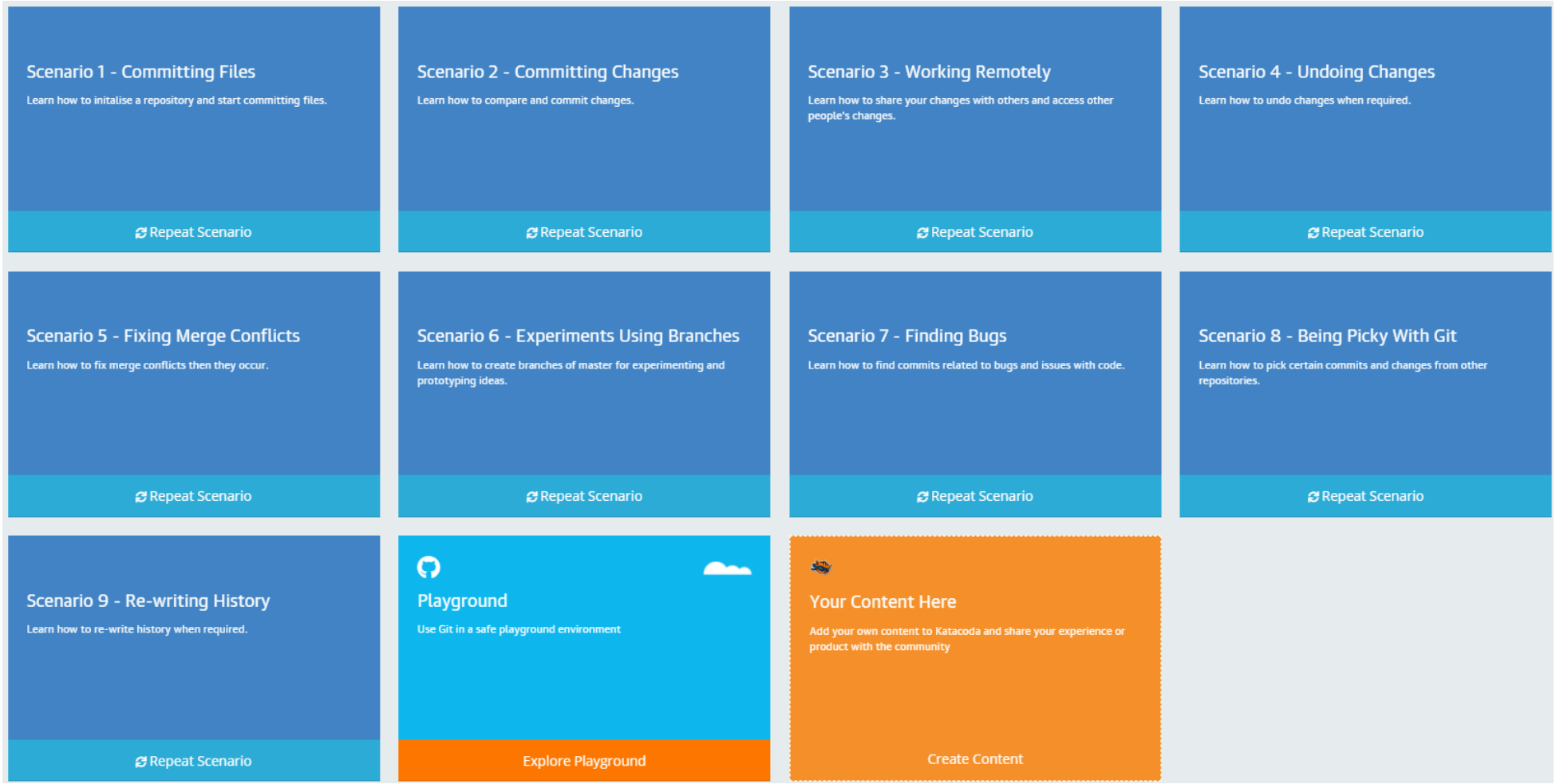
