

# CS213 Recitation 1

# **Qinchen Yang (Email: qy129@scarletmail.rutgers.edu)**

## - Recitation:

- We will cover key points from the lecture and any additional topics specified by the professor.
- All materials discussed will be documented in our slides and uploaded to the Files module in Canvas.

## - Office Hour:

- Tuesdays, 2:30PM - 3:30PM
- Location: <https://rutgers.zoom.us/j/99842410673?pwd=amVlcms2VGN4dIBXZ01UTU8zeEhOUT09>
- You can also reach out to me via email at any time.

## - Grading:

- Another TA and I will grade the midterm and final exams, which together account for 45% of your final grade.
- For the two recitations following the midterm exam, I will bring your graded papers to the recitation. You're welcome to come and review your exam paper during this time.

## - Other TA:

- Jinquan Hang, Email: jinquan.hang@rutgers.edu

## - Graders for 5 Java Projects (55% of your final grade):

- Krina Patel, Email: kp1005@scarletmail.rutgers.edu
- Laksh Kotian, Email: lk596@scarletmail.rutgers.edu

- Install IntelliJ
- Create a Java project
- Basic Operations for Github

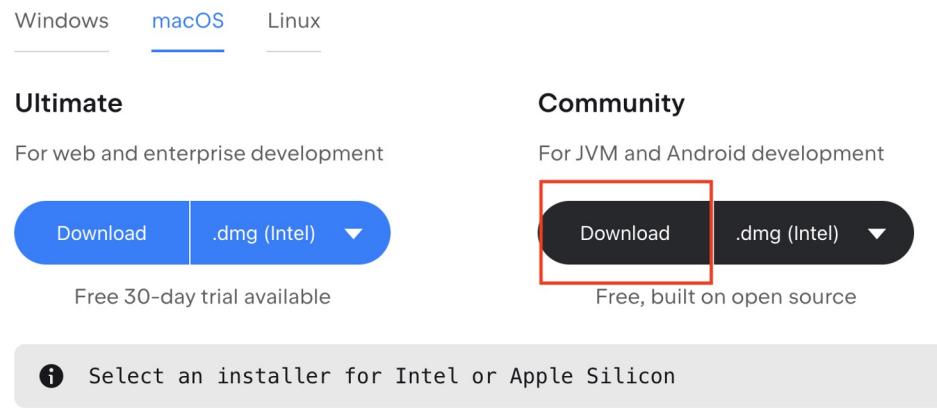
# Install IntelliJ

# Download installer

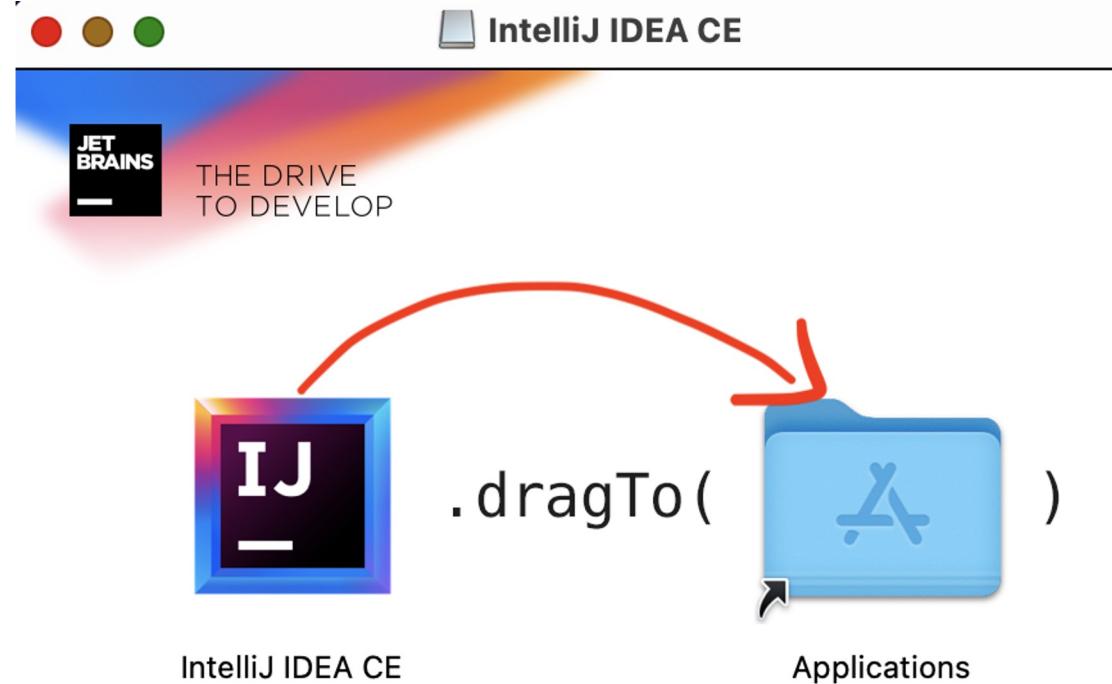
1. Website: <https://www.jetbrains.com/idea/download/>

or search “IntelliJ” on Google

1. Download the Community edition (Mac should choose the Apple Silicon version, except for the 2020 27-inch iMac. the 2019 Mac Pro. and the 2018 Mac mini.) **Download IntelliJ IDEA**



