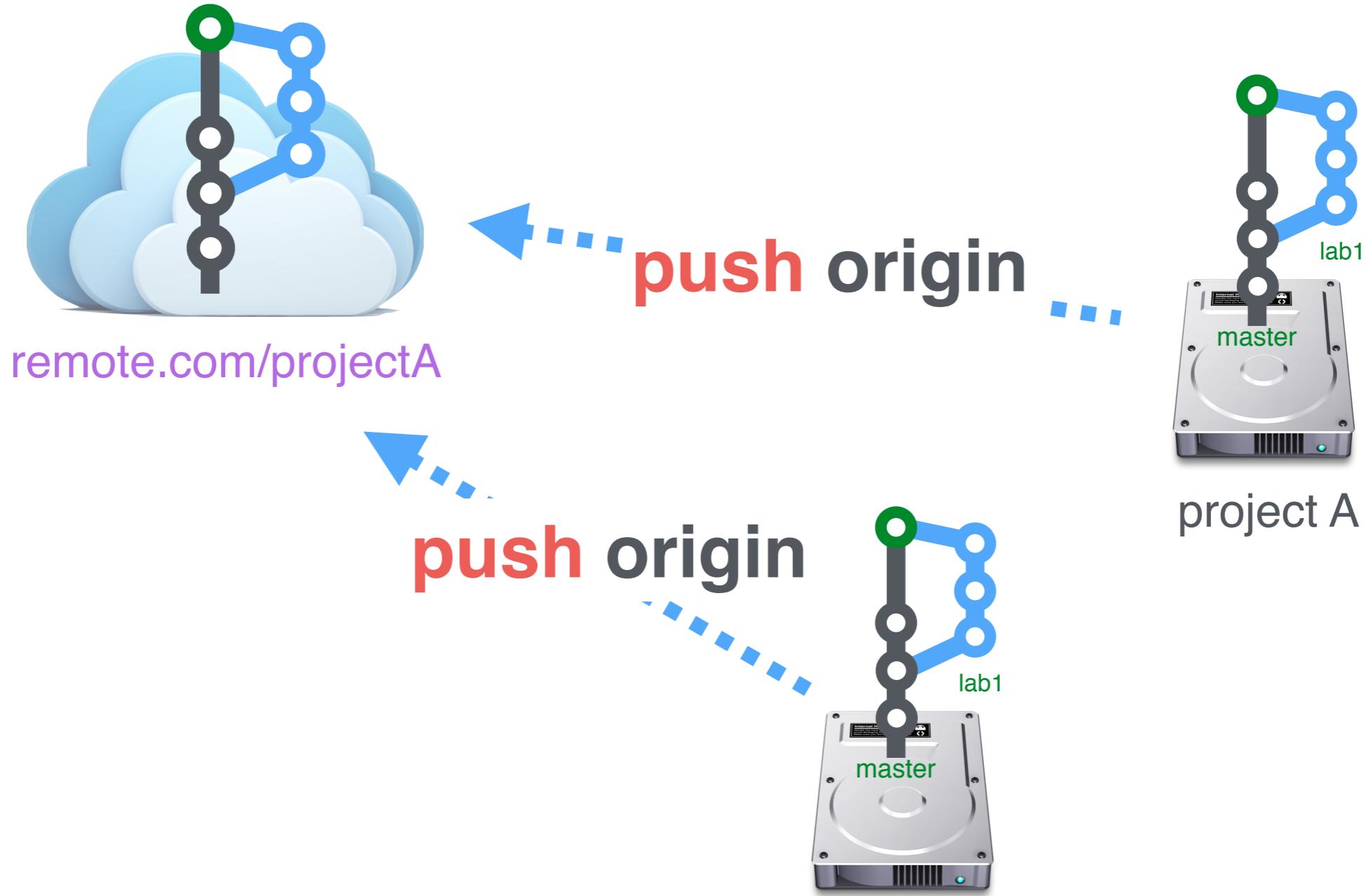
2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Pull



2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Push



2. 프로젝트 셋업 및 Workflow 의 이해

#Git - Reference

Git 메뉴얼 (한글)

