

Lesson 1:
Navigating a Commit History

SEARCH

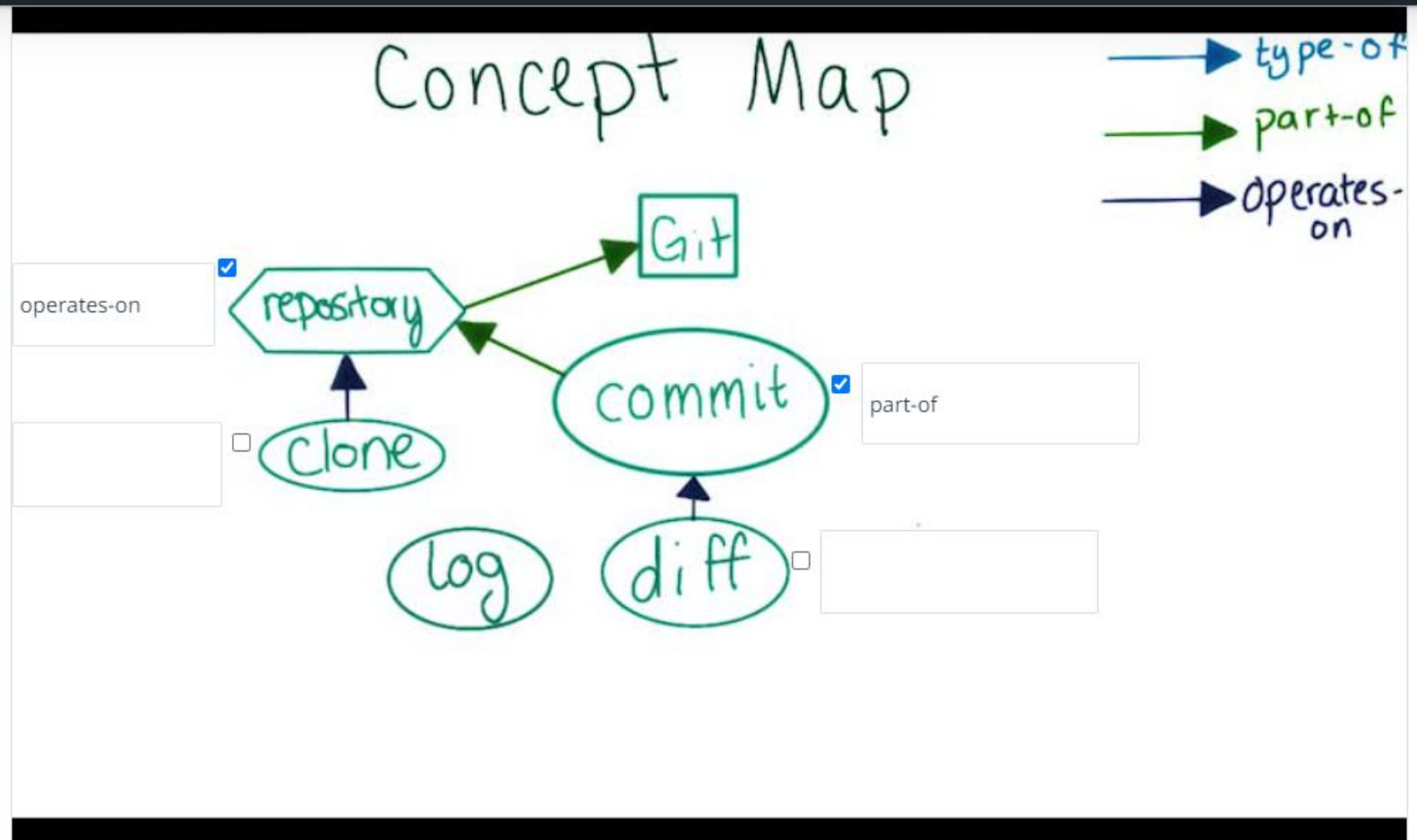
RESOURCES

CONCEPTS

- 27. Interview with Lewis Kaneshiro
- 28. Git Workspace
- 29. Setting Up Your Workspace on...
- 30. Setting Up Your Workspace on...
- 31. Reflect: How Do You Want to ...
- 32. Lesson 1 Summary
- ★ 33. Survey Says!

Concept Map: repository, clone, log

SEND FEEDBACK



Lesson 2:
Problem Set 1

SEARCH

RESOURCES

CONCEPTS

★ 8. Behavior of git diff

★ 9. Behavior of git checkout

★ 10. Cloning a New Repository

★ 11. Identifying a Bug

★ 12. Fixing the Bug

★ 13. Identifying a Second Bug

★ 14. Fixing the Second Bug

Old File Plus Diff

SEND FEEDBACK

Original File

A

B

C

D

E

F

Output of diff -u

---file.txt

+++updated.txt

B

+\$

C

-D

+#

+%

E

Final File

A

B

\$

C

#

%

E

F

Windows taskbar with icons for various applications and system status.

Lesson 2:
Problem Set 1

SEARCH

RESOURCES

CONCEPTS

✓ 1. Lesson 2 Intro

● 2. Problem Set Introduction

✓ 3. Old File Plus Diff

✓ 4. Tracking Versions Using Git

✓ 5. Git Command Review

★ 6. Behavior of git clone

★ 7. Behavior of git log

Git Command Review

SEND FEEDBACK

Git command review

For each action, type the name of the corresponding Git command.

