



Lab on apps development for tablets, smartphones and smartwatches

How to use git for your final projects

Giovanni Ansaloni

Dimitra Tatli, Riselda Kodra, Yuxuan Wang
Qunyou Liu, Amirhossein Shahbazinia, Christodoulos Kechris

School of Engineering (STI) – Institute of Electrical and Micro Engineering (IEM)



- Sign in to Gitlab with Tequila:
 - gitlab.epfl.ch
- Update your profile if it is necessary.
- Ask us to add you to the course's group in Gitlab.

Gitlab Account

Sign in with

Remember me



- Ask a TA for the creation of a new gitlab project named after your group
 - 1-A_Heart-RateGame
 - 1-B_Image-Hunt
 - ...

Create your project

Android-EE-490 > ... > MySampleGroup

M MySampleGroup Group ID: 19199 [Leave group](#) 🔔 New subgroup New project

Subgroups and projects Shared projects Archived projects Name ▾

Create new subgroup
Groups are the best way to manage multiple projects and members.

Create new project
Projects are where you can store your code, access issues, wiki, and other features of Gitlab.

New project > **Create blank project**

Project name

Project URL **Project slug**

Want to organize several dependent projects under the same namespace? [Create a group.](#)

Project description (optional)

Visibility Level [?](#)
 Private
Project access must be granted explicitly to each user. If this project is part of a group, access is granted to members of the group.

Project Configuration

Initialize repository with a README
Allows you to immediately clone this project's repository. Skip this if you plan to push up an existing repository.

Enable Static Application Security Testing (SAST)
Analyze your source code for known security vulnerabilities. [Learn more.](#)

Create project Cancel



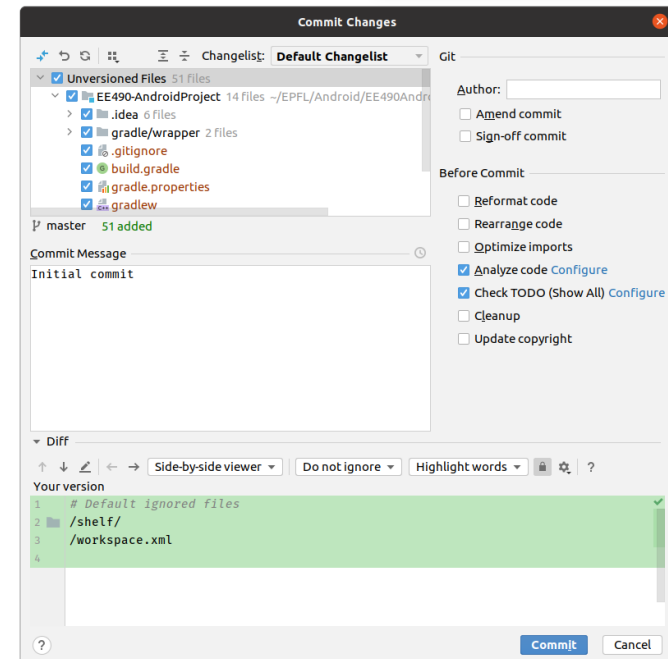
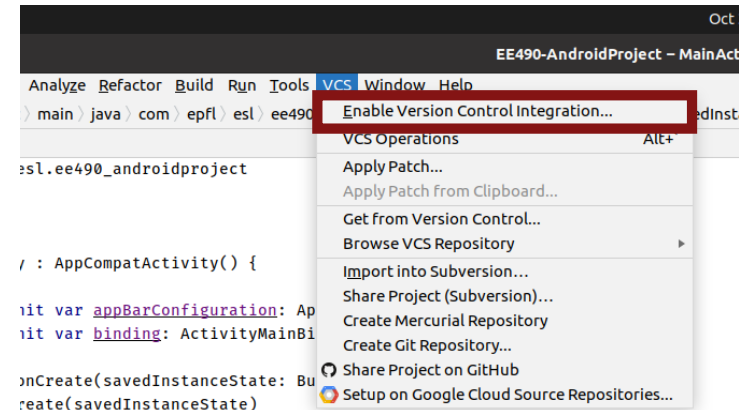
Init:

- Initialize version control system (VCS) with git:
 - VCS -> Enable Version Control Integration -> git

Commit:

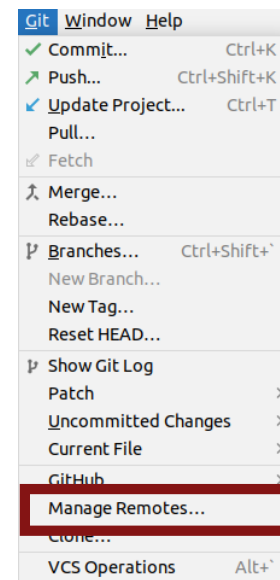
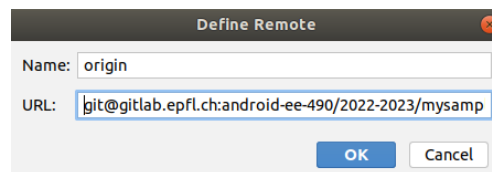
- Git -> Commit... -> Commit Changes
- Select all the files and write the Commit Message and then Commit

Git init and commit





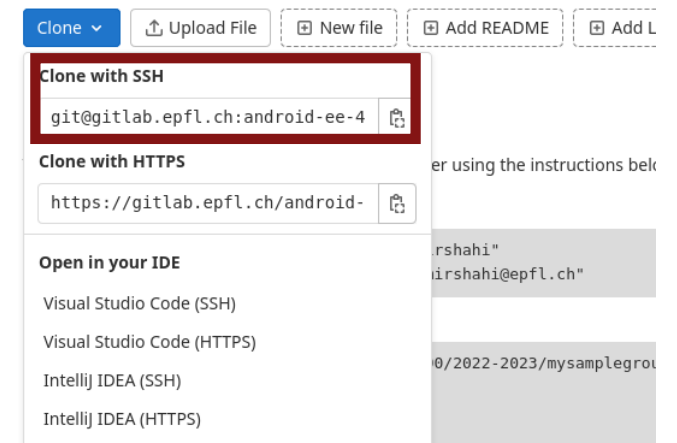
- In your Gitlab project page:
 - Copy the **Clone** link with **SSH**
- In Android Studio:
 - Git -> Manage Remotes
 - Define a remote as "origin"
 - Paste the URL from Gitlab



Set git remotes

The repository for this project is empty

You can get started by cloning the repository or start adding files to it with one of the following options:





Git SSH key

- If you already have an SSH key connected to your Gitlab account, skip this step.
- Follow this link to generate an SSH key in your system and connect it with your Gitlab account:

<https://docs.gitlab.com/ee/user/ssh.html>

- The procedure is different for each OS → Ask us if you have problems



Git branch, commit, and push

- When your Android Studio is connected to Gitlab,
- Create your branch in Android Studio by:
 - Git -> New branch... -> put your name as the new branch name
- For every important changes in the code use Git -> commit
 - Use meaningful commit messages
 - Use commit frequently
- Push your changes to the remote by Git -> Push...

Git fetch and merge

- When your friend pushes his/her code, you can have access to the code by fetching the code from the origin. Use Git -> Fetch.
- If you want to use their code, you should merge their code with yours. But pay attention to (probable) conflicts!
- *Ask us if you need help with git commands!*