<http://git-scm.com/book/ko>

Learn Git Branching

<http://pcottle.github.io/learnGitBranching/>

Code School - Try git

<https://try.github.io/levels/1/challenges/1>

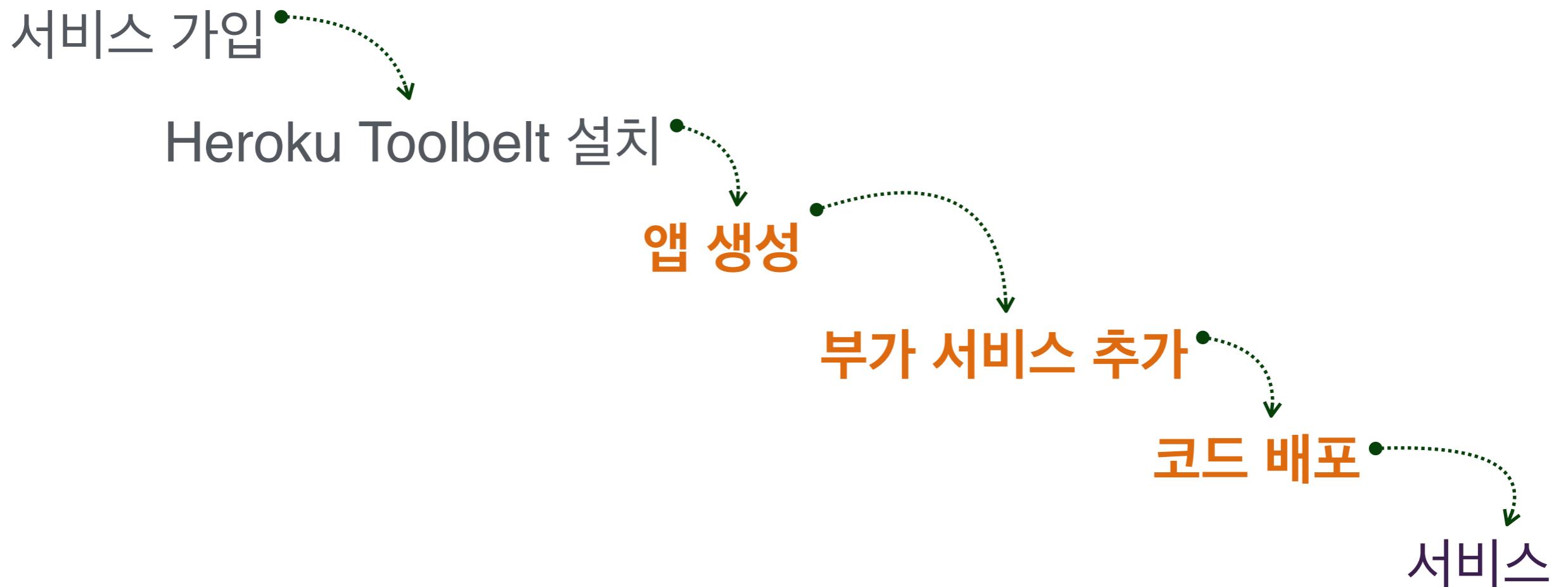
Atlassian git tutorial

<https://www.atlassian.com/git/tutorial>

3. PaSS 서비스를 이용한 서버 세팅

1. Heroku
2. MongoLab
3. Tutorial

3. Paas 서비스를 이용한 서버 세팅



heroku toolbelt

everything you need to get started using heroku



Mac OS X



Windows



Debian/Ubuntu



Standalone

[↓ Heroku Toolbelt for Mac OS X](#)

What is it?

- Heroku client - CLI tool for creating and managing Heroku apps

Getting started

Once installed, you'll have access to the `heroku` command from your command shell. Log in using the email address and password you used when creating your Heroku account:

```
$ heroku login
Enter your Heroku credentials.
Email: adam@example.com
Password (typing will be hidden):
Authentication successful.
```

3. PaSS 서비스를 이용한 서버 세팅

#Heroku

```
hello@git:master $ heroku apps:create hello
```

Creating example... done, stack is cedar

<http://hello.herokuapp.com/> | git@heroku.com:hello.git

3. PaSS 서비스를 이용한 서버 세팅

#Heroku

```
hello@git:master $ heroku addons:add mongohq:small
```

```
hello@git:master $ git push heroku master
```

```
hello@git:master $ heroku logs
```

3. Paas 서비스를 이용한 서버 세팅

#Heroku - Add-on

Data Stores

Choose from Postgres, Memcache, Mongo, Redis, Hadoop and more. Then forget doing database backups, restores, or wearing the pager ever again.