- Compare two commits, printing each line that is present in one commit but not the other.

git diff
- Make a copy of an entire Git repository, including the history, onto your own computer.

git clone
- Temporarily reset all files in a repository to their state at the time of a specific commit.

git checkout
- Show the commits made in a repository, starting with the most recent.

git log

View Intro

Next Lesson

Submit Answer

Windows taskbar with icons for File Explorer, Edge, and other applications.

System tray showing volume, network, and time (1:18 PM).

Lesson 2:
Problem Set 1

SEARCH

RESOURCES

CONCEPTS

✓ 4. Tracking Versions Using Git

✓ 5. Git Command Review

✓ 6. Behavior of git clone

✓ 7. Behavior of git log

★ 8. Behavior of git diff

★ 9. Behavior of git checkout

★ 10. Cloning a New Repository

Behavior of git log

SEND FEEDBACK

```
commit 7be5a12f1567866b0d77ccdf2055d1a33831da78
Date:   Fri Jul 11 12:56:26 2014 -0300

    Add sound for the wing.

commit 06d72e1f95f046002ec46f41cf71957227111141
Date:   Wed Jul 9 23:42:55 2014 -0300

    Add mute button.

commit 3d4d45b246aad6a1cd0afaf7cfae26966110727e
Date:   Mon Jul 7 17:35:47 2014 -0300

    Fix leaderboard button
```

For this `git log` output, check all the commits you would expect to contain code for a mute button.

☒

 commit 7be5a12f1567866b0d77ccdf2055d1a33831da78 (the top commit listed)

☒

 commit 06d72e1f95f046002ec46f41cf71957227111141 (the middle commit listed)

☐

 commit 3d4d45b246aad6a1cd0afaf7cfae26966110727e (the bottom commit listed)

Windows taskbar icons

Reset 100% 1:27 PM

ENG 1:26 PM

Lesson 2:
Problem Set 1

SEARCH

RESOURCES

CONCEPTS

✓ 5. Git Command Review

✓ 6. Behavior of git clone

✓ 7. Behavior of git log

✓ 8. Behavior of git diff

★ 9. Behavior of git checkout

★ 10. Cloning a New Repository

★ 11. Identifying a Bug

Behavior of git diff

SEND FEEDBACK

```
commit 7be5a12f1567866b0d77ccdf2055d1a33831da78
Date:   Fri Jul 11 12:56:26 2014 -0300

    Add sound for the wing.

commit 06d72e1f95f046002ec46f41cf71957227111141
Date:   Wed Jul 9 23:42:55 2014 -0300

    Add mute button.

commit 3d4d45b246aad6a1cd0afaf7cfae26966110727e
Date:   Mon Jul 7 17:35:47 2014 -0300

    Fix leaderboard button
```

Select the command for which the mute button code lines would be shown as additions.

- ☐ `git diff 7be5a1 06d72e`
- ☐ `git diff 06d72e 7be5a1`
- ☐ `git diff 06d72e 3d4d45`
- ☒ `git diff 3d4d45 06d72e`

Reset 100 % 1:28 PM

ENG 1:28 PM

Lesson 2:
Problem Set 1

SEARCH

RESOURCES

CONCEPTS

✓ 5. Git Command Review

✓ 6. Behavior of git clone

✓ 7. Behavior of git log

✓ 8. Behavior of git diff

✓ 9. Behavior of git checkout

★ 10. Cloning a New Repository

★ 11. Identifying a Bug

Behavior of git checkout

SEND FEEDBACK

Behavior of git checkout

Select when each statement would be true.

	Never true	Sometimes true	Always true
Checking out an earlier commit will change the state of at least one file.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Checking out an earlier commit will change the state of more than one file.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Checking out an earlier commit will change the state of every file in the repository.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
After checking out a commit, the state of all the files in the repository will be from the same point in time.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Reset 100 % 1:36 PM

ENG 1:36 PM

Lesson 3:
Creating and Modifying a Repository

Concept Map: init, add, staging area

SEND FEEDBACK

SEARCH

RESOURCES

CONCEPTS

✓ 6. Concept Map: init, add, stagin...

