



Github

Jerry



軟體動物？ Mollusca



軟體(Software) 不等於 軟體(Mollusca)



客戶解釋他們想要的



專案主持人對客戶需求的
認知



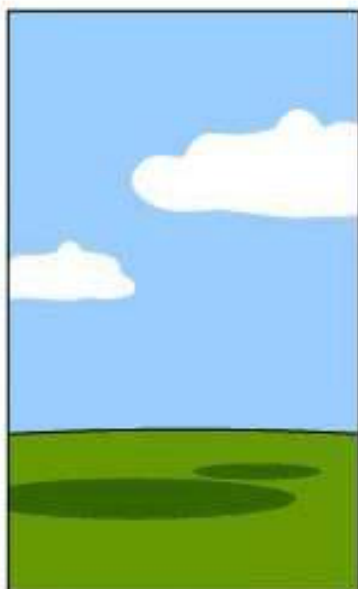
系統分析師所設計的



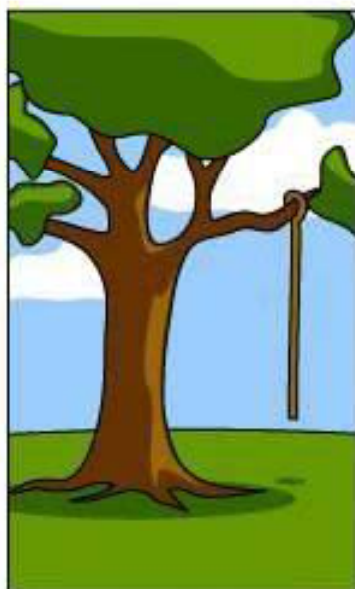
程式設計師所寫出來的



顧問所描繪的願景



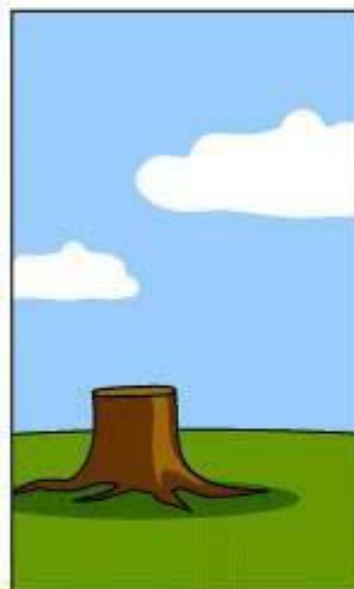
專案的文件



最後交付給客戶的軟體



客戶所付的錢

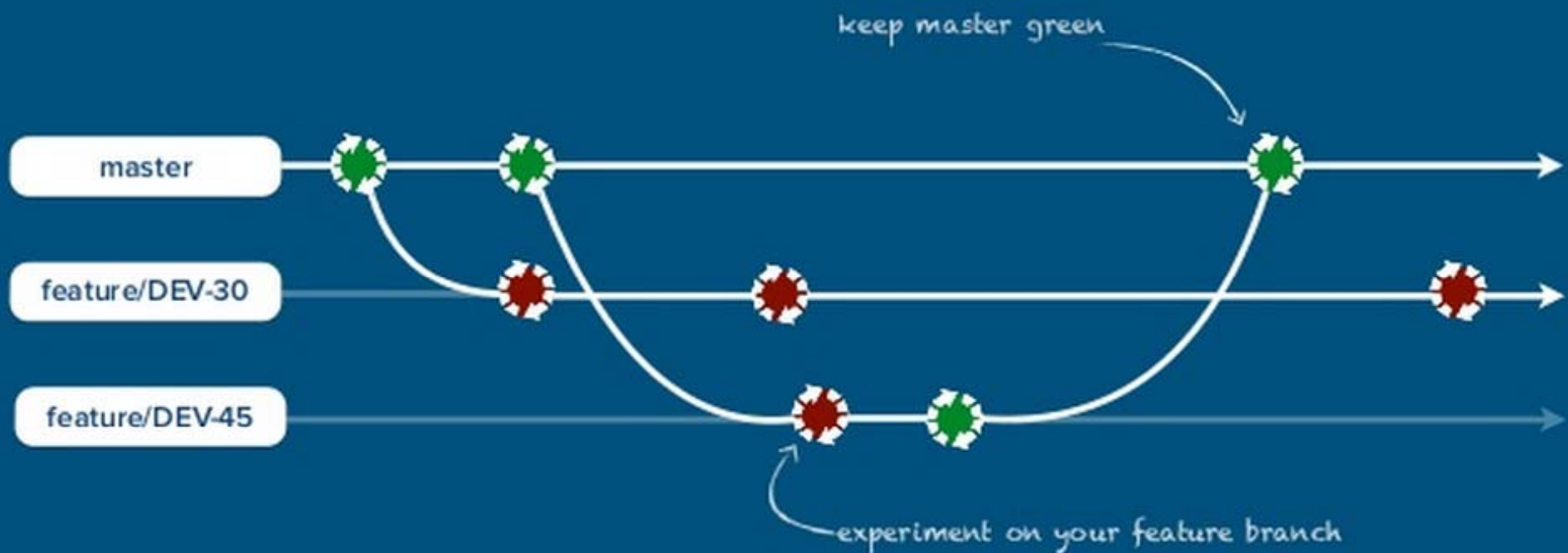


上線後的技術支援



客戶真正需要的

Simplest Workflow



GitHub

GitHub [編輯]

GitHub是一個**共享虛擬主機服務**，用於存放使用**Git**版本控制的軟體代碼和內容專案。它由GitHub公司（曾稱Logical Awesome）的開發者Chris Wanstrath、PJ Hyett和Tom Preston-Werner使用**Ruby on Rails**編寫而成。

GitHub 同時提供付費帳戶和免費帳戶。這兩種帳戶都可以建立公開的代碼倉庫，但是付費帳戶也可以建立私有的代碼倉庫。根據在2009年的Git使用者調查，GitHub是最流行的Git存取站點。^[2]除了允許個人和組織建立和存取代碼庫以外，它也提供了一些方便社會化軟體開發的功能，包括允許使用者跟蹤其他使用者、組織、軟體庫的動態，對軟體代碼的改動和 **bug** 提出評論等。GitHub也提供了圖表功能，用於顯示開發者們怎樣在代碼庫上工作以及軟體的開發活躍程度。

截止到 2015 年，GitHub 已經有超過九百萬註冊使用者和 2110 萬代碼倉庫。^[3]事實上已經成為了世界上最大的代碼存放網站。^[4]

GitHub

GitHub

公司類型

私人

創始人

Tom Preston-Werner
Chris Wanstrath
PJ Hyett

執行長

Chris Wanstrath

總部地點

美國加利福尼亞州舊金山

產業

軟體

所有者

GitHub, Inc.


網址

github.com 

Alexa排名

 世界 163 ▼ 16

 美國 149

 中國 304^[1]

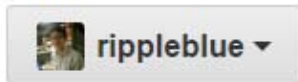
Set up

- `git config --global user.name "jerry"`
`git config --global user.email`
`"jerry@mail.ntust.edu.tw"`

EMPTY REPOSITORY

Empty repository

Owner



Repository name

/

Great repository names are short and memorable. Need inspiration? How about **sagacious-octo-weasel**.

Description (optional)



Public

Anyone can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.



Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: **None** ▼

Add a license: **None** ▼



Create repository



- 自行進資料夾新增檔案(windows)

...or create a new repository on the command line

```
echo # gitpython1 >> README.md  
git init  
git add README.md  
git commit -m "first commit"  
git remote add origin https://github.com/rippleblue/gitpython1.git  
git push -u origin master
```

空的必須加

成功畫面



rippleblue / gitpython1

Unwatch 1

Star 0

Fork 0

Description

Short description of this repository

Website

Website for this repository (optional)

Save or Cancel

1 commit

1 branch

0 releases

1 contributor



Branch: master

gitpython1 / +



first commit



rippleblue authored 4 minutes ago

latest commit 215088d101

README.md

first commit

4 minutes ago

README.md

Hello World

<> Code

Issues 0

Pull requests 0

Wiki

Pulse

Graphs

Settings

HTTPS clone URL

https://github.com/



You can clone with HTTPS, SSH,

NON-EMPTY REPOSITORY
(第一天結束)

 rippleblue ▾



You've been added to the **codefortomorrow** organization!

Here are some quick tips for a first-time organization member.

- Use the switch context button in the upper left corner of this page to switch between your personal context (**rippleblue**) and organizations you are a member of.
- After you switch contexts you'll see an organization-focused dashboard that lists out organization repositories and activities.



defunkt ▾





Easier feeds for GitHub Pages

If you publish a blog using GitHub pages, it's now easier for others to subscribe to updates with the Jekyll feed plugin.

[View 76 new broadcasts](#)

Repositories you contribute to

	dspim/A1-basic-data-analysis	0 ★
	dspim2/dspim2.github.io	0 ★

Your repositories 22

[+ New repository](#)

Find a repository...

Owner

Repository name



rippleblue ▾

/

git



Great repository names are short and memorable. Need inspiration? How about **bilious-octo-tanuki**.

Description (optional)



Public

Anyone can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.



Initialize this repository with a README

This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: **None** ▾

Add a license: **None** ▾



Create repository



Branch: **master** ▾

gitpython / +



Initial commit



rippleblue authored just now

latest commit 7097629b9b

[README.md](#)

Initial commit

just now

README.md

gitpython

Pull requests **0**

Wiki

Pulse

Graphs

Settings

HTTPS clone URL

<https://github.com/>



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

Clone in Desktop

Download ZIP

Non-empty Repository

- git clone
<https://github.com/rippleblue/pythontest2.git>
- cd gitpython
- 自行新增檔案至資料夾
- git add .
- git commit -m "11.txt"
- git push origin master
- git log

Non-empty Repository

- 再新增檔案至資料夾
- `git add .`
- `git commit -m "new commit"`
- `git push`

新檔案上傳

- 再新增檔案至資料夾
- `git add .`
- `git commit -m "new commit"`
- `git push`

```
[master +1 ~0 -0 !]> git add .  
[master +1 ~0 -0]> git add.
```

```
[master +1 ~0 -0  
[master +2 ~0 -0]
```

DELETE FILES

Error ?

Mode	LastWriteTime	Length	Name
----	-----	-----	----
-a---	2015/9/26 下午 10:35	5	README.md

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master +0 ~0 -1]> git add .
```

```
Warning: You ran 'git add' with neither '-A (--all)' or '--ignore-removal',
whose behaviour will change in Git 2.0 with respect to paths you removed.
Paths like '1.txt' that are
removed from your working tree are ignored with this version of Git.
```

```
* 'git add --ignore-removal <paths-spec>', which is the current default,
  ignores paths you removed from your working tree.
```

```
* 'git add --all <paths-spec>' will let you also record the removals.
```

```
Run 'git status' to check the paths you removed from your working tree.
```

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master +0 ~0 -1]> git commit -m "Delete 1.txt"
```

```
On branch master
```

```
Your branch is up-to-date with 'origin/master'.
```

```
Changes not staged for commit:
  deleted:    1.txt
```

```
no changes added to commit
```