Redis Cloud



RedisGreen



Heroku Postgres



IronCache



ClearDB MySQL
Database



GrapheneDB βeta



Cloudant Data
Layer as a Service



Keen IO



Memcached Cloud



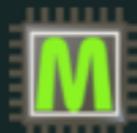
openredis



RethinkDB Cloud
βeta



MongoHQ



MemCachier



Redis To Go



PG Backups



Treasure Data
Hadoop

3. Paas 서비스를 이용한 서버 세팅



PLANS + FEATURES

PRICING

DOCS + SUPPORT

SIGN UP

LOG IN

Fully managed MongoDB-as-a-Service

Bring your data, and we'll manage the machines. Never think about ops again.



MongoDB in your choice of cloud. It's this easy.



Create a database

Provision MongoDB on-demand on AWS, Azure, or Google.

```
7 var mongo = require('mongodb').MongoClient;
9 var url = 'mongodb://muser:mypass@ds02...
10 mongo.connect(url, function(err, db) {
11   if(err) {
12     console.log("Error: unable to connect to data
13     return;
14   }
15 }
16 // your code here
17
18
```

2

Paste its connection URI

Copy and paste the connection string into your code.



Build the future

Focus on your product instead of operations.

3. PaSS 서비스를 이용한 서버 세팅

The screenshot shows the Mongolab web interface. At the top, there's a navigation bar with links for WELCOME, PLANS + FEATURES, PRICING, DOCS + SUPPORT, ACCOUNT, and LOG OUT. A user account summary { user: "ibare", account: "ibare" } is displayed. Below the navigation, there are buttons for Create from backup, Clone existing, and Create new. On the left, there's a sidebar titled 'Development and Utility' with a section for 'MongoDB Deployments'. One deployment is listed: 'ds047085/pikitimeline' with status 'Ok: This database is up and running'. In the center, a modal dialog box titled 'Configure a remote connection' is open. It contains instructions about remote connections and three configuration steps. Below these are fields for 'Name for this remote connection*' (with a yellow placeholder bar), 'URI* (explain this)' (with a text input field), and two checkboxes: 'Save password? (explain this)' and 'I allow MongoLab to save configuration data in my remote database(s).* (explain this)'. At the bottom right of the dialog are 'Cancel' and 'Save' buttons.

mongolab

WELCOME PLANS + FEATURES PRICING DOCS + SUPPORT ACCOUNT LOG OUT

{ user: "ibare", account: "ibare" }

Home

MongoDB Deployments

Create from backup

Clone existing

Create new

Development and Utility

NAME

▼ ds047085/pikitimeline
Ok: This database is up and running

FILE SIZE

16.00 MB

help

Remote Connections

[None at this time]

Add

Configure a remote connection

Remote Connections allow you to visualize and manage the data and database(s) on MongoDB servers running anywhere.

From here you can configure a connection to (1) a remote database, (2) a remote mongod server process, or (3) a remote replica set.

Name for this remote connection*

URI* (explain this)

Save password? (explain this)

I allow MongoLab to save configuration data in my remote database(s).* (explain this)

Cancel

Save

3. PaSS 서비스를 이용한 서버 세팅

#MongoLab - Connection String

“mongodb://uid:pw@host.mongolab.com:47085/dbname”

3. PaSS 서비스를 이용한 서버 세팅

- Tutorial
 - Heroku
 - <https://toolbelt.heroku.com/debian>
 - mkdir hello-heroku
 - <https://devcenter.heroku.com/articles/creating-apps>
 - <https://mongolab.com/>