● 7. Reflect: Staging Area

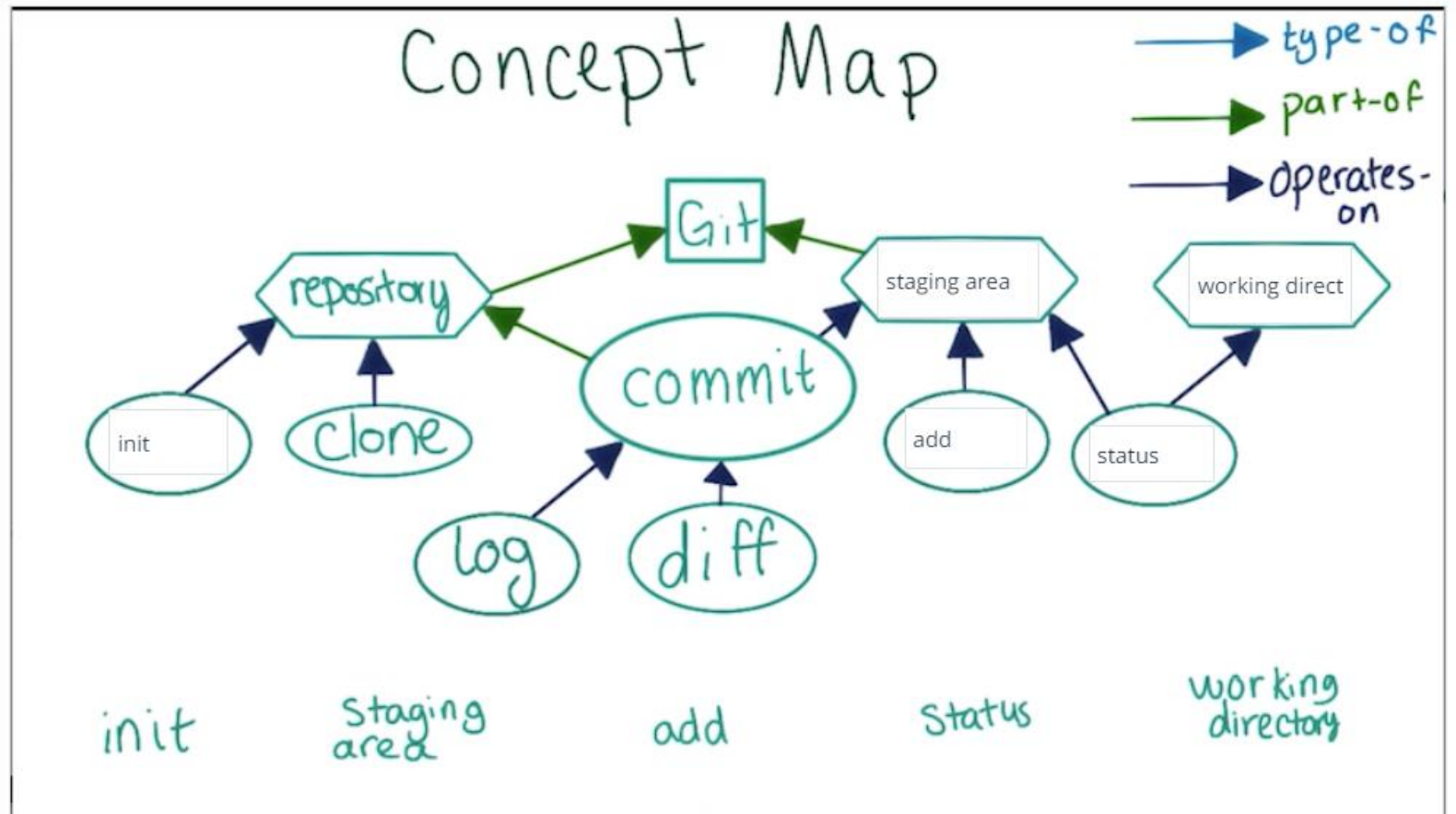
● 8. Writing Good Commit Messages

★ 9. Committing Changes

★ 10. git diff Revisited

● 11. Commit the Bug Fix

● 12. Reflect: Commit Size



Lesson 3:
Creating and Modifying a Repository

SEARCH

RESOURCES

CONCEPTS

✓ 10. git diff Revisited

● 11. Commit the Bug Fix

● 12. Reflect: Commit Size

● 13. Branches

★ 14. Making a Branch

● 15. Reflect: When to Use Branches

● 16. Interview with Mike Wales

git diff Revisited

SEND FEEDBACK

What two versions does each form of git diff compare?

Choices: working directory
staging area
commit 1
commit 2

git diff

git diff --staged

git diff commit1 commit2

Working directory

File1

File2

Staging area

File1

File2

Repository

Commit1

...

Commit2

...

working directory

staging area

commit 1

commit 2

13

Reset

100 %

1:44 PM

Lesson 3:
Creating and Modifying a Repository

SEARCH

RESOURCES

CONCEPTS

✓ 18. Reachability

● 19. Detached HEAD Revisited

● 20. Reflect: Visualizing with Diagra...