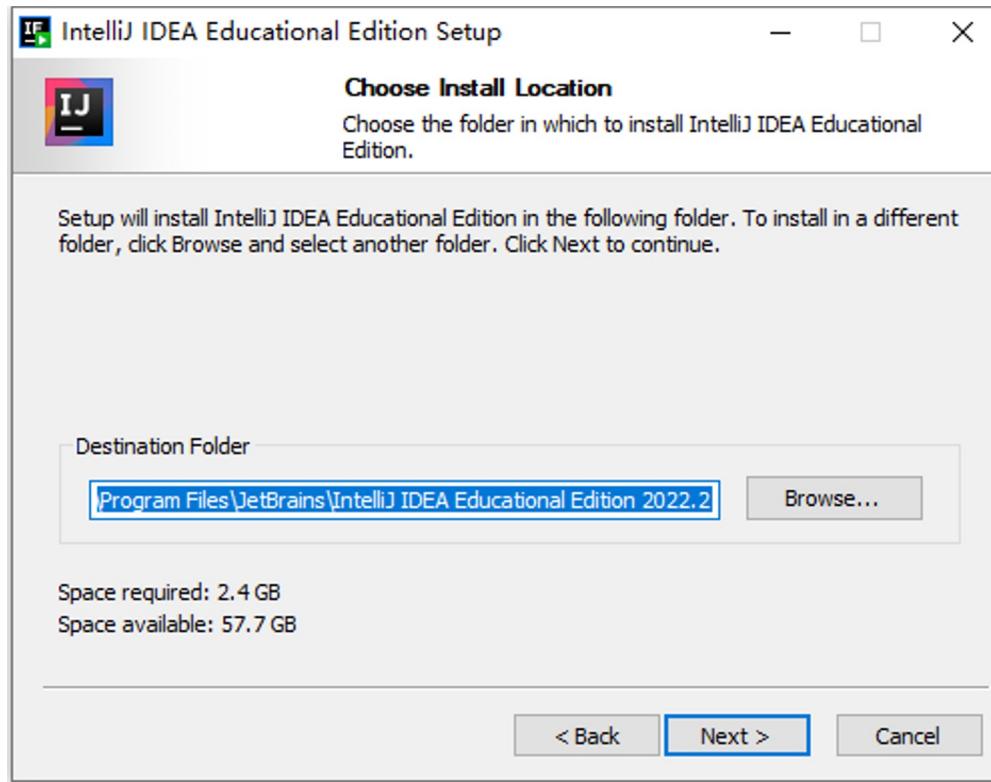
# For Mac



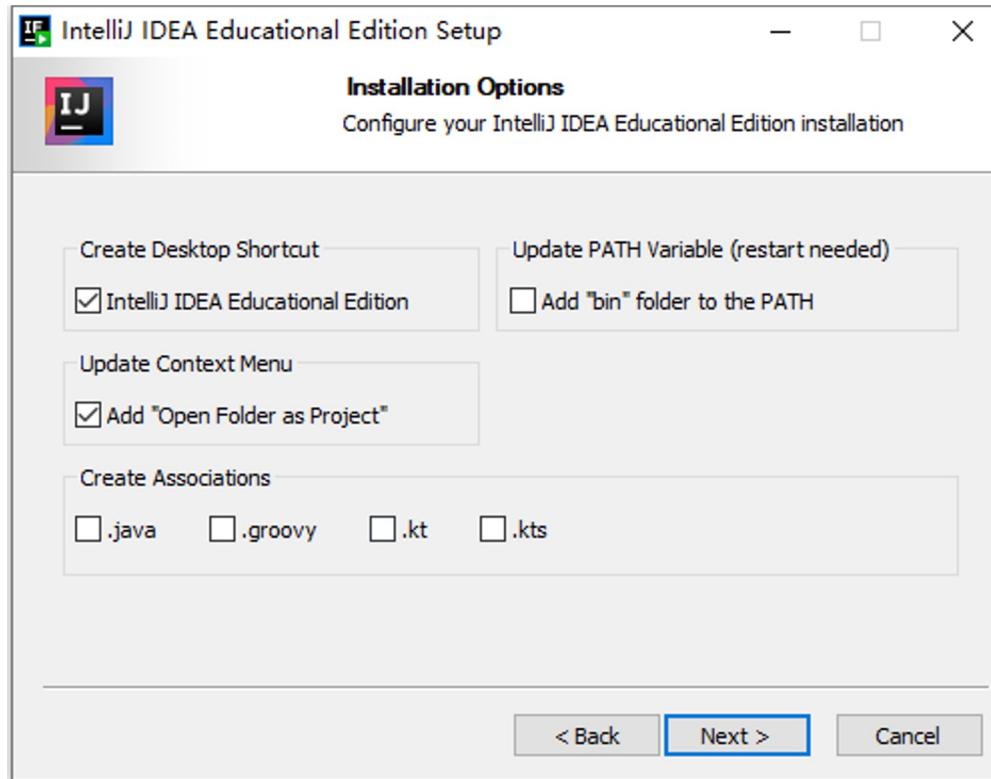
# For Windows



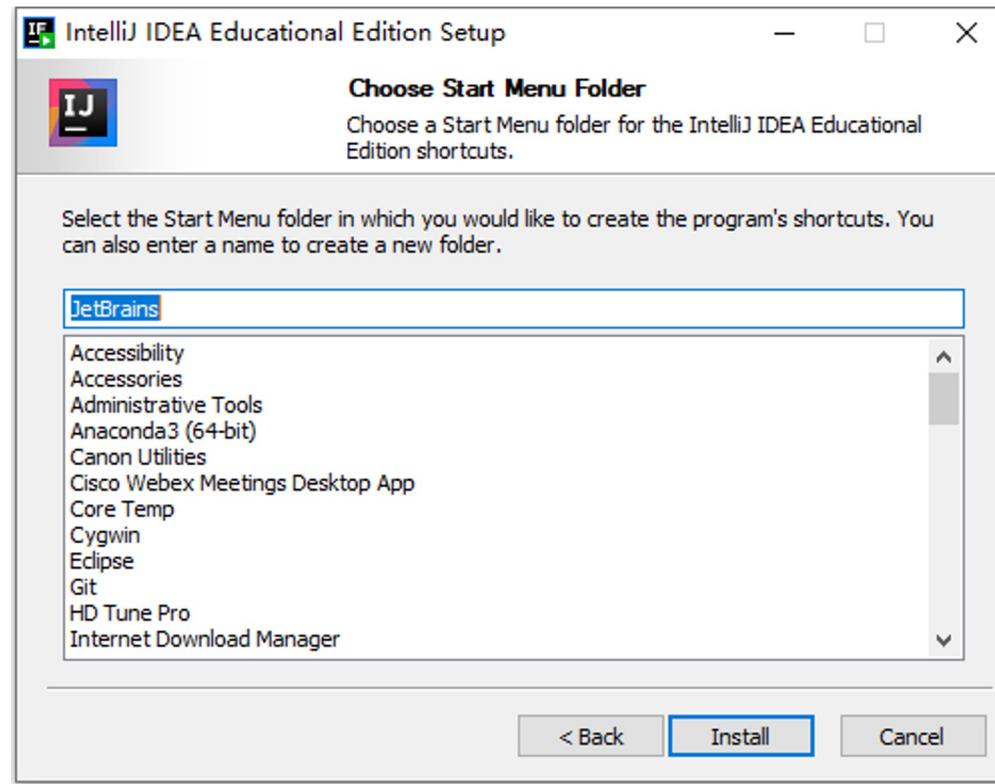
# For Windows



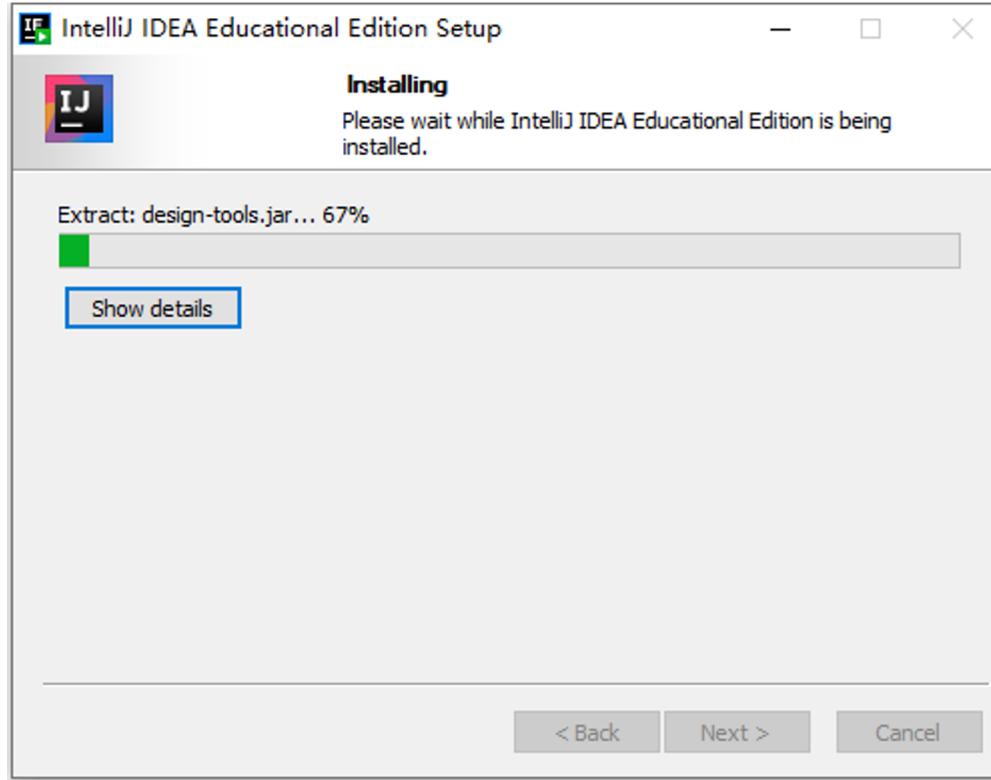
# For Windows



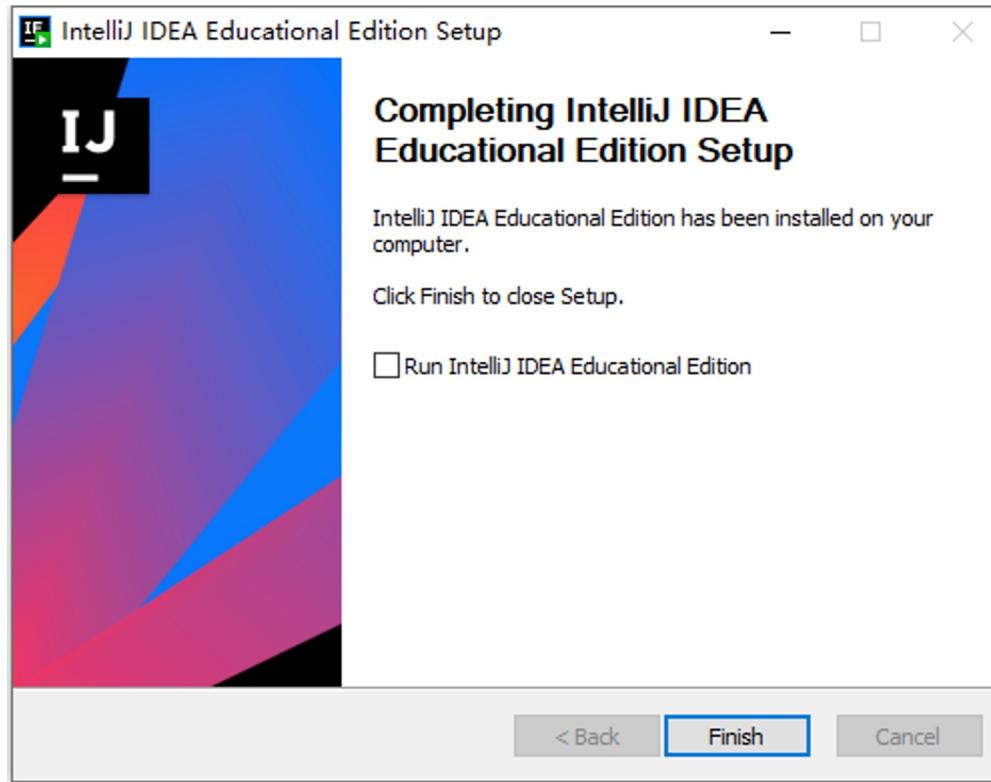
# For Windows



# For Windows



# For Windows



# **Create a toy project**



Projects

Customize

Plugins

Learn IntelliJ IDEA

My Courses

# Welcome to IntelliJ IDEA

Create a new project to start from scratch.

Open existing project from disk or version control.



New Project



Open



Get from VCS

Open existing Eclipse projects...

## Take a quick onboarding tour

Get familiar with the IntelliJ IDEA user interface and learn how to code in Java with smart assistance in just 7 minutes!

Start Tour



## New Project



New Project

Empty Project

Generators

Maven Archetype

JavaFX

Kotlin Multiplatform

Compose Multiplatform

IDE Plugin

Android

Name: first\_project

Location: D:\CS213



Project will be created in: D:\CS213\first\_project

 Create Git repository

Language: Java Kotlin Groovy Scala +

Build system: IntelliJ Maven Gradle

JDK: 18 Oracle OpenJDK version 18.0.2

 Add sample code

&gt; Advanced Settings



Download JDK

Version: 18



Vendor: Oracle OpenJDK 18.0.2.1



Location: ~/Library/Java/JavaVirtualMachines/openjdk-18.0.2.1



JDK:

18 Oracle OpenJDK version 18.0.1

18 Oracle OpenJDK version 18.0.1

Download JDK...

Add JDK...