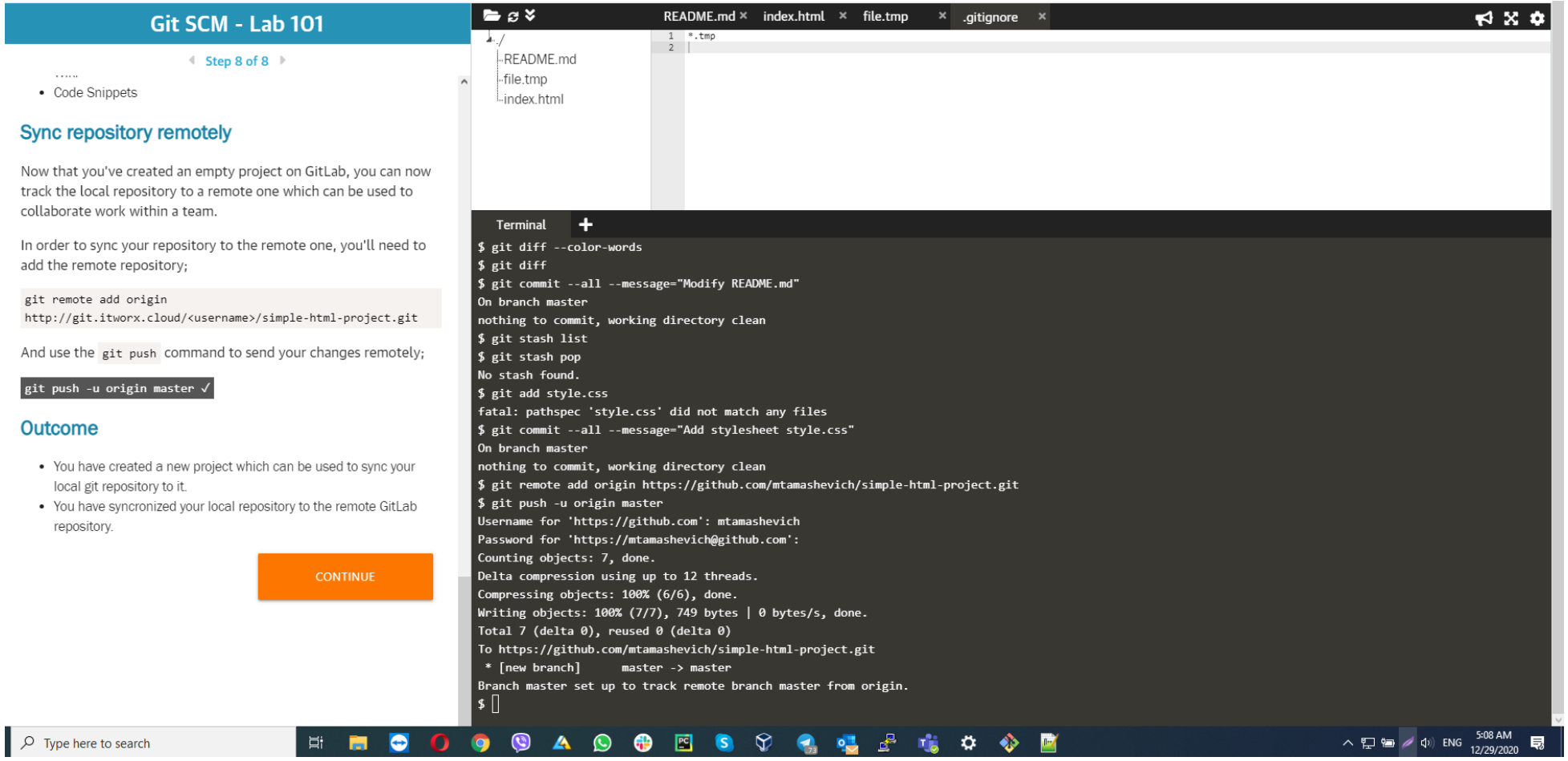
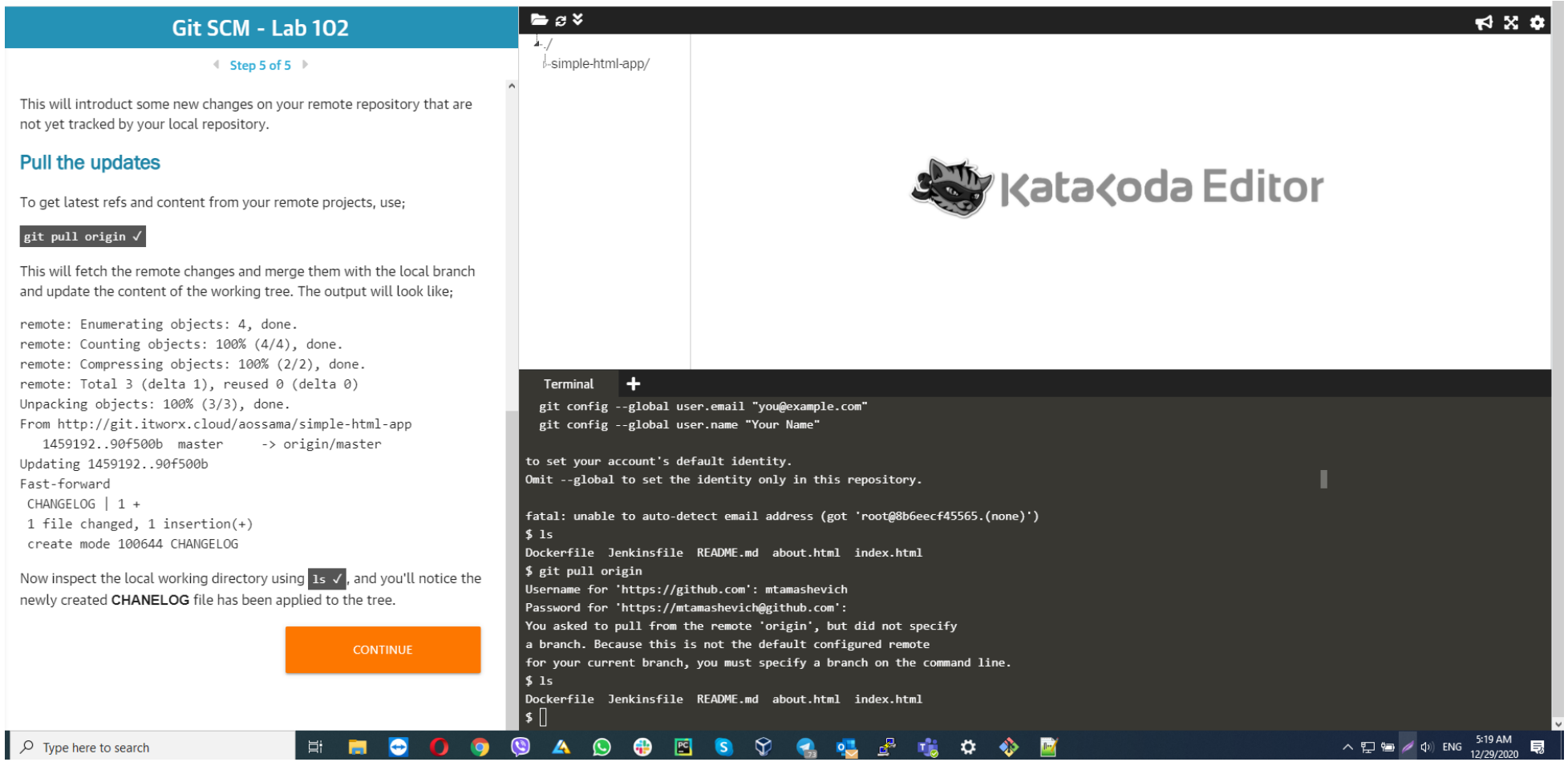