★ 21. Combining Simple Files

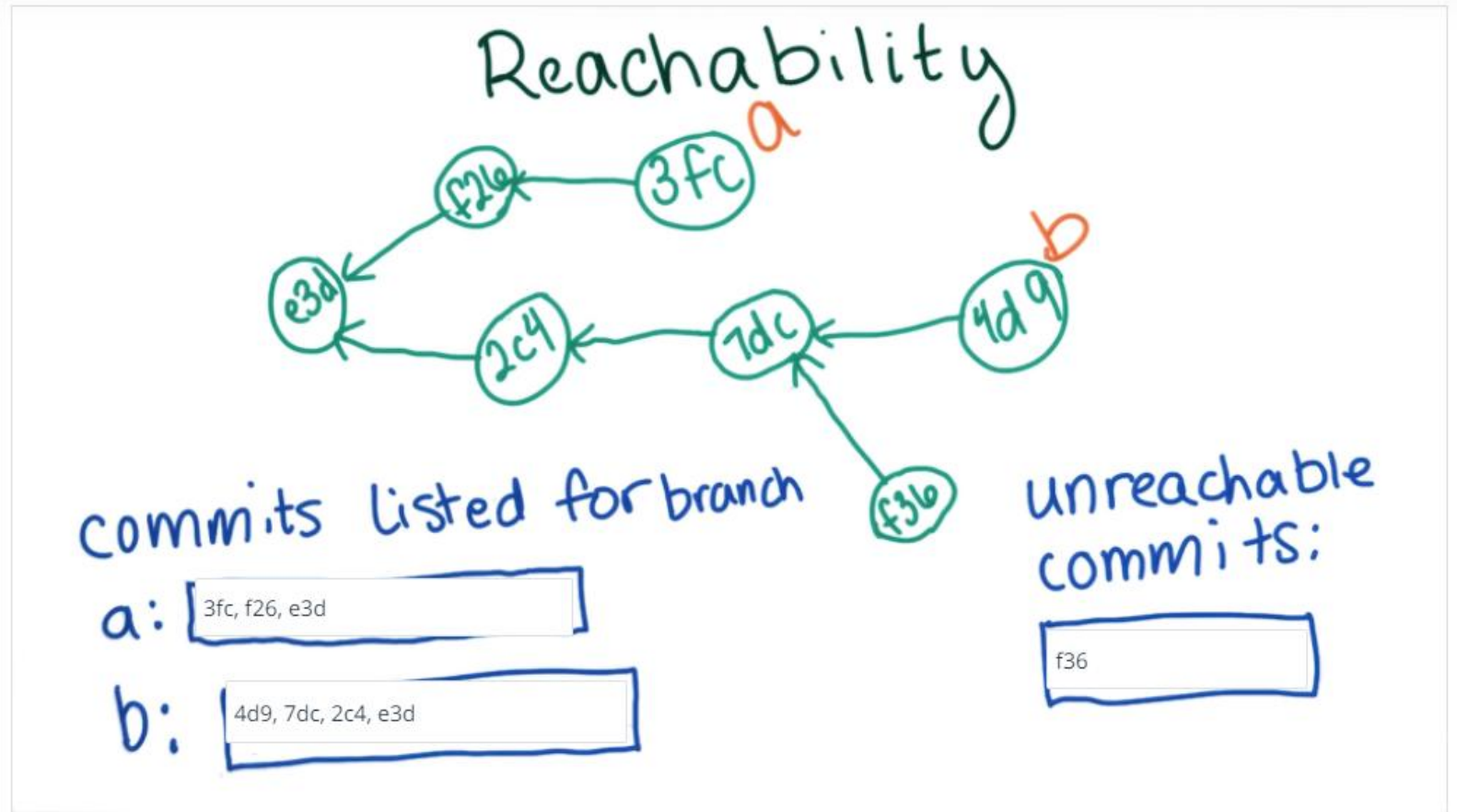
★ 22. Combining Simple Files Using ...

★ 23. Merging Coins into Master

★ 24. Merging on the Command Line

Reachability

SEND FEEDBACK



Lesson 3:
Creating and Modifying a Repository

SEARCH

RESOURCES

CONCEPTS

✓ 21. Combining Simple Files

★ 22. Combining Simple Files Using ...

★ 23. Merging Coins into Master

★ 24. Merging on the Command Line

● 25. Reflect: Merging Two Branches

★ 26. Merge Conflicts

● 27. Conflict Detection

Combining Simple Files

SEND FEEDBACK

Merging files

Jake
B
D
E

In final? Yes, no, or unknown

A
B
C
D
E

unknown

yes

unknown

yes

unknown

Rachel
A
B
C
D

Reset 100% 1:52 PM

ENG 1:52 PM

Lesson 3:
Creating and Modifying a Repository

SEARCH

RESOURCES

CONCEPTS

✓ 22. Combining Simple Files Using...

★ 23. Merging Coins into Master

★ 24. Merging on the Command Line

● 25. Reflect: Merging Two Branches

★ 26. Merge Conflicts

● 27. Conflict Detection

★ 28. Update Easy Mode

Combining Simple Files Using Original

SEND FEEDBACK

Merging files

Original: A
B
D

In final? Yes, no, or unknown

Jake
B
D
E

Rachel
A
B
C
D

A	<input type="text" value="no"/>
B	<input type="text" value="Yes"/>
C	<input type="text" value="yes"/>
D	<input type="text" value="Yes"/>
E	<input type="text" value="yes"/>

