

AGENDA

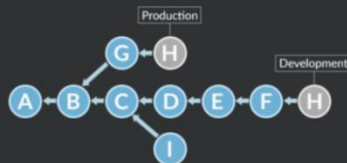
Today we will learn:

- What is git cherry-pick
- When to use cherry-pick
- How to cherry-pick multiple commits
- Resolve conflicts during the cherry-picking
- Best practices



When to use git cherry-pick?

Git cherry-pick: *Why and How*



WHEN TO USE CHERRY-PICK

SOME OF THE CASES

- Deliver hotfix to the end user as fast as possible
- Undoing changes and restoring lost commits
- Regular team collaboration



```
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0008_login)
$ git log --oneline -3
ec6b5ec (HEAD -> TA0008_login) styles for login button are implemented
3f31666 Backend for login is implemented
e50bada (origin/master, origin/HEAD, test, master, lost_changes, TA0007_1, TA0006_important_task) login popup during login
```

```
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0008_login)
$ |
```

```
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0008_login)
$ git log --oneline -3
ec6b5ec (HEAD -> TA0008_login) styles for login button are implemented
3f31666 Backend for login is implemented
e50bada (origin/master, origin/HEAD, test, master, lost_changes, TA0007_1, TA0006_important_task) login popup during login
```

```
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0008_login)
$ git switch master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
```

```
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (master)
$ git switch -c TA0009_button_styles
Switched to a new branch 'TA0009_button_styles'
```

```
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)
$ nano styles/login.css
```

```
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)
$ git commit -a -m "Some commit"
warning: LF will be replaced by CRLF in src/styles/login.css.
The file will have its original line endings in your working directory
[TA0009_button_styles ab8db4c] Some commit
1 file changed, 1 insertion(+)
```

```
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)
$ git cherry-pick ec6b5e
```

```
MINGW64/c/Users/Andrii_Piatakha/Desktop/Lern IT - Git/src
Switched to branch 'master'
Your branch is up to date with 'origin/master'.

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (master)
$ git switch -c TA0009_button_styles
Switched to a new branch 'TA0009_button_styles'

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)
$ nano styles/login.css

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)
$ git commit -a -m "Some commit"
warning: LF will be replaced by CRLF in src/styles/login.css.
The file will have its original line endings in your working directory
[TA0009_button_styles ab8db4c] Some commit
1 file changed, 1 insertion(+)

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)
$ git cherry-pick ec6b5ec
Auto-merging src/styles/login.css
CONFLICT (content): Merge conflict in src/styles/login.css
error: could not apply ec6b5ec... Styles for login button are implemented
hint: after resolving the conflicts, mark the corrected paths
hint: with 'git add <paths>' or 'git rm <paths>'
hint: and commit the result with 'git commit'

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PICKING)
$

MINGW64/c/Users/Andrii_Piatakha/Desktop/Lern IT - Git/src

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PICKING)
$ git status
On branch TA0009_button_styles
You are currently cherry-picking commit ec6b5ec.
  (fix conflicts and run "git cherry-pick --continue")
  (use "git cherry-pick --skip" to skip this patch)
  (use "git cherry-pick --abort" to cancel the cherry-pick operation)

Unmerged paths:
  (use "git add <file>..." to mark resolution)
    both modified:   styles/login.css

no changes added to commit (use "git add" and/or "git commit -a")

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PICKING)
$ |
```

```
MINGW64/c/Users/Andrii_Piatakha/Desktop/Lern IT - Git/src
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PING)
$ git status
On branch TA0009_button_styles
You are currently cherry-picking commit ec6b5ec.
  (fix conflicts and run "git cherry-pick --continue")
  (use "git cherry-pick --skip" to skip this patch)
  (use "git cherry-pick --abort" to cancel the cherry-pick operation)

Unmerged paths:
  (use "git add <file>..." to mark resolution)
    both modified:   styles/login.css

no changes added to commit (use "git add" and/or "git commit -a")

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PING)
$ nano styles/login.css

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PING)
$ git add .

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PING)
$ |
```

```
MINGW64/c/Users/Andrii_Piatakha/Desktop/Lern IT - Git/src
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PING)
$ git cherry-pick --continue
```