4. API 서버 & UI 개발 & 테스트

#Tutorial

February 2016						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
31	1	2	3	4	5	6
	11a Acell 커뮤니티 데이 2p Acell 커뮤니티 데이 2:30p 과제 리뷰 @Nin 4p 대만 컨퍼런스콜 @C	11a 피키 Y @Susie 12p 브랜드카드 디테일 2p 사업 미팅 @벤 3p 컨퍼런스콜 @ Susie	10a 미팅 @벤 11a 면접 @ann 2p G셀 개발자 미팅 @e 3p 디바이스 식별자 정초 5p UFO 인터뷰 @ann	10a 사업 미팅 @벤 11a 컨퍼런스콜 @ Susie 11:30a 브랜드카드 스트리밍 12p 인터뷰1 @앤 3p 사업 미팅 @벤	10a 조이 면접 @Paul 10:30a 조이 면접 @Pa 12p A/B 셀 정기회의 (A/B 셀) 2p BM실 에이전시 미팅 4p 미팅 @벤 5p 씨랩 인터뷰 @앤	
7	8	9	10	11	12	13
		2p 사업 미팅 @벤 3p 컨퍼런스콜 @ Susie		10a C-lab 기획자 인터뷰 11a 컨퍼런스콜 @ Susie 3p 사업 미팅 @벤		
14	15	16	17	18	19	20
	11a 서버장비구매 & IS 11a 서버장비구매 & IS 1p A셀 커뮤니티데이 @	11a 피키 Y @ Susie 2p 사업 미팅 @벤	4p 작가 인터뷰 @앤 2p 사업 미팅 @벤	2p 사업 미팅 @벤		
21	22	23	24	25	26	27
		11a 피키 Y @ Susie 2p 사업 미팅 @벤		2p 사업 미팅 @벤		
28	29	1	2	3	4	5
		11a 피키 Y @ Susie				
6	7	8	9	10	11	12

4. API 서버 & UI 개발 & 테스트

#Tutorial Directory

/ Project Home

+ .git

+ node_modules

+ public

\— css

+ lib

+ app

+ index.html

+ test

+ package.son

+ index.js

4. API 서버 & UI 개발 & 테스트

#New event UI

회의실 예약 보드

Feb 14 — 20, 2016

today < > day week month

	Sun 2/14	Mon 2/15	Tue 2/16	Wed 2/17	Thu 2/18	Fri 2/19	Sat 2/20
all-day							
6am							
7am							
8am							
9am							
10am							
11am							
12pm							
1pm							
2pm							
3pm							
4pm							
5pm							
6pm							
7pm							

예약 등록

타이틀이요~

성함이?

비밀번호 (수정, 삭제시 필요함)

[취소](#) [등록](#)

4. API 서버 & UI 개발 & 테스트

#New event API

```
app.post('/events/:roomid', (req, res, next) => {
  event = new Events(_.extend({ roomId: req.params.roomid }, req.body));
  event.save();
});
```

4. API 서버 & UI 개발 & 테스트

#server.js - mongodb

```
var db = mongoose.connection;  
  
mongoose.connect('mongodb://uid:pw@host.mongolab.com:47085/dbname');  
  
db.on('error', () => console.error('connection error!'));  
db.once('open', () => console.log('mongodb connection ok'));  
  
var eventSchema = mongoose.Schema({  
    roomId: String,  
    title: String,  
    start: String,  
    end: String,  
    owner: String,  
    password: String  
});
```

4. API 서버 & UI 개발 & 테스트

#server.js - router

```
app.get('/utils/md5/:message', (req, res, next) => res.send(md5(req.params.message)));  
  
app.get('/events/:roomid', (req, res, next) => {  
  Events.find({ roomId: req.params.roomid }, (err, collection) => {  
    res.send(collection);  
  });  
});
```

4. API 서버 & UI 개발 & 테스트

#server.js - Edit Item

```
app.put('/events/:id', (req, res, next) => {
  var event = new Events(req.body);

  Events.findById(req.params.id, (err, findEvent) => {
    findEvent.title = event.title;
    findEvent.start = event.start;
    findEvent.end = event.end;
    findEvent.owner = event.owner;

    findEvent.save((err, updateEvent) => res.send(updateEvent));
  });
});

app.delete('/events/:id', (req, res, next) => {
  Events.findById(req.params.id).remove( () => res.send({ message: 'ok' }) );
});
```