Lesson 3:
Creating and Modifying a Repository

SEARCH

RESOURCES

CONCEPTS

✓ 23. Merging Coins into Master

★ 24. Merging on the Command Line

● 25. Reflect: Merging Two Branches

★ 26. Merge Conflicts

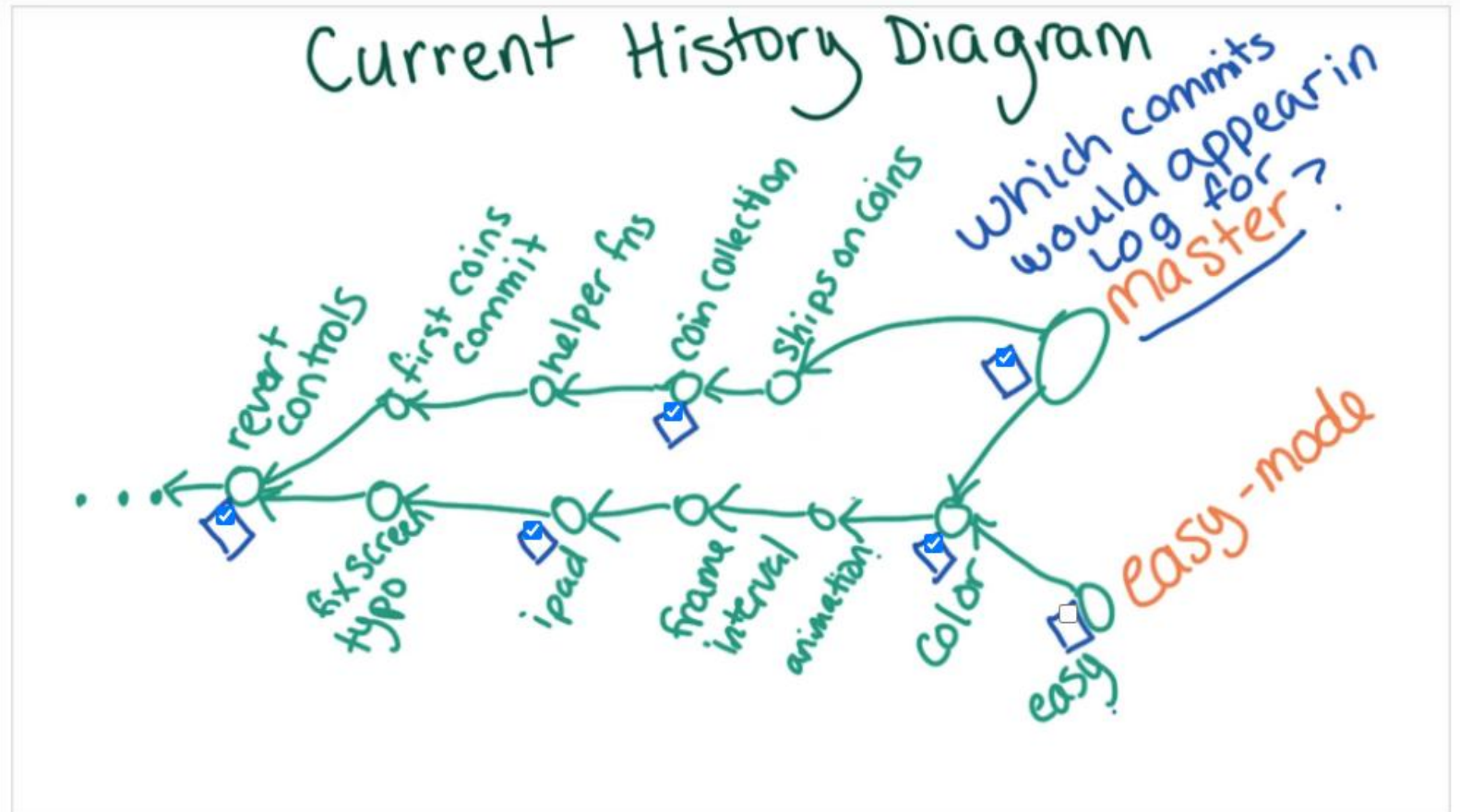
● 27. Conflict Detection

★ 28. Update Easy Mode

★ 29. Resolving Merge Conflicts

Merging Coins into Master

SEND FEEDBACK



Lesson 3: Creating and Modifying a Repository

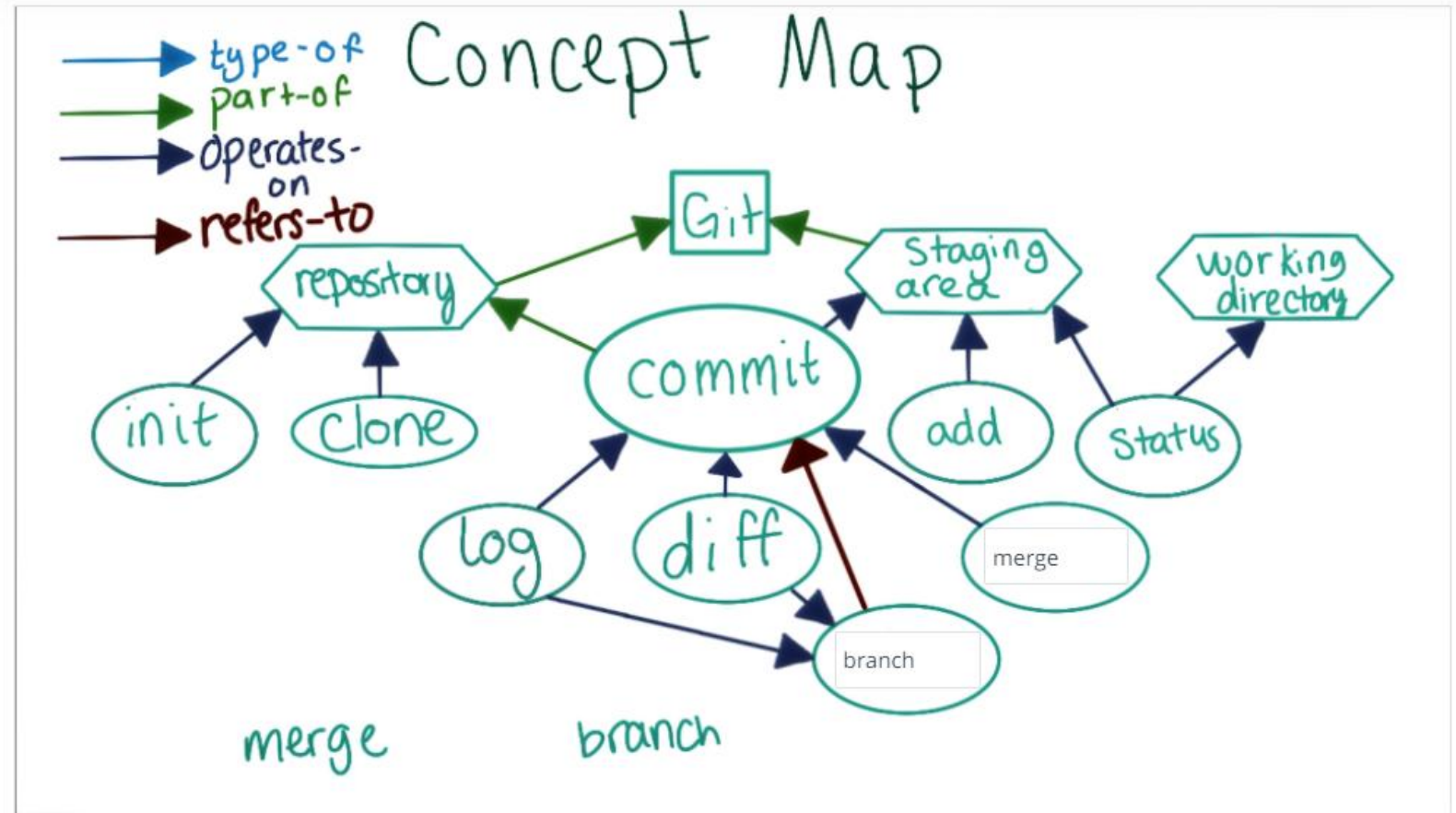
SEARCH

RESOURCES

CONCEPTS

- ✓ 26. Merge Conflicts
- ✓ 27. Conflict Detection
- ✓ 28. Update Easy Mode
- ✓ 29. Resolving Merge Conflicts
- ✓ 30. Committing the Conflict Resol...
- ✓ **31. Concept Map: branch, merge**
- 32. Reflect: Automatic vs. Manual ...
- 33. Interview with Jeffrey Middleton

