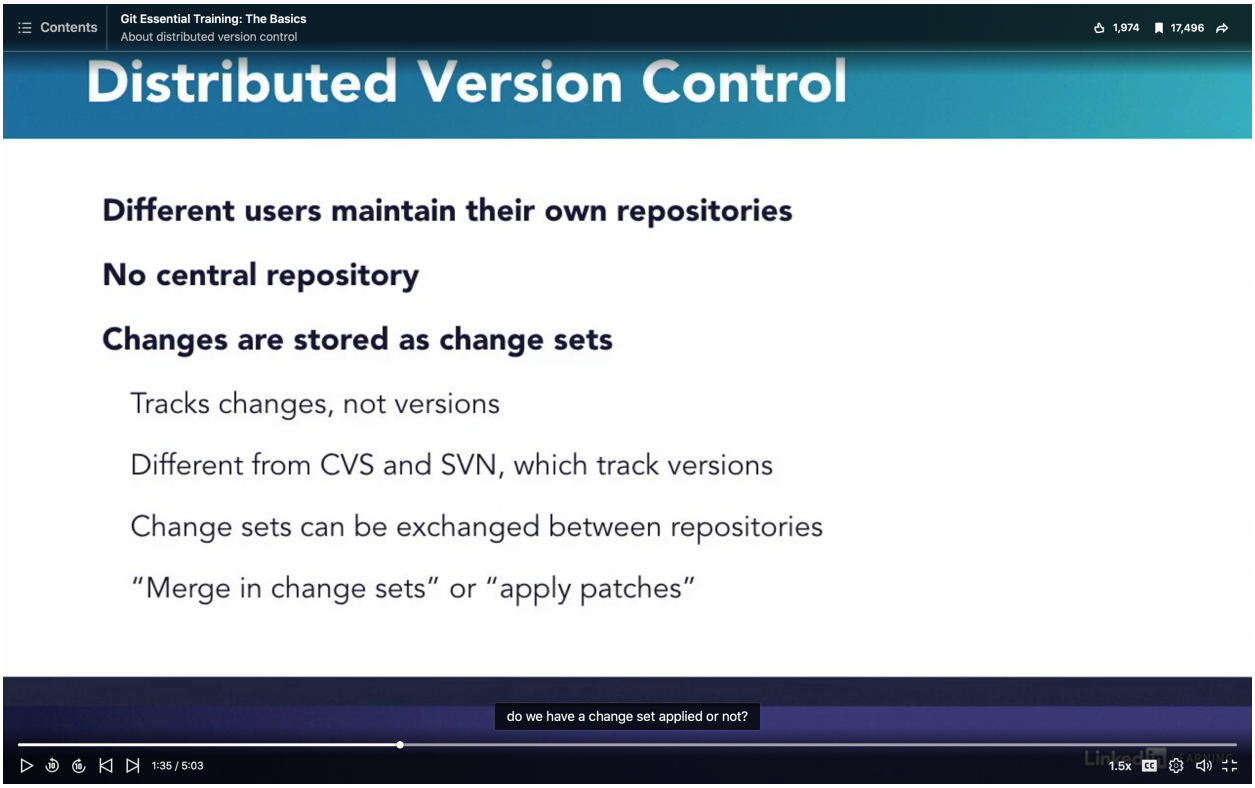
GIT Essential Training

GIT Notations

Commit Message Best Practices

```
ghi2394 - Fixes bug in admin logout

When an admin logged out of the admin area, they
could not log in to the members area because their
session[:user_id] was still set to the admin ID.
This patch fixes the bug by setting session[:user_id]
to nil when any user logs out of any area.
```



Commit Message Best Practices

Bullet points are usually asterisks or hyphens

Can add "tracking numbers" from bugs or support requests

Can develop shorthand for your organization

"[css,js] "

"bugfix:"

"#38405 -"

Commit Message Best Practices

A short single-line summary (less than 50 characters)

Optionally followed by a blank line and a more complete description

Keep each line to less than 72 characters

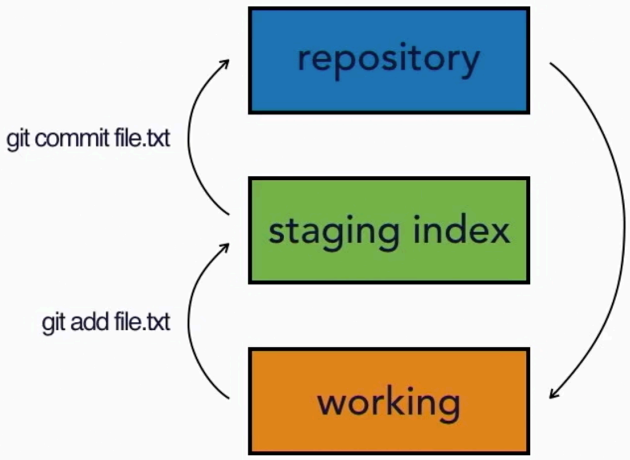
Write commit messages in present tense, not past tense

"Fix for a bug" or "Fixes a bug," not "fixed a bug"

HEAD- SHA Algorithm

Hash Values (SHA-1)

- Git uses SHA-1 hash algorithm to create checksums
- 40-character hexadecimal string (0-9, a-f)
- Example: 5c15e8bd540c113cd2d9eac6f64cacbc5ff6fe9c



Hash Values (SHA-1)

- Git generates a checksum for each change set
- Checksum algorithms convert data into a simple number
- Same data always equals same checksum
- Data integrity is fundamental
- Changing data would change checksum

it's directly tied to the contents that are inside of it.