Delete files

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master +0 ~0 -1]> git add --all
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master +0 ~0 -1]> git commit -m "Delete 1.txt"
[master 5f5b362] Delete 1.txt
1 file changed, 0 insertions(+), 0 deletions(-)
delete mode 100644 1.txt
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git push
Counting objects: 4, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (1/1), done.
Writing objects: 100% (2/2), 232 bytes | 0 bytes/s, done.
Total 2 (delta 0), reused 0 (delta 0)
To https://github.com/rippleblue/Rtest.git
383b2d8..5f5b362 master -> master
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]>
```

REPOSITORY MERGE

- 新增github 與 工作目錄
 - gitpython_empty
 - 照舊再做一次

- git remote add origin https://github.com/rippleblue/gitpython_empty.git
- git add .
- git branch new1
- git branch
- git checkout new1

- 新增任檔案
- `git add .`
- `git commit -m "new1 branch"`
- `git push`
- `git push origin new1`

- git checkout master
- git merge new1
- git push

Github

The screenshot shows the GitHub interface for a repository named 'gitpython_empty'. A modal window titled 'Switch branches/tags' is open, displaying a search bar 'Find or create a branch...' and a list of branches: 'master' (checked) and 'new1' (highlighted). The repository page shows the 'master' branch selected, with a commit hash 'db07d6b4dc' and a timestamp '10 minutes ago'. The page also features a 'Pull requests' section with 0 requests, a 'Wiki' section, and a 'Pulse' section. A 'Settings' link is visible in the right sidebar. At the bottom, there is a section for cloning the repository, showing the HTTPS clone URL 'https://github.com/...' and a button to 'Clone in Desktop'.

Branch: master **gitpython_empty** / +

Switch branches/tags

Find or create a branch...

Branches Tags

✓ master

new1

new1

latest commit db07d6b4dc

10 minutes ago

40 minutes ago

16 minutes ago

Help people interested in this repository understand your project by adding a README. [Add a README](#)

Pull requests 0

Wiki

Pulse

Graphs

Settings

HTTPS clone URL

<https://github.com/>

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

[Clone in Desktop](#)



Branch: **new1** ▾

gitpython_empty / +



This branch is 2 commits ahead, 1 commit behind master.

Pull request Compare

new file2



rippleblue authored 3 minutes ago

latest commit d2dfa94773

111.txt	next new file	10 minutes ago
2222.txt	new file	7 minutes ago
eee.txt	new file2	3 minutes ago
new111.txt	first commit	41 minutes ago
new222.txt	new1 branch	16 minutes ago

Help people interested in this repository understand your project by adding a README.

[Add a README](#)

Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).



base: **master** ▾

...

compare: **new1** ▾

✓ **Able to merge.** These branches can be automatically merged.



Create pull request

Discuss and review the changes in this comparison with others.



🔗 **2** commits

📄 **2** files changed

💬 **0** commit comments

👤 **1** contributor



Commits on Sep 19, 2015



rippleblue

new file

074cd64



rippleblue

new file2

d2dfa94



Showing **2** changed files with **0** additions and **0** deletions.

Unified

Split





New1 new file1

Write

Preview

 Markdown supported

Leave a comment

Attach images by dragging & dropping, [selecting them](#), or pasting from the clipboard.

Create pull request



rippleblue commented just now

Owner



No description provided.



rippleblue added some commits 8 minutes ago



new file

074cd64



new file2

d2dfa94

Add more commits by pushing to the **new1** branch on **rippleblue/gitpython_empty**.



This branch is up-to-date with the base branch

Merging can be performed automatically.



Merge pull request

You can also [open this in GitHub Desktop](#) or [view command line instructions](#).

BRANCH

Create and delete branches

- Create

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git branch
* master
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git branch v1
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git branch
* master
  v1
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]>
```

- Delete

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git branch -d v1
Deleted branch v1 (was 5f5b362).
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git branch
* master
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]>
```

- `git branch -D new-branch` # 強制刪除 new-branch

Switching branches

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git branch v1
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git branch
* master
  v1
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git checkout v1
Switched to branch 'v1'
C:\Users\rippleblue2002\Documents\GitHub\Rtest [v1]> git branch
* master
  v1
C:\Users\rippleblue2002\Documents\GitHub\Rtest [v1]>
```