Concept Map: branch, merge

[SEND FEEDBACK](#)

Lesson 4:
Using GitHub to Collaborate

SEARCH

RESOURCES

CONCEPTS

✓ 4. Keeping Repositories in Sync

★ 5. Adding a Remote

● 6. Editing Files on GitHub

● 7. Reflect: When to Use a Remote ...

★ 8. Pulling Changes

★ 9. Concept Map: GitHub, Push, Pu...

● 10. Reflect: Manual vs. Automatic ...

Keeping Repositories in Sync

SEND FEEDBACK

Syncing Repositories

local

GitHub

push

Check the commits that will be sent

Reset

100 %

2:00 PM

Lesson 4:
Using GitHub to Collaborate

SEARCH

RESOURCES

CONCEPTS

✓ 9. Concept Map: GitHub, Push, P...

✓ 10. Reflect: Manual vs. Automatic ...

✓ 11. Forking a Repository

✓ 12. Fork the Recipes Repository

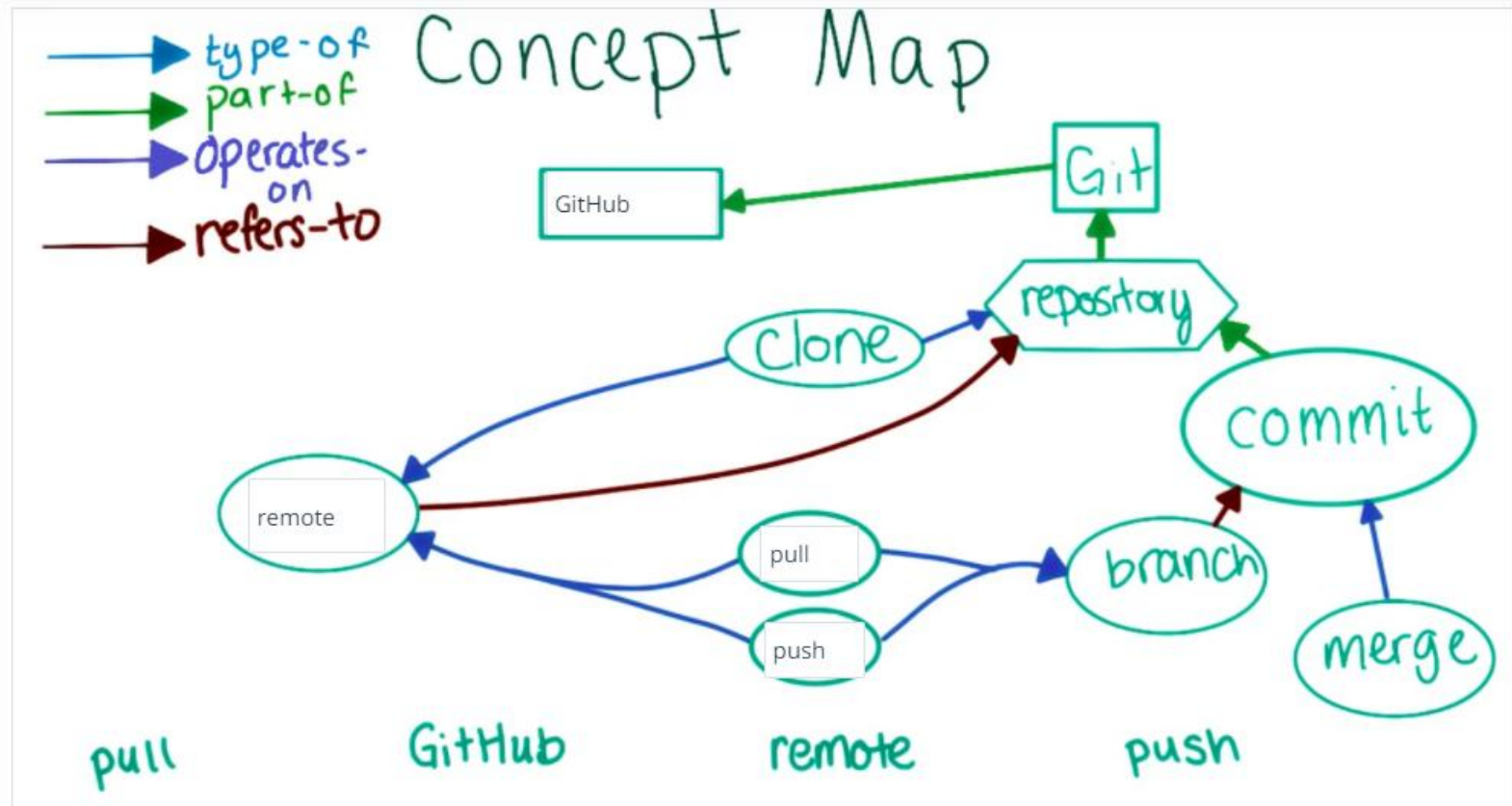
✓ 13. Push Changes to the Recipes ...

