

Цель работы

– Изучить идеологию и применение средств контроля версий. – Освоить умения по работе с git.

Выполнение лабораторной работы

Зададим имя и email владельца репозитория, кодировку и прочие параметры.

Создаю аккаунт на github.

Overview Repositories 2 Projects Packages Stars

Popular repositories

study_2022-2023_arh-pc- Public

study_2022-2023_os-intro Public

15 contributions in the last year

Contribution settings

ArsoevaZalina

Edit profile

Contribution activity

December 2022

Устанавливаем git-flow и gh

```
[sudo] пароль для zalinaarsoeva:
## git-flow no-make installer ##
Installing git-flow to /usr/local/bin
Cloning repo from GitHub to gitflow
Клонирование в «gitflow»...
remote: Enumerating objects: 4270, done.
remote: Total 4270 (delta 0), reused 0 (delta 0), pack-reused 4270
Получение объектов: 100% (4270/4270), 1.74 МБ | 2.28 МБ/с, готово.
Определение изменений: 100% (2533/2533), готово.
Уже обновлено.
branch 'master' set up to track 'origin/master'.
Переключено на новую ветку «master»
install: создание каталога '/usr/local/share/doc'
install: создание каталога '/usr/local/share/doc/gitflow'
install: создание каталога '/usr/local/share/doc/gitflow/hooks'
'gitflow/git-flow' -> '/usr/local/bin/git-flow'
'gitflow/git-flow-init' -> '/usr/local/bin/git-flow-init'
'gitflow/git-flow-feature' -> '/usr/local/bin/git-flow-feature'
'gitflow/git-flow-bugfix' -> '/usr/local/bin/git-flow-bugfix'
'gitflow/git-flow-hotfix' -> '/usr/local/bin/git-flow-hotfix'
'gitflow/git-flow-release' -> '/usr/local/bin/git-flow-release'
'gitflow/git-flow-support' -> '/usr/local/bin/git-flow-support'
'gitflow/git-flow-version' -> '/usr/local/bin/git-flow-version'
'gitflow/gitflow-common' -> '/usr/local/bin/gitflow-common'
'gitflow/gitflow-shFlags' -> '/usr/local/bin/gitflow-shFlags'
'gitflow/git-flow-config' -> '/usr/local/bin/git-flow-config'
'gitflow/hooks/filter-flow-hotfix-finish-tag-message' -> '/usr/local/share/doc/gitflow/hooks/filter-flow-hotfix-finish-tag-message'
'gitflow/hooks/filter-flow-hotfix-start-version' -> '/usr/local/share/doc/gitflow/hooks/filter-flow-hotfix-start-version'
'gitflow/hooks/filter-flow-release-branch-tag-message' -> '/usr/local/share/doc/gitflow/hooks/filter-flow-release-branch-tag-message'
'gitflow/hooks/filter-flow-release-finish-tag-message' -> '/usr/local/share/doc/gitflow/hooks/filter-flow-release-finish-tag-message'
'gitflow/hooks/filter-flow-release-start-version' -> '/usr/local/share/doc/gitflow/hooks/filter-flow-release-start-version'
'gitflow/hooks/post-flow-bugfix-delete' -> '/usr/local/share/doc/gitflow/hooks/post-flow-bugfix-delete'
'gitflow/hooks/post-flow-bugfix-finish' -> '/usr/local/share/doc/gitflow/hooks/post-flow-bugfix-finish'
'gitflow/hooks/post-flow-bugfix-publish' -> '/usr/local/share/doc/gitflow/hooks/post-flow-bugfix-publish'
'gitflow/hooks/post-flow-bugfix-pull' -> '/usr/local/share/doc/gitflow/hooks/post-flow-bugfix-pull'
'gitflow/hooks/post-flow-bugfix-start' -> '/usr/local/share/doc/gitflow/hooks/post-flow-bugfix-start'
'gitflow/hooks/post-flow-bugfix-track' -> '/usr/local/share/doc/gitflow/hooks/post-flow-bugfix-track'
'gitflow/hooks/post-flow-feature-delete' -> '/usr/local/share/doc/gitflow/hooks/post-flow-feature-delete'
'gitflow/hooks/post-flow-feature-finish' -> '/usr/local/share/doc/gitflow/hooks/post-flow-feature-finish'
'gitflow/hooks/post-flow-feature-publish' -> '/usr/local/share/doc/gitflow/hooks/post-flow-feature-publish'
'gitflow/hooks/post-flow-feature-pull' -> '/usr/local/share/doc/gitflow/hooks/post-flow-feature-pull'
'gitflow/hooks/post-flow-feature-start' -> '/usr/local/share/doc/gitflow/hooks/post-flow-feature-start'
'gitflow/hooks/post-flow-feature-track' -> '/usr/local/share/doc/gitflow/hooks/post-flow-feature-track'
'gitflow/hooks/post-flow-hotfix-delete' -> '/usr/local/share/doc/gitflow/hooks/post-flow-hotfix-delete'
'gitflow/hooks/post-flow-hotfix-finish' -> '/usr/local/share/doc/gitflow/hooks/post-flow-hotfix-finish'
```

```
[zalinaarsoeva@fedora tmp]$ sudo dnf install gh
Последняя проверка окончания срока действия метаданных: 0:32:50 назад, Пн 05 дек 2022 14:45:37.
Зависимости разрешены.
=====
Пакет          Архитектура      Версия            Репозиторий      Размер
=====
Установка:
gh             x86_64           2.20.2-2.fc36     updates          8.0 М

Результат транзакции
=====
Установка 1 Пакет

Объем загрузки: 8.0 М
Объем изменений: 41 М
Продолжить? [д/н]: д
Загрузка пакетов:
gh-2.20.2-2.fc36.x86_64.rpm      2.6 MB/s | 8.0 MB      00:03
-----
Общий размер                    2.1 MB/s | 8.0 MB      00:03
Проверка транзакции
Проверка транзакции успешно завершена.
Идет проверка транзакции
Тест транзакции проведен успешно.
Выполнение транзакции
Подготовка      :                               1/1
Установка       : gh-2.20.2-2.fc36.x86_64    1/1
Запуск скрипта  : gh-2.20.2-2.fc36.x86_64    1/1
Проверка        : gh-2.20.2-2.fc36.x86_64    1/1

Установлен:
gh-2.20.2-2.fc36.x86_64
```

```
[zalinaarsoeva@fedora tmp]$ git config --global user.name ArsoevaZalina
[zalinaarsoeva@fedora tmp]$ git config --global user.email zalinarsoeva@yandex.ru
[zalinaarsoeva@fedora tmp]$ git config --global core.quotepath false
[zalinaarsoeva@fedora tmp]$ git config --global init.defaultBranch master
[zalinaarsoeva@fedora tmp]$ git config --global core.autocrlf input
[zalinaarsoeva@fedora tmp]$ git config --global core.safecrlf warn
```