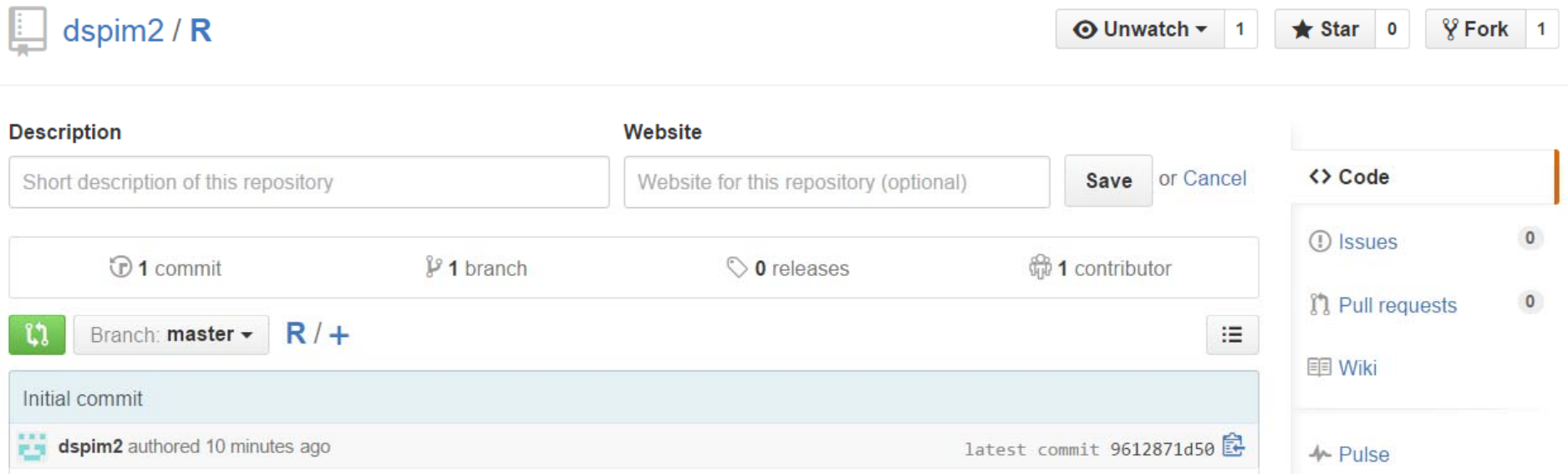
EXERCISE

Exercise

- Try to create non-empty and Empty repository
- Try to commit to repository
- Try to push files to repository
- Try to delete files from repository
- How to upload your files to teacher repository ?

How to upload your files to teacher repository ?