● 14. Reflect: Forks, Clones, and Bra...

● 15. Collaborations Cause Conflict

Concept Map: GitHub, Push, Pull, Remote

SEND FEEDBACK



Lesson 4:
Using GitHub to Collaborate

SEARCH

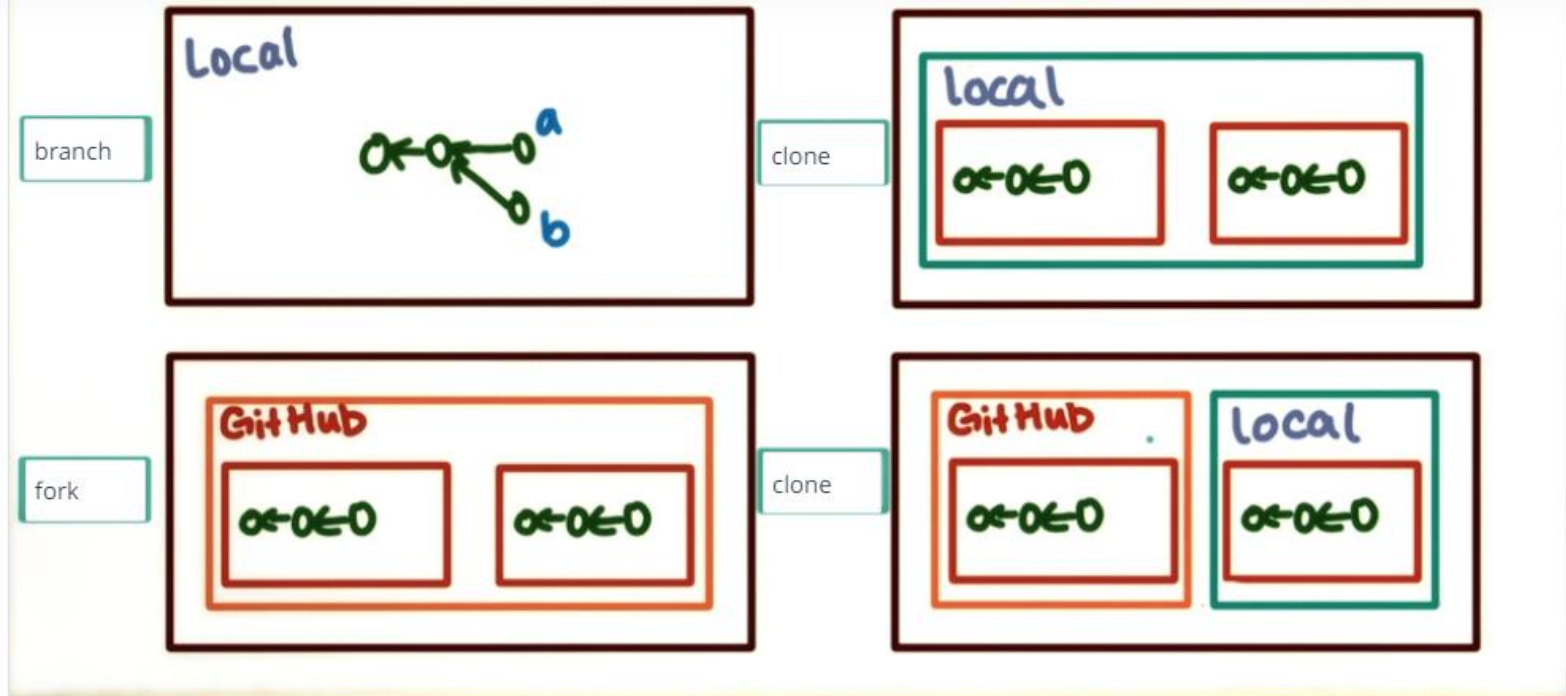
RESOURCES

CONCEPTS

- ✓ 11. Forking a Repository
- ✓ 12. Fork the Recipes Repository
- ✓ 13. Push Changes to the Recipes ...
- ✓ 14. Reflect: Forks, Clones, and Bra...
- ✓ 15. Collaborations Cause Conflict
- ✓ 16. Change the Chili Recipe
- ✓ 17. Sarah Changes the Chili Recipe

Forking a Repository

SEND FEEDBACK



[View Intro](#)

[VIEW ANSWER](#)

[SUBMIT ANSWER](#)

Lesson 4:
Using GitHub to Collaborate

SEARCH

RESOURCES

CONCEPTS

✓ 13. Push Changes to the Recipes ...

✓ 14. Reflect: Forks, Clones, and Bra...