4. API 서버 & UI 개발 & 테스트

#server.js - Run Server

```
app.listen(process.env.PORT || 3000, () => console.log('ready!'));
```

4. API 서버 & UI 개발 & 테스트

#Download index.html & more ...

```
$ wget https://github.com/ibare/OpensourceDevTutorial/blob/master/public/index.html
$ css/*
$ lib/*
$ app/*
```

4. API 서버 & UI 개발 & 테스트

#run service

\$ node index.js

\$ nodemon index.js

\$ BUILD_ID=dontKillMe NODE_ENV=production forever start index.js

5. 빌드 및 배포 (Jenkins)

1. Jenkins

2. Tutorial

5. 빌드 및 배포 (Jenkins)

 Jenkins

search [?](#)

Jenkins [ENABLE AUTO REFRESH](#)

 [New Item](#)

 [People](#)

 [Build History](#)

 [Manage Jenkins](#)

 [Credentials](#)

All [+](#)

S	W	Name ↓	Last Success	Last Failure	Last Duration
		Test Job	1 day 2 hr - #12	1 day 6 hr - #2	3.6 sec 

Icon: [S](#) [M](#) [L](#)

[Legend](#)  [RSS for all](#)  [RSS for failures](#)  [RSS for just latest builds](#)

Build Queue 

No builds in the queue.

Build Executor Status 

1 Idle
2 Idle

 [Help us localize this page](#)

Page generated: Feb 12, 2016 3:25:28 AM KST [REST API](#) [Jenkins ver. 1.647](#)

5. 빌드 및 배포 (Jenkins)

#New Item

 New Item

 People

 Build History

 Manage Jenkins

 Credentials

Build Queue

No builds in the queue.

Build Executor Status

1 Idle

2 Idle

Item name

My Project

Freestyle project

This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

Maven project

Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

External Job

This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system. See [the documentation for more details](#).

Multi-configuration project

Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

Copy existing Item

Copy from

OK

5. 빌드 및 배포 (Jenkins)

#Config - Git

- Discard Old Builds ?
- GitHub project ?
- This build is parameterized ?
- Disable Build (No new builds will be executed until the project is re-enabled.) ?
- Execute concurrent builds if necessary ?

Advanced Project Options

[Advanced...](#)

Source Code Management

- None
- CVS
- CVS Projectset
- Git

Repositories

Repository URL

<https://github.com/ibare/OpensourceDevTutorial.git> ?

Credentials

- none - ▼

Add ?

[Advanced...](#)

[Add Repository](#)

[Delete Repository](#)

Branches to build

Branch Specifier (blank for 'any')

[*/master](#) ?

[Add Branch](#)

[Delete Branch](#)

[Save](#)

[Apply](#)

5. 빌드 및 배포 (Jenkins)

#Config - Build Script

Build

Execute shell

Command

```
cd "/var/lib/jenkins/jobs/Test Job/workspace"
forever stopall
npm install
npm test
BUILD_ID=dontKillMe NODE_ENV=production forever start index.js
```



See [the list of available environment variables](#)

Delete

Add build step ▾

Post-build Actions

-->

Publish JUnit test result report



Test report XMLs

test-reports.xml

[Fileset 'includes'](#) setting that specifies the generated raw XML report files, such as 'myproject/target/test-reports/*.xml'. Basedir of the fileset is [the workspace root](#).

Retain long standard output/error



Health report amplification factor

1.0



1% failing tests scores as 99% health. 5% failing tests scores as 95% health

5. 빌드 및 배포 (Jenkins)

#Dashboard

 Back to Dashboard

 Status

 Changes

 Workspace

 Build Now

 Delete Project

 Configure

 Test Results Analyzer

 GitHub Hook Log

Project Test Job

 [add description](#)

[Disable Project](#)

Test Result Trend



Permalinks

[\(just show failures\) enlarge](#)