&gt; Advanced Se

Cancel

Download

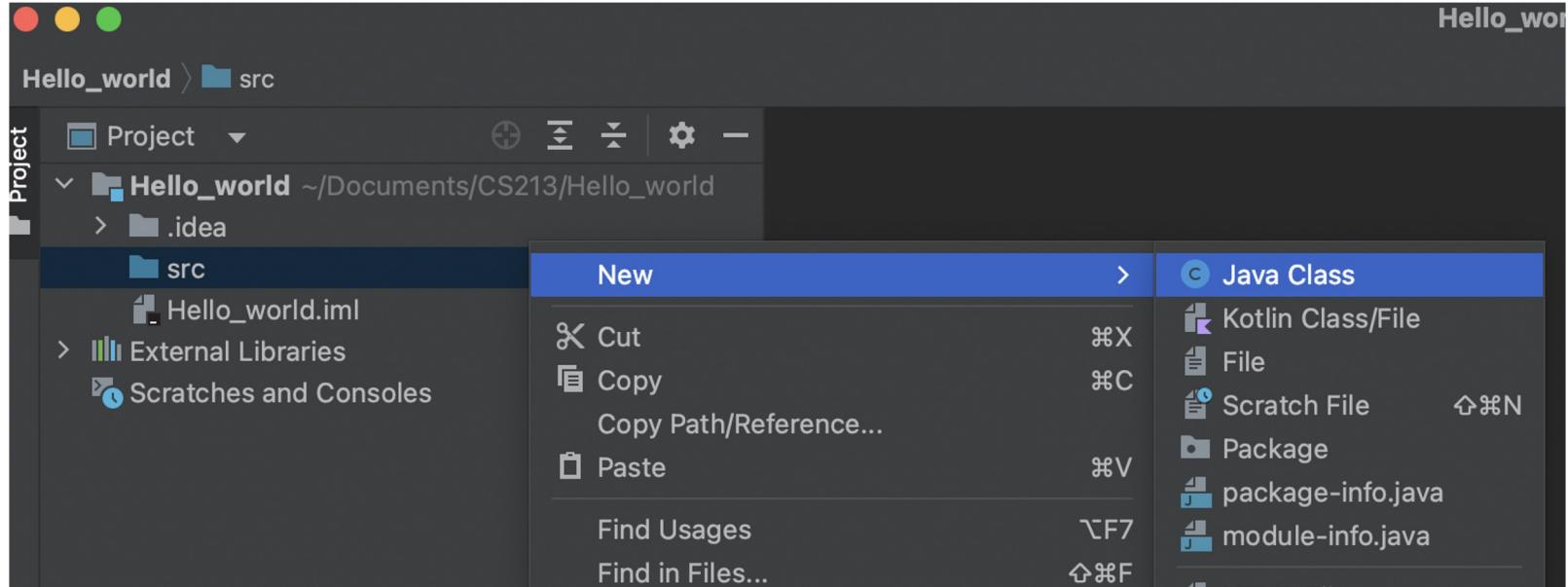
Detected SDKs

/Library/Java/JavaVirtualMachines/openjdk-8.jdk version 1.8.0\_312

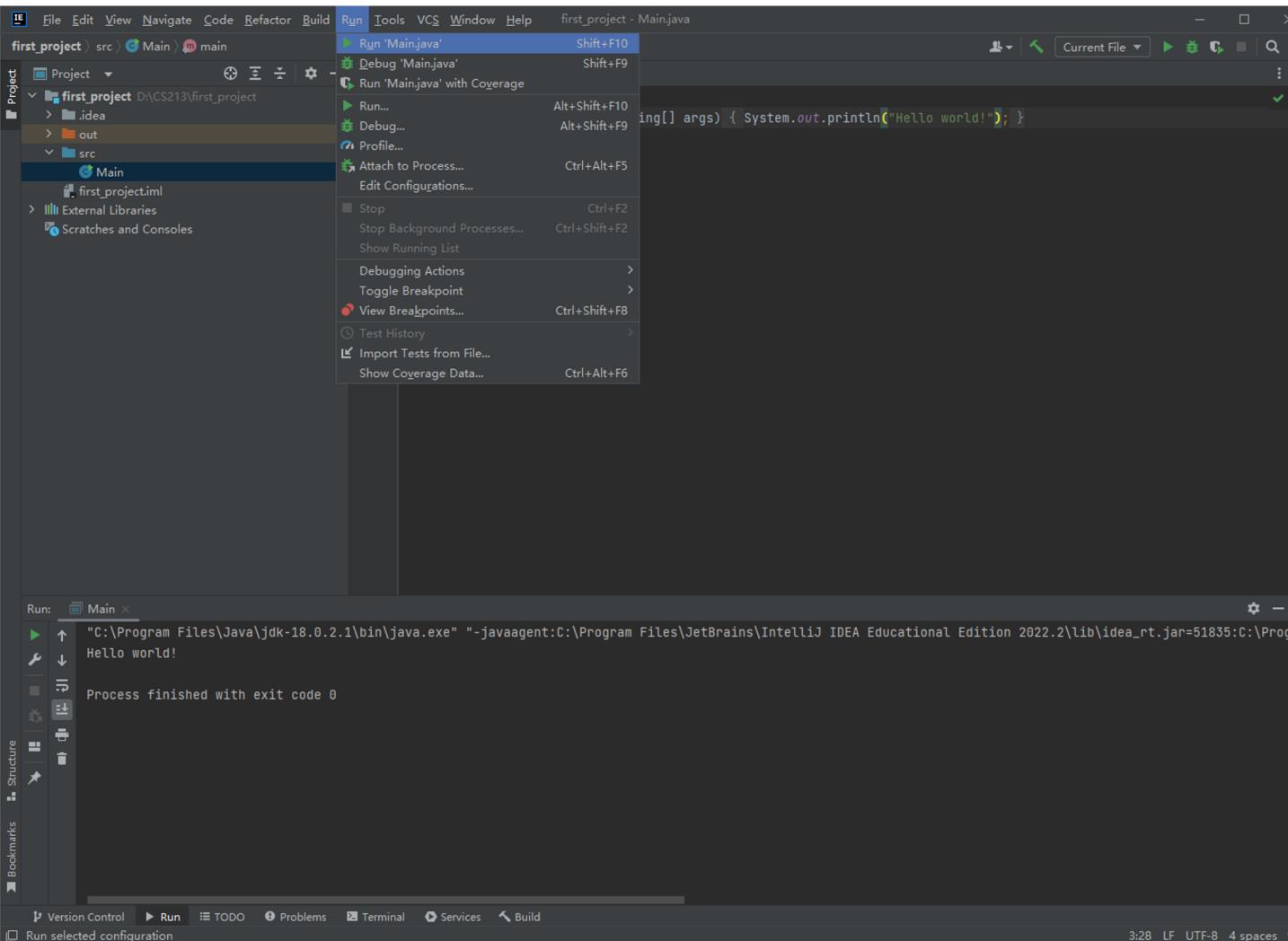
The screenshot shows the IntelliJ IDEA interface with a Java project named "first\_project". The project structure on the left includes ".idea", "src" (containing "Main.java"), "External Libraries", and "Scratches and Consoles". The "Main.java" file is open in the editor, displaying the following code:

```
1  public class Main {
2      public static void main(String[] args) { System.out.println("Hello world!"); }
3  }
```

The status bar at the bottom provides information about version control, problems, terminal, services, indexing, and file encoding.