✓ 15. Collaborations Cause Conflict

✓ 16. Change the Chili Recipe

✓ 17. Sarah Changes the Chili Recipe

✓ 18. Simulate Sarah's Changes

✓ 19. Updating Local Copies of Rem...

Push Changes to the Recipes Repository

SEND FEEDBACK

Where was your commit present?

Right before you ran `git push`, where do you think your commit adding a new recipe was present? Similarly, now that you have run `git push`, where do you think this commit is present? Check all that apply, and remember that it's possible for a commit to be present in a repository both before and after running `git push`.

	Right before running <code>git push</code>	Right after running <code>git push</code>
In your local repository (visible via <code>git log</code>)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
On your fork (visible via the commit history on GitHub)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
On Larry's repository (visible via the commit history on GitHub)	<input type="checkbox"/>	<input type="checkbox"/>

Reset 100 % 2:23 PM

ENG 2:23 PM

Lesson 4:
Using GitHub to Collaborate

SEARCH

RESOURCES

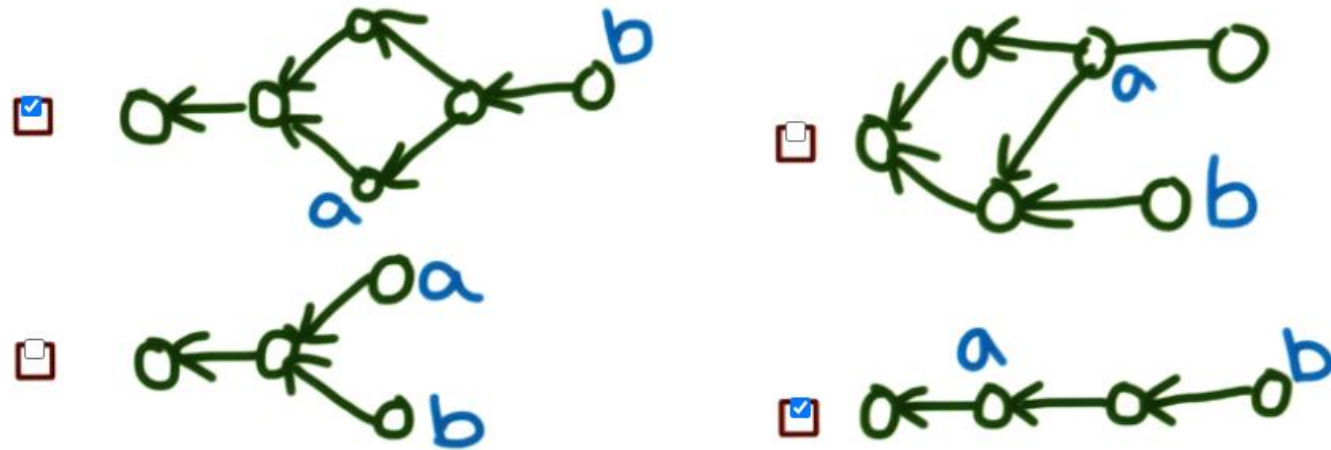
CONCEPTS

- ✓ 21. Fast-Forward Merges
- 22. Reflect: Local Copies of Remot...
- ★ 23. Making a Pull Request
- ★ 24. Updating a Pull Request
- 25. Reflect: Collaboration Using Gi...
- 26. Conflicting Changes
- ★ 27. Updating Your Local Repository

Fast-Forward Merges

SEND FEEDBACK

Fast-forward Merges



Check if merging **b** into **a** would be a fast-forward

Lesson 4: Using GitHub to Collaborate

SEARCH

RESOURCES

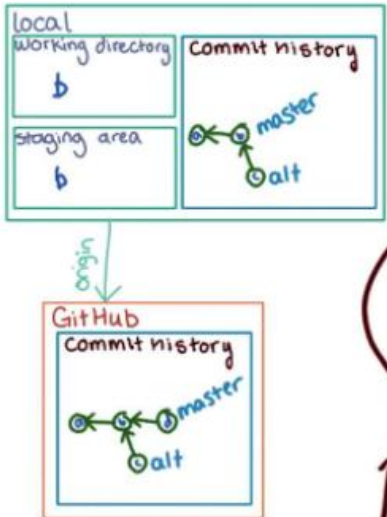
CONCEPTS

- ✓ 23. Making a Pull Request
- ★ 24. Updating a Pull Request
- 25. Reflect: Collaboration Using Gi...
- 26. Conflicting Changes
- ★ 27. Updating Your Local Repository
- ★ 28. Merging a Pull Request
- ★ 29. Concept Map: Fork, Fetch, Pull...

Making a Pull Request

SEND FEEDBACK

What gets Changed?



assume these commands are run with local master checked out

	Local working directory	Local staging area	Local master branch	GitHub master branch
edit and save README.md	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
git add README.md	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
git commit	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
git pull origin master	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
git push origin master	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
merge alt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
pull request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Lesson 4:
Using GitHub to Collaborate

SEARCH

RESOURCES

CONCEPTS

- ✓ 28. Merging a Pull Request
- ✓ 29. Concept Map: Fork, Fetch, Pu...
- 30. Interview with Brent Beer of G...
- 31. Reflect: When to Use a Separa...
- 32. Modifying the Adventure Repo...
- ★ 33. Keeping a Fork Up-To-Date
- 34. Lesson 3 Summary

Concept Map: Fork, Fetch, Pull Request

SEND FEEDBACK