- [Last build \(#12\), 1 day 2 hr ago](#)
- [Last stable build \(#12\), 1 day 2 hr ago](#)
- [Last successful build \(#12\), 1 day 2 hr ago](#)
- [Last failed build \(#2\), 1 day 6 hr ago](#)
- [Last unsuccessful build \(#4\), 1 day 6 hr ago](#)
- [Last completed build \(#12\), 1 day 2 hr ago](#)

Build History	
	trend
<input type="text" value="find"/>	<input type="button" value="X"/>
 #12	Feb 11, 2016 1:10 AM
 #11	Feb 11, 2016 1:05 AM
 #10	Feb 10, 2016 9:39 PM
 #9	Feb 10, 2016 9:36 PM
 #8	Feb 10, 2016 9:32 PM
 #7	Feb 10, 2016 9:12 PM
 #6	Feb 10, 2016 9:10 PM

5. 빌드 및 배포 (Jenkins)

#Jenkins Preference

Manage Jenkins



[Configure System](#)

Configure global settings and paths.



[Configure Global Security](#)

Secure Jenkins; define who is allowed to access/use the system.



[Reload Configuration from Disk](#)

Discard all the loaded data in memory and reload everything from file system. Useful when you modified config files directly on disk.



[Manage Plugins](#)

Add, remove, disable or enable plugins that can extend the functionality of Jenkins. (**updates available**)



[System Information](#)

Displays various environmental information to assist trouble-shooting.



[System Log](#)

System log captures output from `java.util.logging` output related to Jenkins.



[Load Statistics](#)

Check your resource utilization and see if you need more computers for your builds.



[Jenkins CLI](#)

Access/manage Jenkins from your shell, or from your script.



[Script Console](#)

Executes arbitrary script for administration/trouble-shooting/diagnostics.



[Manage Nodes](#)

Add, remove, control and monitor the various nodes that Jenkins runs jobs on.

6. Issue Ticket, PR, Code Review & PR 정책

1. Github

2. Jira

3. Tutorial

6. Issue Ticket, PR, Code Review & PR 정책

#Github Issue - Create

The screenshot shows a GitHub repository named "Mid-Century Meowdern". The repository has 1 commit, 1 branch (branch: master), and 0 releases. The main content area displays an "Initial commit" made by "lizclink" 10 minutes ago, which includes a "README.md" file. On the right side, there is a sidebar with various repository links: Code, Issues (which is highlighted with a large white circle), Pull Requests, Wiki, Pulse, Graphs, Network, and Settings. At the bottom, there is an HTTPS clone URL: <https://github.com>.

Mid-Century Meowdern — Edit

1 commit 1 branch 0 releases

branch: master / mysite

Initial commit

lizclink authored 10 minutes ago

latest commit 6e030833ce

README.md Initial commit 10 minutes ago

my site

Mid-Century Meowdern

Code

Issues

Pull Requests

Wiki

Pulse

Graphs

Network

Settings

HTTPS clone URL

<https://github.com>

You can clone with [HTTPS](#), [SSH](#), or [Subversion](#). [?](#)

6. Issue Ticket, PR, Code Review & PR 정책

#Github Issue - Create

The screenshot shows the GitHub Issues page with the following interface elements:

- Header:** Issues, Pull requests, Labels, Milestones, Filters (set to is:open is:issue), New issue.
- Statistics:** 104 Open, 9,660 Closed.
- Search Bar:** is:open is:issue.
- Sort Options:** Author, Labels, Milestones, Assignee, Sort.
- Issues List:** A list of 9 open issues, each with a title, status, labels, creation date, author, and a comment count. The issues are:

 - ! .form-group-sm .form-group-lg shrink textarea confirmed css: #13989 opened 11 hours ago by limitstudios v3.2.1 (4 comments)
 - ! Tooltip unnecessarily breaks into multiple lines when positioned to the right confirmed js: #13987 opened 15 hours ago by hnrch02 v3.2.1 (0 comments)
 - ! Tooltip Arrows in Modal example facing wrong way css: #13981 opened a day ago by SDCore (6 comments)
 - ! Table improvement css: #13978 opened a day ago by Tjoosten (0 comments)
 - ! docs/dist files docs: #13977 opened 2 days ago by XhmikosR v3.2.1 (7 comments)
 - ! Potential solution to #4647 js: #13976 opened 2 days ago by julioarmando (4 comments)
 - ! Bootstrap site: right-hand navigation text becomes rasterized after scrolling css docs: #13974 opened 2 days ago by mg1075 v3.2.1 (4 comments)
 - ! Dropdown toggle requires two clicks js: #13972 opened 2 days ago by Kizmar (1 comment)