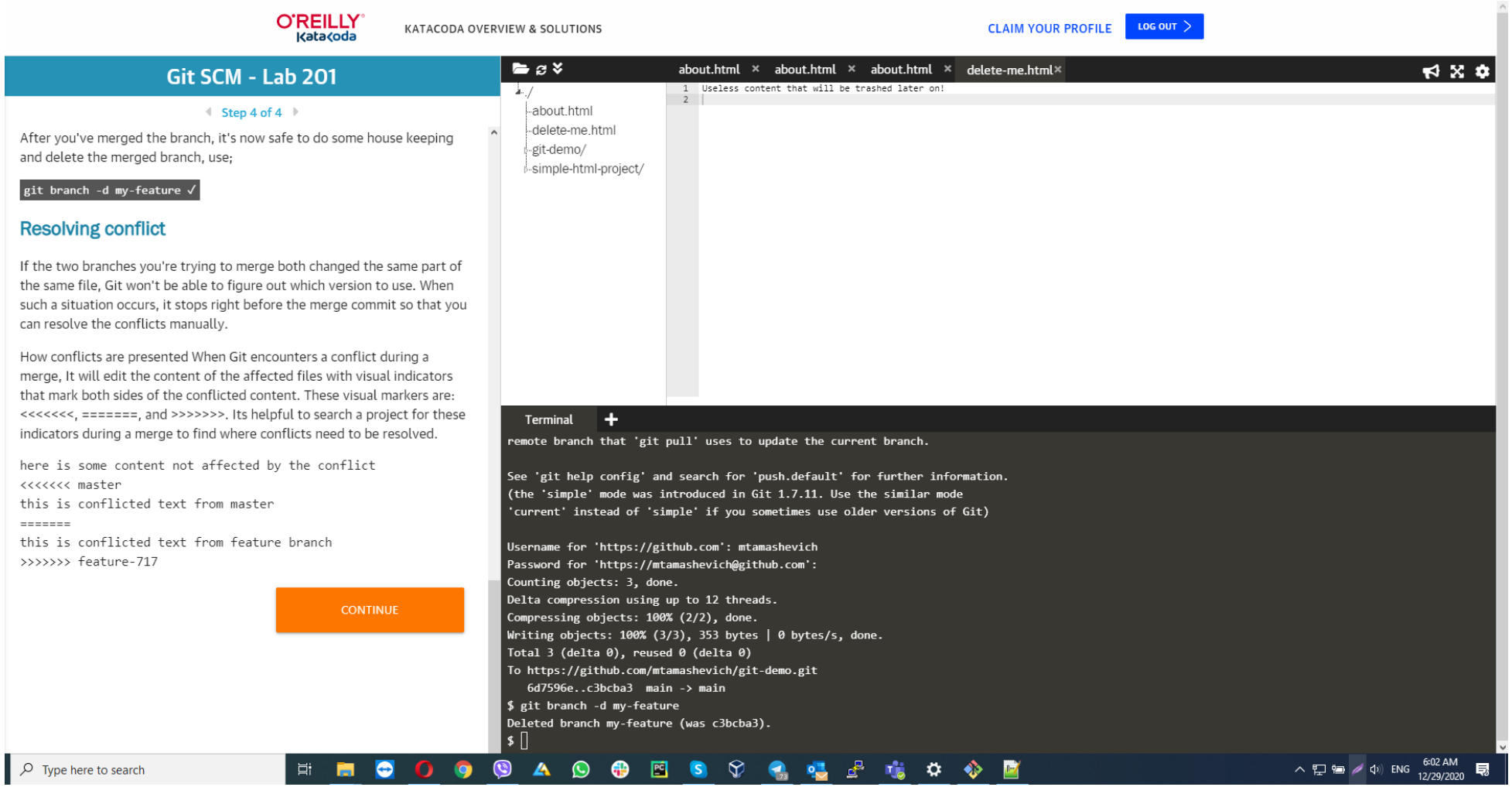

