Лабораторной работе 4
Продвинутое использование git

Абдуллахи Бахара

Российский университет дружбы народов, Москва, Россия

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Цель работы

▶ Получение навыков правильной работы с репозиториями git.

Задание

▶ Выполнить работу для тестового репозитория.

▶ Преобразовать рабочий репозиторий в репозиторий с git-flow и conventional commits.

Установка программного обеспечения

- ▶ Установка git-flow: (dnf install gitflow)
- ▶ Установка Node.js : (dnf install nodejs)
- ▶ Настройка Node.js

```
foot
[babdullakhi@babdullakhi ~]$ sudo dnf copr enable elegos/gitflow
[sudo] password for babdullakhi:
Enabling a Copr repository. Please note that this repository is not part
of the main distribution, and quality may vary.

The Fedora Project does not exercise any power over the contents of
this repository beyond the rules outlined in the Copr FAQ at
<https://docs.pagure.org/copr.copr/user_documentation.html#what-i-can-bu
ild-in-copr>,
and packages are not held to any quality or security level.

Please do not file bug reports about these packages in Fedora
Bugzilla. In case of problems, contact the owner of this repository.

Do you really want to enable copr.fedorainfracloud.org/elegos/gitflow? [
y/N]: y
Repository successfully enabled.
```

```
[babdullakhi@babdullakhi ~]$ sudo dnf install gitflow
Copr repo for gitflow owned by elegos   1.7 kB/s | 1.5 kB     00:00
```

Общепринятые коммиты:

1. commitizen
2. standard-changelog

```
[babdullakhi@babdullakhi ~]$ pnpm add -g commitizen
Packages: +152
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Downloading registry.npmjs.org/typescript/5.4.2: 5.82 MB/5.82 MB, done
Progress: resolved 152, reused 0, downloaded 152, added 152, done

/home/babdullakhi/.local/share/pnpm/global/5:
+ commitizen 4.3.0

Done in 7s
[babdullakhi@babdullakhi ~]$ []
```

Конфигурация общепринятых коммитов:

▶ Конфигурация для пакетов Node.js (pnpm init)

```
[babdullakhi@babdullakhi git-extended]$ pnpm init
Wrote to /home/babdullakhi/git-extended/package.json

{
  "name": "git-extended",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC"
}
[babdullakhi@babdullakhi git-extended]$
```

Сконфигурим формат коммитов. Для этого добавим в файл package.json команду для формирования коммитов:


```
  GNU nano 7.2                    package.json                    Modified

  "name": "git-extended",
  "version": "1.0.0",
  "description": "Git repo for educational purposes",
  "main": "index.js",
  "repository": "git@github.com:Bahara12/git-extended.git",
  "author": "bahara abdullahi baharaabdullah14@gmail.com",
  "license": "CC-BY-4.0",
  "config": {
      "commitizen": {
          "path": "cz-conventional-changelog"
      }
  }
}
```

▶ Добавим новые файлы:

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▶ Отправим на github:

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- ▶ Префикс для ярлыков установим в v.
- ▶ Проверьте, что Вы на ветке develop: (git branch)
- ▶ Загрузите весь репозиторий в хранилище:

```
[babdullakhi@babdullakhi git-extended]$ git push --all
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 4 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (6/6), 2.78 KiB | 947.00 KiB/s, done.
Total 6 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To github.com:Bahara12/git-extended.git
   b8d628c..561efcf  develop -> develop
   01aab4e..0e04a44  main -> main
[babdullakhi@babdullakhi git-extended]$ ▯
```

```
[babdullakhi@babdullakhi git-extended]$ git push --tags
Enumerating objects: 1, done.
Counting objects: 100% (1/1), done.
Writing objects: 100% (1/1), 156 bytes | 156.00 KiB/s, done.
Total 1 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:Bahara12/git-extended.git
 * [new tag]          v1.2.3 -> v1.2.3
[babdullakhi@babdullakhi git-extended]$ ▯
```

Работа с репозиторием git:

▶ Создадим ветку для новой функциональности:
▶ Далее, продолжаем работу с git как обычно.
▶ следует объединить ветку feature_branch с develop:
  ▶ git flow feature finish feature_branch

```
[babdullakhi@babdullakhi git-extended]$ git flow feature start feature_b
ranch
Switched to a new branch 'feature/feature_branch'

Summary of actions:
- A new branch 'feature/feature_branch' was created, based on 'develop'
- You are now on branch 'feature/feature_branch'

Now, start committing on your feature. When done, use:

    git flow feature finish feature_branch

[babdullakhi@babdullakhi git-extended]$
```

Создание релиза git-flow:

- ▶ Создадим релиз с версией 1.2.3:
- ▶ Обновите номер версии в файле package.json.
  Установите её в 1.2.3.
- ▶ Создадим журнал изменений
  - ▶ standard-changelog
- ▶ Добавим журнал изменений в индекс
- ▶ git commit -am 'chore(site): update changelog'
- ▶ Зальём релизную ветку в основную ветку
  - ▶ git flow release finish 1.2.3

```
[babdullakhi@babdullakhi git-extended]$ git add CHANGELOG.md
[babdullakhi@babdullakhi git-extended]$ git commit -am 'chore(site): upd
ate changelog'
[release/1.2.3 7945f42] chore(site): update changelog
 2 files changed, 5 insertions(+), 1 deletion(-)
[babdullakhi@babdullakhi git-extended]$ git flow release finish 1.2.3
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
Merge made by the 'ort' strategy.
 CHANGELOG.md | 4 ++++
 package.json | 2 +-
 2 files changed, 5 insertions(+), 1 deletion(-)
Already on 'main'
Your branch is ahead of 'origin/main' by 3 commits.
  (use "git push" to publish your local commits)
```

Отправим данные на github:

- git push –all
- git push –tags
  - Создадим релиз на github с комментарием из журнала изменений:

Спасибо за винимание!