MINGW64/c:/Users/Andrii_Piatakha/Desktop/Lern IT - Git/src

```
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PICKING)
```

```
$ git cherry-pick --continue
```

hint: waiting for your

ha/Desktop/Lern IT - G

COMMIT_EDITMSG - Notepad

File Edit Format View Help

Styles for login button are implemented

```
# Conflicts:
#       src/styles/login.css
#
# It looks like you may be committing a cherry-pick.
# If this is not correct, please remove the file
#       .git/CHERRY_PICK_HEAD
# and try again.
#
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# Date:      Tue Nov 3 21:10:05 2020 +0200
#
# On branch TA0009_button_styles
# You are currently cherry-picking commit ec6b5ec.
#
# changes to be committed:
#       modified:   src/styles/login.css
```


MINGW64:/c:/Users/Andrii_Piatkha/Desktop/Lern IT - Git/src

```
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PICKING)
```

```
$ git cherry-pick --continue
```

```
hint: waiting for your editor to close the file... unix2dos: converting file C:/Users/Andrii_Pia
ha/Desktop/Lern IT - Git/.git/COMMIT_EDITMSG to DOS format...
```

```
dos2unix: converting file C:/Users/Andrii_Piatakha/Desktop/Lern IT - Git/.git/COMMIT_EDITMSG to
x format...
```

```
[TA0009_button_styles 52376a5] styles for login button are implemented
```

Date: Tue Nov 3 21:10:05 2020 +0200

```
1 file changed, 7 insertions(+)
```

```
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)
```

\$ |

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PICKING)

\$ git cherry-pick --continue

hint: Waiting for your editor to close the file... unix2dos: converting file C:/Users/Andrii_Piatakha/Desktop/Lern IT - Git/.git/COMMIT_EDITMSG to DOS format...

dos2unix: converting file C:/Users/Andrii_Piatakha/Desktop/Lern IT - Git/.git/COMMIT_EDITMSG to unix format...

[TA0009_button_styles 52376a5] Styles for login button are implemented

Date: Tue Nov 3 21:10:05 2020 +0200

1 file changed, 7 insertions(+)

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)

\$ git log --oneline -3

52376a5 (HEAD -> TA0009_button_styles) Styles for login button are implemented

ab8db4c Some commit

e50bada (origin/master, origin/HEAD, test, master, lost_changes, TA0007_1, TA0006_important_task) login popup during login

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)

\$ |

To abort the operation

```
MINGW64/c/Users/Andrii_Piatakha/Desktop/Lern IT - Git/src
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PICKING)
$ git cherry-pick --continue
hint: Waiting for your editor to close the file... unix2dos: converting file C:/Users/Andrii_Piatakha/Desktop/Lern IT - Git/.git/COMMIT_EDITMSG to DOS format...
dos2unix: converting file C:/Users/Andrii_Piatakha/Desktop/Lern IT - Git/.git/COMMIT_EDITMSG to unix format...
[TA0009_button_styles 52376a5] Styles for login button are implemented
Date: Tue Nov 3 21:10:05 2020 +0200
1 file changed, 7 insertions(+)

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)
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e50bada (origin/master, origin/HEAD, test, master, lost_changes, TA0007_1, TA0006_important_task) login popup during login

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)
$ git cherry-pick --abort
```

For multiple commits

```
MINGW64/c/Users/Andrii_Piatakha/Desktop/Lern IT - Git/src
Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles|CHERRY-PICKING)
$ git cherry-pick --continue
hint: Waiting for your editor to close the file... unix2dos: converting file C:/Users/Andrii_Piatakha/Desktop/Lern IT - Git/.git/COMMIT_EDITMSG to DOS format...
dos2unix: converting file C:/Users/Andrii_Piatakha/Desktop/Lern IT - Git/.git/COMMIT_EDITMSG to unix format...
[TA0009_button_styles 52376a5] Styles for login button are implemented
Date: Tue Nov 3 21:10:05 2020 +0200
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Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)
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ab8db4c Some commit
e50bada (origin/master, origin/HEAD, test, master, lost_changes, TA0007_1, TA0006_important_task) login popup during login

Andrii_Piatakha@EPUAKHAW1357 MINGW64 ~/Desktop/Lern IT - Git/src (TA0009_button_styles)
$ git cherry-pick ec6b5ec 3f31666
```



BEST PRACTICES OF USING CHERRY-PICK

Rules:

1. Prefer merge or rebase when possible
2. Avoid creating any duplication
3. Use 'x' option during cherry-pick

`git cherry-pick -x`

COMMIT_EDITMSG - Notepad

File Edit Format View Help

Styles for login button are implemented

(cherry picked from commit ec6b5ece4fec243c87df4458726dd0d22c8deab0)



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