Scenario 1 - Committing Files
Learn how to initalise a repository and start committing files.
Repeat Scenario
Scenario 2 - Committing Changes
Learn how to compare and commit changes.
Repeat Scenario
Scenario 3 - Working Remotely
Learn how to share your changes with others and access other people's changes.
Repeat Scenario
Scenario 4 - Undoing Changes
Learn how to undo changes when required.
Repeat Scenario
Scenario 5 - Fixing Merge Conflicts
Learn how to fix merge conflicts then they occur.
Repeat Scenario
Scenario 6 - Experiments Using Branches
Learn how to create branches of master for experimenting and prototyping ideas.
Repeat Scenario
Scenario 7 - Finding Bugs
Learn how to find commits related to bugs and issues with code.
Repeat Scenario
Scenario 8 - Being Picky With Git
Learn how to pick certain commits and changes from other repositories.
Repeat Scenario
Scenario 9 - Re-writing History
Learn how to re-write history when required.
Repeat Scenario
Playground
Use Git in a safe playground environment
Explore Playground
Your Content Here
Add your own content to Katacoda and share your experience or product with the community
Create Content


Git SCM - Lab 101
Step 8 of 8
Code Snippets
Sync repository remotely
Now that you've created an empty project on GitLab, you can now track the local repository to a remote one which can be used to collaborate work within a team.
In order to sync your repository to the remote one, you'll need to add the remote repository;
git remote add origin http://git.itworx.cloud/<username>/simple-html-project.git
And use the git push command to send your changes remotely;
git push -u origin master ✓
Outcome
You have created a new project which can be used to sync your local git repository to it.
You have syncronized your local repository to the remote GitLab repository.
CONTINUE
README.md
index.html
file.tmp
.gitignore
./
README.md
file.tmp
index.html
*.tmp
Terminal
$ git diff --color-words
$ git diff
$ git commit --all --message="Modify README.md"
On branch master
nothing to commit, working directory clean
$ git stash list
$ git stash pop
No stash found.
$ git add style.css
fatal: pathspec 'style.css' did not match any files
$ git commit --all --message="Add stylesheet style.css"
On branch master
nothing to commit, working directory clean
$ git remote add origin https://github.com/mtamashevich/simple-html-project.git
$ git push -u origin master
Username for 'https://github.com': mtamashevich
Password for 'https://mtamashevich@github.com':
Counting objects: 7, done.
Delta compression using up to 12 threads.
Compressing objects: 100% (6/6), done.
Writing objects: 100% (7/7), 749 bytes | 0 bytes/s, done.
Total 7 (delta 0), reused 0 (delta 0)
To https://github.com/mtamashevich/simple-html-project.git
* [new branch] master -> master
Branch master set up to track remote branch master from origin.
$
Type here to search
ENG
5:08 AM
12/29/2020