6. Issue Ticket, PR, Code Review & PR 정책

#Github Issue - 커밋 메세지에 티켓 번호 연동

◀ The no-conflict mode should be the default behaviour #12395

Open thewebdreamer opened this issue 3 days ago · 10 comments

 thewebdreamer commented 3 days ago

The no-conflict mode should be the default behaviour. Why would a Bootstrap client need to implement this?

 cvrebert commented 3 days ago

I believe no-conflict-is-not-the-default is the norm for jQuery plugins?

 thewebdreamer commented 3 days ago

It is true that it is the norm for jQuery plugins.

Couldn't there be a clash with other jQuery plugins with the current implementation of Bootstrap though?

Edit New issue

Labels 
js

Milestone 
No milestone

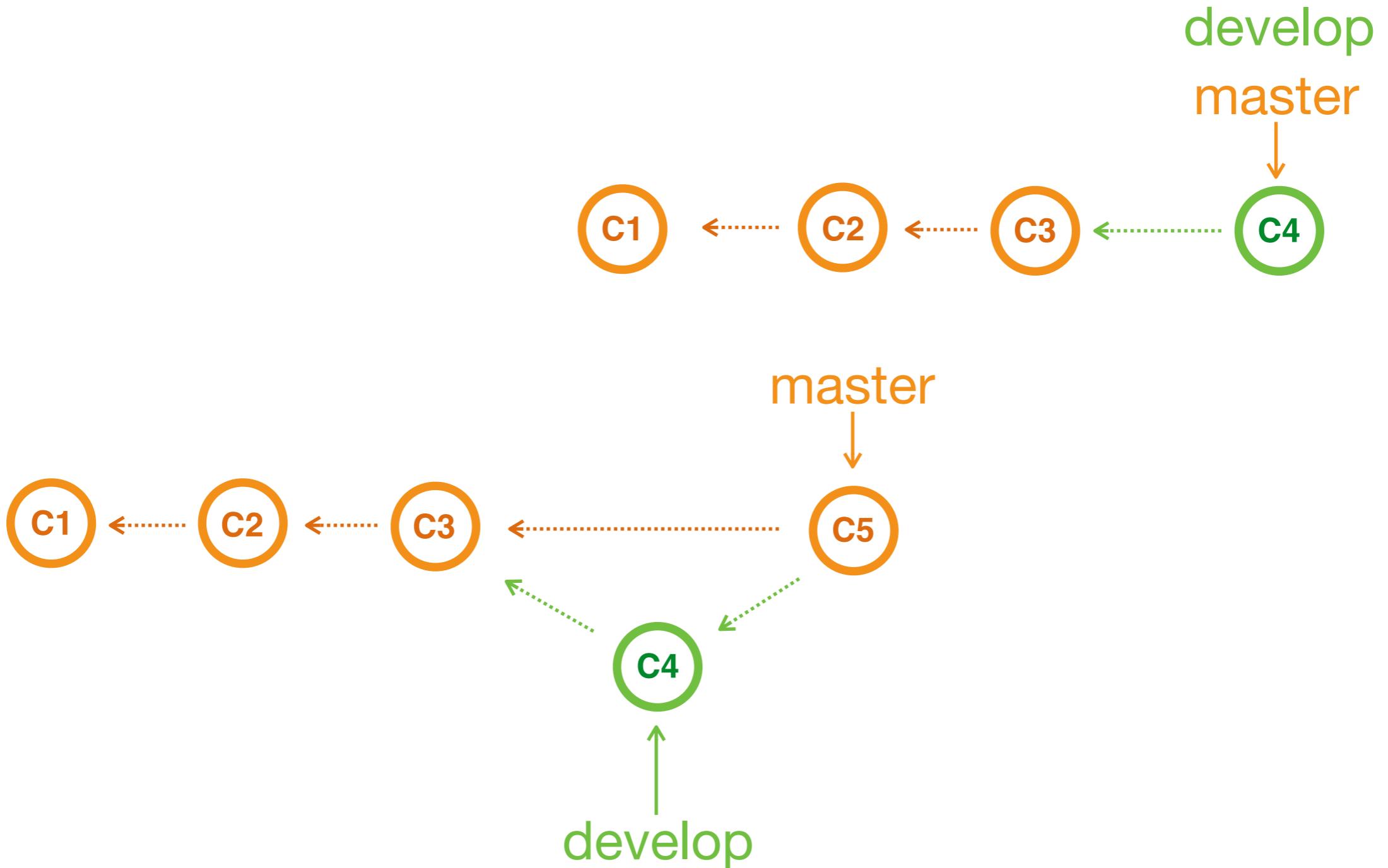
Assignee 
No one assigned

Notifications 
Subscribe

3 participants 

6. Issue Ticket, PR, Code Review & PR 정책

#Github PR 정책 - Fast Forward의 이해



6. Issue Ticket, PR, Code Review & PR 정책



Pricing

Try it free

The best software teams ship early and often

Not many tools, one tool. JIRA Software is built for every member of your software team to plan, track, and release great software.