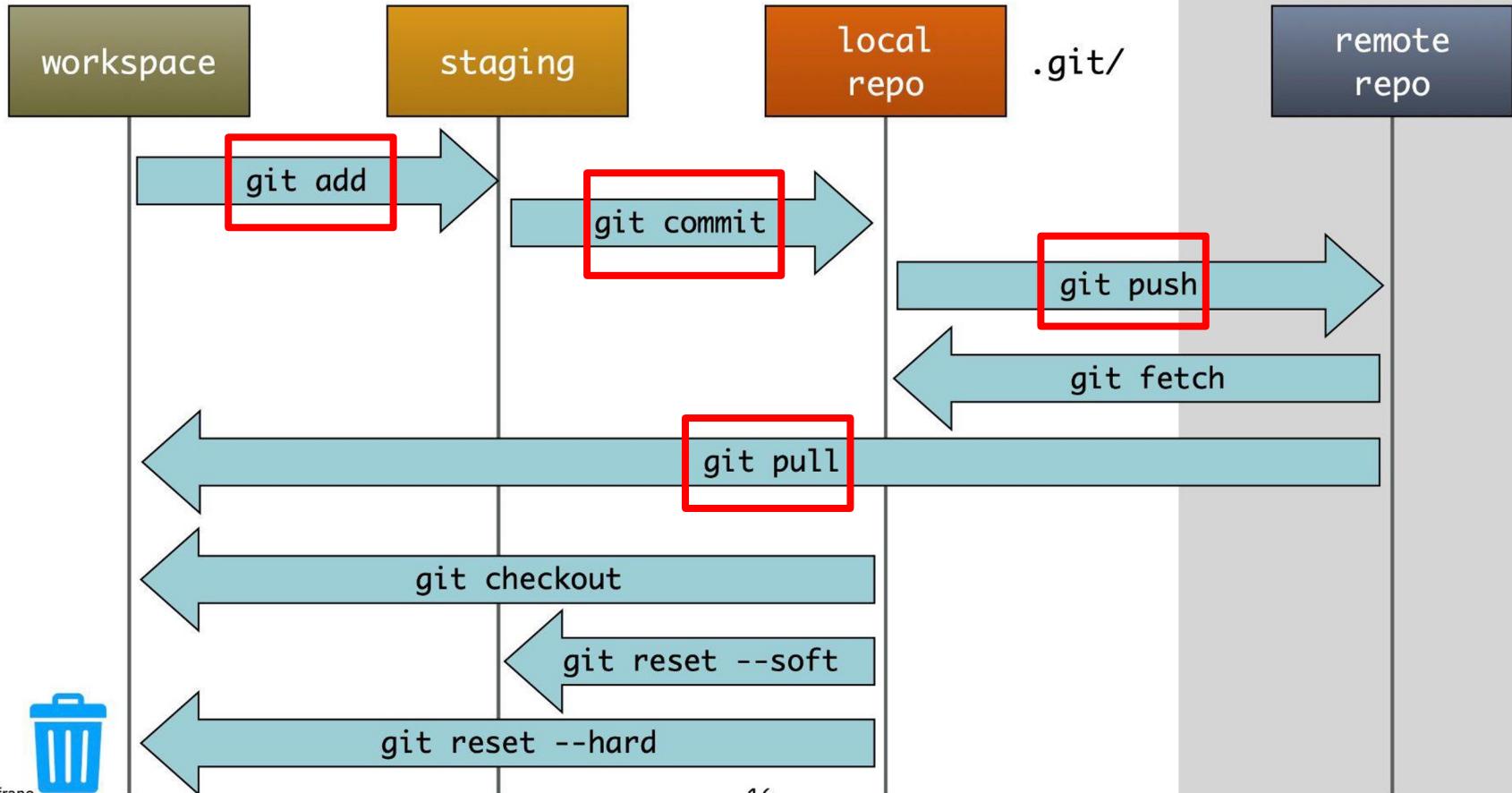
```
public class Main {  
  
    public static void main(String[] args) { System.out.println("Hello world!"); }  
}
```



# **Basic Operations for Github**



# Git Command Workflow



# .gitconfig

- It's important to make sure that you have git configured correctly with your `user.name` and `user.email`
- You can use `git config -l` to list the values
- You can use `git config name value` to change them

```
git config --global user.name "Your Name Goes Here"
```

```
git config --global user.email you@example.com
```



# SSH Keys

The Mac OS logo, featuring the word "Mac" in black and "OS" in blue.

- If you haven't set up an ssh key to work with GitHub then you should do this now. In your Terminal window type the following:

```
$ ssh-keygen -t rsa -b 4096 -C "youremail@nyu.edu"
```

- Just press ENTER at all of the prompts. This will generate a private and public ssh key that you can use with GitHub

# New SSH key

The screenshot shows the GitHub 'Personal settings' page with the 'SSH keys' section highlighted. A red box labeled 'Select New SSH key' surrounds the 'New SSH key' button, and another red box labeled 'Select SSH and GPG keys' surrounds the 'SSH and GPG keys' section.

**Personal settings**

- Profile
- Account
- Emails
- Notifications
- Billing
- SSH and GPG keys**
- Security
- Sessions
- Blocked users
- Repositories
- Organizations

**SSH keys**

Select New SSH key → **New SSH key**

This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.

Key	Name	Identifier	Added	Last Used	Action
	John's MacBook Pro	1b:1c:4f:4d:2a:e8:b7:87:c9:f2:11:61:d0:a2:dc:e5	Added on Jul 27, 2013	Last used within the last 2 weeks — Read/write	<b>Delete</b>