Git SCM - Lab 102
Step 5 of 5
This will introduct some new changes on your remote repository that are not yet tracked by your local repository.
Pull the updates
To get latest refs and content from your remote projects, use;
git pull origin ✓
This will fetch the remote changes and merge them with the local branch and update the content of the working tree. The output will look like;
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 1), reused 0 (delta 0)
Unpacking objects: 100% (3/3), done.
From http://git.itworx.cloud/aossama/simple-html-app
1459192..90f500b master -> origin/master
Updating 1459192..90f500b
Fast-forward
CHANGELOG | 1 +
1 file changed, 1 insertion(+)
create mode 100644 CHANGELOG
Now inspect the local working directory using ls ✓, and you'll notice the newly created CHANELOG file has been applied to the tree.
CONTINUE
./
simple-html-app/
Katakoda Editor
Terminal
git config --global user.email "you@example.com"
git config --global user.name "Your Name"
to set your account's default identity.
Omit --global to set the identity only in this repository.
fatal: unable to auto-detect email address (got 'root@8b6eecf45565.(none)')
$ ls
Dockerfile Jenkinsfile README.md about.html index.html
$ git pull origin
Username for 'https://github.com': mtamashevich
Password for 'https://mtamashevich@github.com':
You asked to pull from the remote 'origin', but did not specify
a branch. Because this is not the default configured remote
for your current branch, you must specify a branch on the command line.
$ ls
Dockerfile Jenkinsfile README.md about.html index.html
$
Type here to search
ENG
5:19 AM
12/29/2020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KATACODA OVERVIEW & SOLUTIONS
CLAIM YOUR PROFILE
LOG OUT
Git SCM - Lab 201
Step 4 of 4
After you've merged the branch, it's now safe to do some house keeping and delete the merged branch, use;
git branch -d my-feature ✓
Resolving conflict
If the two branches you're trying to merge both changed the same part of the same file, Git won't be able to figure out which version to use. When such a situation occurs, it stops right before the merge commit so that you can resolve the conflicts manually.
How conflicts are presented When Git encounters a conflict during a merge, It will edit the content of the affected files with visual indicators that mark both sides of the conflicted content. These visual markers are: <<<<<<<, =======, and >>>>>>>. Its helpful to search a project for these indicators during a merge to find where conflicts need to be resolved.
here is some content not affected by the conflict
<<<<<<< master
this is conflicted text from master
=======
this is conflicted text from feature branch
>>>>>>> feature-717
CONTINUE
about.html
about.html
about.html
delete-me.html
./
about.html
delete-me.html
git-demo/
simple-html-project/
1 Useless content that will be trashed later on!
2
Terminal
remote branch that 'git pull' uses to update the current branch.
See 'git help config' and search for 'push.default' for further information.
(the 'simple' mode was introduced in Git 1.7.11. Use the similar mode
'current' instead of 'simple' if you sometimes use older versions of Git)
Username for 'https://github.com': mtamashevich
Password for 'https://mtamashevich@github.com':
Counting objects: 3, done.
Delta compression using up to 12 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 353 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/mtamashevich/git-demo.git
6d7596e..c3bcba3 main -> main
$ git branch -d my-feature
Deleted branch my-feature (was c3bcba3).
$
Type here to search
ENG
6:02 AM
12/29/2020