- 提交檔案到老師的Repository

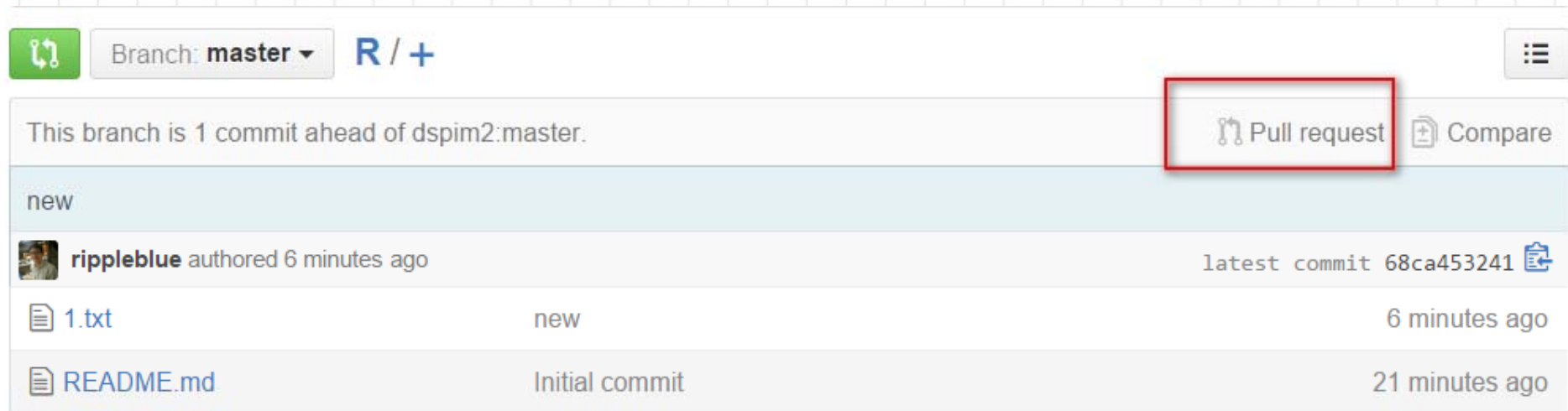


The screenshot shows the GitHub interface for the repository `dspim2 / R`. At the top, there are buttons for `Unwatch` (1), `Star` (0), and `Fork` (1). Below this is the repository description section with fields for `Description` and `Website`, and buttons for `Save` and `Cancel`. A summary bar shows `1 commit`, `1 branch`, `0 releases`, and `1 contributor`. Below the summary bar, there is a green `Branch: master` dropdown and a blue `R / +` button. The commit history shows an `Initial commit` by `dspim2` 10 minutes ago, with the latest commit hash `9612871d50`. On the right side, there is a sidebar with links for `Code`, `Issues` (0), `Pull requests` (0), `Wiki`, and `Pulse`.

先Fork到本機

- git clone <https://github.com/rippleblue/R.git>
- 新增檔案
- Git add .
- Git commit -m “something new”
- Git push

Create pull request




The screenshot shows a GitHub pull request interface. At the top, there's a green icon with two arrows, a dropdown menu showing 'Branch: master', and a blue 'R / +' button. To the right is a hamburger menu icon. Below this, a light gray bar states 'This branch is 1 commit ahead of dspim2:master.' To the right of this bar, a red rectangle highlights a button with a fork icon and the text 'Pull request', followed by a 'Compare' button with a plus icon. Below the bar, a light blue header says 'new'. The main content area shows a commit by 'rippleblue' authored 6 minutes ago, with the latest commit hash '68ca453241'. Below this, a table lists files: '1.txt' (new, 6 minutes ago) and 'README.md' (Initial commit, 21 minutes ago).



Branch: master R / +

This branch is 1 commit ahead of dspim2:master.

Pull request Compare

new

 rippleblue authored 6 minutes ago latest commit 68ca453241

 1.txt	new	6 minutes ago
 README.md	Initial commit	21 minutes ago

Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).



base fork: **dspim2/R** ▾

base: **master** ▾

...

head fork: **rippleblue/R** ▾

compare: **master** ▾

✓ **Able to merge.** These branches can be automatically merged.



Create pull request

Discuss and review the changes in this comparison with others.



🔗 **1** commit

📄 **1** file changed

💬 **0** commit comments

👤 **1** contributor



Commits on Sep 19, 2015



rippleblue

new

68ca453



Showing **1** changed file with **0** additions and **0** deletions.

Unified

Split

0




1.txt

View



收到Pull requests的Repository

 dspim2 / R

[Unwatch](#) 1 [Star](#) 0 [Fork](#) 1

Description

Short description of this repository

Website

Website for this repository (optional)

Save


 or [Cancel](#)


1 commit

1 branch



0 releases


1 contributor

 Branch: **master** [R / +](#)




Initial commit

 **dspim2** authored 22 minutes ago latest commit 9612871d50 

 [README.md](#)

Initial commit

22 minutes ago

 **README.md**

R

[Code](#)

[Issues](#) 0

[Pull requests](#) 1

[Wiki](#)

[Pulse](#)

[Graphs](#)

[Settings](#)

HTTPS clone URL



rippleblue commented [a minute ago](#)



No description provided.



new

68ca453



dspim2 commented just now

Owner



Thx



This branch is up-to-date with the base branch

Merging can be performed automatically.