SSH and GPG keys → Select SSH and GPG keys → **New GPG key**

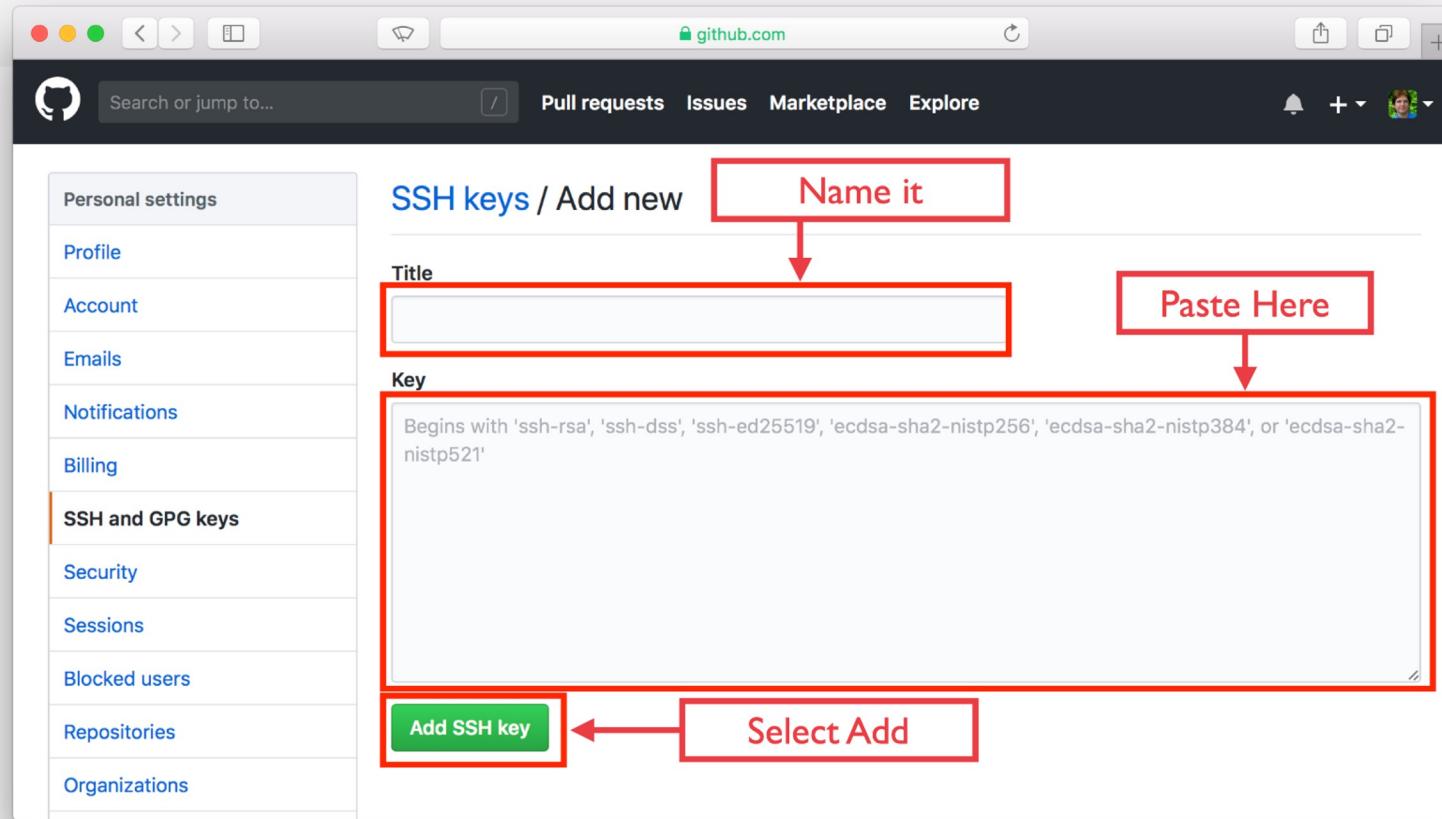
**GPG keys**

New GPG key

There are no GPG keys associated with your account.

Learn how to [generate a GPG key](#) and add it to your account.

# Add SSH key



# Create a New Repository

The screenshot shows the GitHub homepage with a red arrow pointing to the green 'New repository' button in the top right corner of the 'Your repositories' section.

**New repository**

Discover interesting projects and people to populate your personal news feed.

Your news feed helps you keep up with repositories you [watch](#) and people you [follow](#).

[Explore GitHub](#)

© 2016 GitHub, Inc. [Terms](#) [Privacy](#) [Security](#) [Status](#) [Help](#)

Contact GitHub API Training Shop Blog About

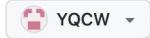
hitcounter

## Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository](#).

Required fields are marked with an asterisk (\*).

Owner \*



Repository name \*

CS213

CS213 is available.

Great repository names are short and memorable. Need inspiration? How about [fictional-octo-adventure](#) ?

Description (optional)

This repo is for demo.

Public

Anyone on the internet can see this repository. You choose who can commit.

Private

You choose who can see and commit to this repository.

Initialize this repository with:

Add a README file

This is where you can write a long description for your project. [Learn more about READMEs](#).

Add .gitignore

.gitignore template: None ▾

Choose which files not to track from a list of templates. [Learn more about ignoring files](#).