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Git SCM - Lab 202

Step 5 of 5

Review, Approve and Merge

1. Review the *Commits* and *Changes* on the Merge request page.
2. Optionally you can specify that the source branch be removed upon it's merge.
3. When satisfied with the merge request, go ahead and click on **Merge** button.

This will cause a new commit on the master branch with the content of the *contact-us* branch.

Pull Latest Content

Now as the master has changed on the remote upstream repository, you'll need to pull the latest changes on your local repository. Use;

`cd ../` ✓

`git checkout master` ✓

`git pull` ✓

To download and update your working directory to the latest changes on the repository.

CONTINUE

package.json × app.js × package.json × package.json × app.js × CHANGELOG ×

- ./
  - app.js
  - package.json
  - project-atomic/

Terminal

```
Updating 44d9eba..7bf3517
Fast-forward
 12345   |   1 +
 LICENSE | 201 ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
 2 files changed, 202 insertions(+)
 create mode 100644 12345
 create mode 100644 LICENSE
$ git checkout feature-01
Branch feature-01 set up to track remote branch feature-01 from origin.
Switched to a new branch 'feature-01'
$ ls
12345  CHANGELOG  CONTRIBUTING.md  README.md  app.js  package.json
$ git status
On branch feature-01
Your branch is up-to-date with 'origin/feature-01'.
Untracked files:
  (use "git add <file>..." to include in what will be committed)
```