Merge pull request

You can also open this in [GitHub Desktop](#) or view [command line instructions](#).



Write

Preview

Markdown supported

Leave a comment

Attach images by dragging & dropping, [selecting them](#), or pasting from the clipboard.

Close pull request

Comment

im



Merge pull request #2 from rippleblue/master

Something new2

 Confirm merge

Cancel

Description

Website

 or [Cancel](#)

🕒 3 commits

🌿 1 branch

📦 0 releases

👤 1 contributor



Branch: master ▾

R / +



Merge pull request #2 from rippleblue/master ...



dspim2 authored 10 seconds ago

latest commit aad009cae4

📄 1.txt

new

11 minutes ago

📄 README.md

Initial commit

25 minutes ago

📖 README.md

R

<> Code

🔔 Issues 0

🔗 Pull requests 0

📖 Wiki

📶 Pulse

📊 Graphs

⚙️ Settings

HTTPS clone URL



進階GIT

Git reset 還原

- 檔案經過Branch上傳
- 將v1進行Merge

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [v1]> git checkout master
Switched to branch 'master'
Your branch is up-to-date with 'origin/master'.
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git merge v1
Updating 5f5b362..816b591
Fast-forward
 2.txt | 0
 33.txt | 0
2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 2.txt
create mode 100644 33.txt
```

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> dir
```

```
目錄: C:\Users\rippleblue2002\Documents\GitHub\Rtest
```

Mode	LastWriteTime	Length	Name
-a---	2015/9/26 下午 11:15	0	1.txt
-a---	2015/9/26 下午 11:15	0	2.txt
-a---	2015/9/26 下午 11:15	0	3.txt
-a---	2015/9/26 下午 10:35	5	README.md

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git revert HEAD
```

```
[master f0a4e46] Revert "new"  
3 files changed, 0 insertions(+), 0 deletions(-)  
delete mode 100644 1.txt  
delete mode 100644 2.txt  
delete mode 100644 3.txt
```

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git push
```

```
Counting objects: 3, done.  
Delta compression using up to 4 threads.  
Compressing objects: 100% (1/1), done.  
Writing objects: 100% (2/2), 254 bytes | 0 bytes/s, done.  
Total 2 (delta 0), reused 0 (delta 0)  
To https://github.com/rippleblue/Rtest.git  
a942f8f..f0a4e46 master -> master
```

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> dir
```

```
目錄: C:\Users\rippleblue2002\Documents\GitHub\Rtest
```

Mode	LastWriteTime	Length	Name
-a---	2015/9/26 下午 10:35	5	README.md

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]>
```

- git show HEAD^ (前一版本)
- git show HEAD^^ (前前一版本)
- git show HEAD~4 (前前前前一版本)

```
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git show HEAD^
commit 929669b3419a4dd12562a3368d7e67fcd1d34d46
Author: jerry <jerry@mail.ntust.edu.tw>
Date: Sat Sep 26 22:37:16 2015 +0800

    txt2

diff --git a/2.txt b/2.txt
deleted file mode 100644
index e69de29..0000000
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git revert HEAD^
[master 50ba30b] Revert "txt2"
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 2.txt
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]> git push
Counting objects: 4, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 312 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/rippleblue/Rtest.git
 f0a4e46..50ba30b master -> master
C:\Users\rippleblue2002\Documents\GitHub\Rtest [master]>
```


- git show filename #檢查狀態
- git diff filename #列出差異
- git stash #放入暫存區