Choose a license

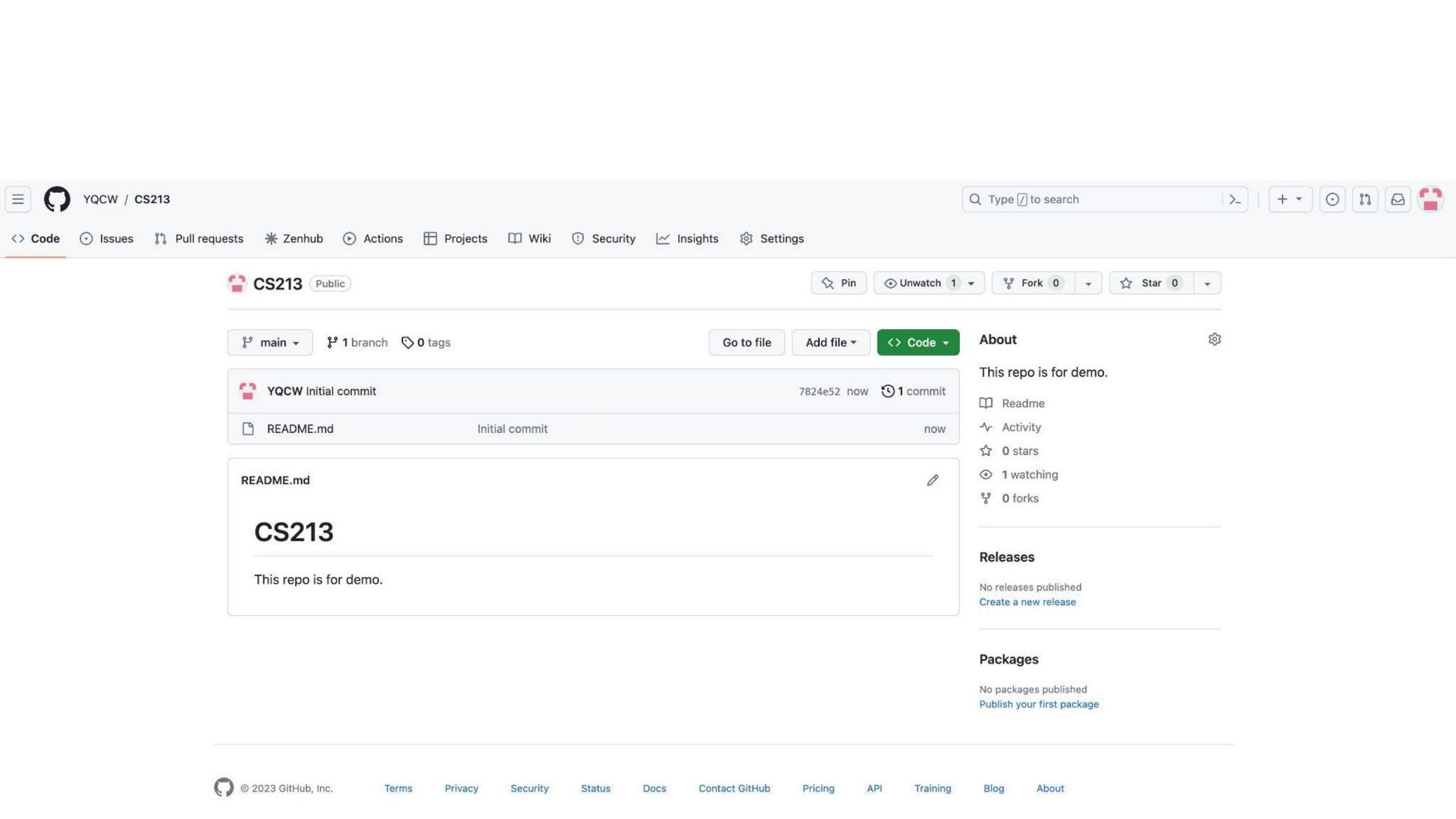
License: None ▾

A license tells others what they can and can't do with your code. [Learn more about licenses](#).

This will set `main` as the default branch. Change the default name in your [settings](#).

You are creating a public repository in your personal account.

Create repository



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Terms

Privacy

Security

Status

Docs

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Blog

About

# Clone your repo (command: git clone + URL)

The screenshot shows a GitHub repository page for 'CS213'. The top navigation bar includes links for Code, Issues, Pull requests, Zenhub, Actions, Projects, Wiki, Security, Insights, and Settings. The repository name 'CS213' is displayed, along with its status as 'Public'. On the left, there's a file tree showing 'main' (1 branch), '1 branch', and '0 tags'. A commit titled 'YQCW Initial commit' is listed, along with a 'README.md' file. The main content area features a large 'CS213' title and a note: 'This repo is for demo.' To the right, there's an 'About' section with details like 'Readme', 'Activity', '0 stars', '1 watching', and '0 forks'. Below this is a 'Releases' section indicating 'No releases published' and a 'Create a new release' link. At the bottom is a 'Packages' section with a note about publishing packages. A prominent red box highlights the 'Code' dropdown menu and the 'git@github.com:YQCW/CS213.git' clone URL.

Code Issues Pull requests Zenhub Actions Projects Wiki Security Insights Settings

CS213 Public

main 1 branch 0 tags

YQCW Initial commit

README.md Initial commit

README.md

CS213

This repo is for demo.

About

This repo is for demo.

Readme Activity 0 stars 1 watching 0 forks

Releases

No releases published Create a new release

Packages

No packages published Publish your first package

Code ▾

Local Codespaces

Clone

HTTPS SSH GitHub CLI

git@github.com:YQCW/CS213.git

Use a password-protected SSH key.

Open with GitHub Desktop

Download ZIP

```
(base) qinchenyang@nbp-25-135-189 tmp % git clone git@github.com:YQCW/CS213.git
Cloning into 'CS213'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
(base) qinchenyang@nbp-25-135-189 tmp % cd CS213
(base) qinchenyang@nbp-25-135-189 CS213 % ls
README.md
(base) qinchenyang@nbp-25-135-189 CS213 % ls -la
total 8
drwxr-xr-x  4 qinchenyang  staff  128 Sep 12 11:56 .
drwxr-xr-x  3 qinchenyang  staff   96 Sep 12 11:56 ..
drwxr-xr-x 12 qinchenyang  staff  384 Sep 12 11:56 .git
-rw-r--r--  1 qinchenyang  staff   31 Sep 12 11:56 README.md
(base) qinchenyang@nbp-25-135-189 CS213 % git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
```

---

# CS213

This repo is for demo.

Modified~~~~

~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~

-- INSERT --

```
(base) qinchenyang@nbp-25-135-189 CS213 % vim README.md
(base) qinchenyang@nbp-25-135-189 CS213 % git diff
diff --git a/README.md b/README.md
index 9678bc3..810ded7 100644
--- a/README.md
+++ b/README.md
@@ -1,2 +1,3 @@
# CS213
This repo is for demo.
+Modified~~~~
```

```
(base) qinchenyang@nbp-25-135-189 CS213 % git add .
(base) qinchenyang@nbp-25-135-189 CS213 % git commit -m "your comment here"
[main ecc6c0c] your comment here
 1 file changed, 1 insertion(+)
(base) qinchenyang@nbp-25-135-189 CS213 % git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Writing objects: 100% (3/3), 282 bytes | 282.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:YQCW/CS213.git
 7824e52..ecc6c0c  main -> main
(base) qinchenyang@nbp-25-135-189 CS213 % git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
```



Type  to search



[Code](#) [Issues](#) [Pull requests](#)

[Zenhub](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)

[Files](#)

[CS213 / README.md](#)

YQCW your comment here

ecc6c0c · 3 minutes ago [History](#)

[Preview](#)

[Code](#)

[Blame](#)

3 lines (3 loc) · 44 Bytes

Code 55% faster with GitHub Copilot

[Raw](#)

# CS213

This repo is for demo. Modified~~~~

[Sign in now to use Zenhub](#)