The screenshot shows the JIRA Software interface for managing a backlog of issues. On the left, there's a sidebar with project navigation and a 'PROJECT SHORTCUTS' section. The main area is titled 'Backlog' and shows a hierarchical view of issues. It includes sections for 'EPICS', 'Sprint 1' (14 issues), 'Sprint 2' (6 issues), and 'Backlog' (49 issues). Each issue item includes a summary, priority, reporter, assignee, and status. Buttons for 'Create sprint' and 'Start sprint' are visible.

Release

Ship with confidence and sanity knowing the information you have is always current.

Report

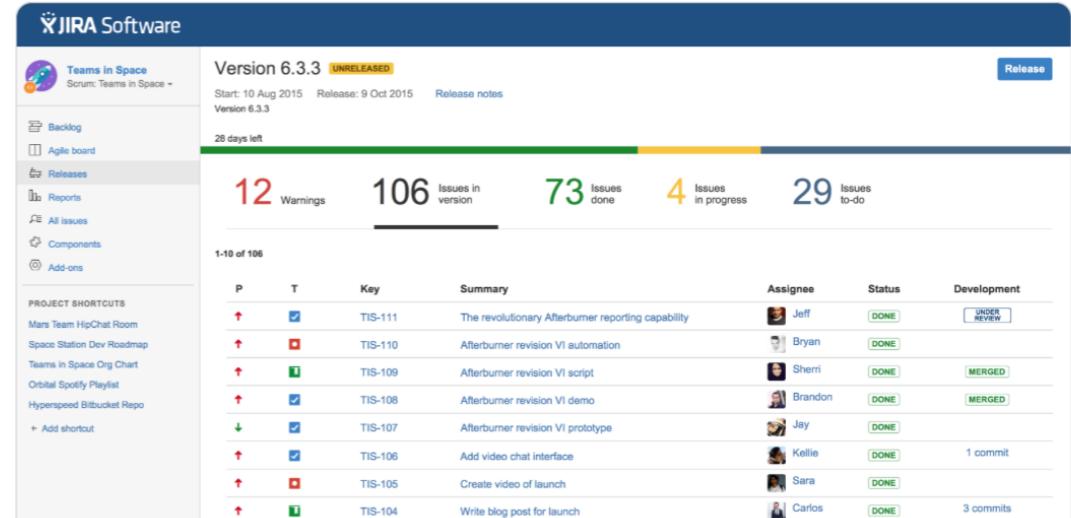
Improve team performance based on real-time, visual data you can use.

Plan

Create user stories and issues, plan sprints, and distribute tasks across your software team.

Track

Prioritize and discuss your team's work in full context with complete visibility.



2016 Open Source Software, Tutorial and Practice

한국정보과학회 오픈소스소프트웨어 연구회

<http://sigoss.github.io>

프로젝트 운영 및 관리 워크샵: 개발 프랙티스 워크샵