Создаем ключи

```
[zalinaarsoeva@fedora tmp]$ ssh-keygen -t rsa -b 4096
Generating public/private rsa key pair.
Enter file in which to save the key (/home/zalinaarsoeva/.ssh/id_rsa): 11
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Passphrases do not match. Try again.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Passphrases do not match. Try again.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in 11
Your public key has been saved in 11.pub
The key fingerprint is:
SHA256:UZm8plfkgzLlIkCxSgpUFDWJFfjQu1fXVD6qbecjeI4 zalinaarsoeva@fedora
The key's randomart image is:
+---[RSA 4096]-----+
| .o+B*=. ..o  .. |
| .  + oo. .= ... |
| .  + o... *o  o |
| . o +  +o=. =... |
| . . . S*.o o    |
|      . . . . o   |
|      . . ..o .  |
|      .ooo.      |
|      Eo....     |
+-----[SHA256]-----+
```

```
[zalinaarsoeva@fedora tmp]$ ssh-keygen -t ed25519
Generating public/private ed25519 key pair.
Enter file in which to save the key (/home/zalinaarsoeva/.ssh/id_ed25519): 12
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Passphrases do not match. Try again.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Passphrases do not match. Try again.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in 12
Your public key has been saved in 12.pub
The key fingerprint is:
SHA256:o39G58wwzDT6KPELMxAxQDW0/Uv4MKp4iA7gevDXJa4 zalinaarsoeva@fedora
The key's randomart image is:
+--[ED25519 256]--+
| .o+*              |
|      *            |
|      o .          |
|      . o  o       |
| .      . + S= .   |
|+      oo*oo* .    |
|o=      .o==o+ B   |
|=.+.. +=o + +     |
|++..E. .o+        |
+-----[SHA256]-----+
```

```
[zalihaarsoeva@fedora tmp]$ gpg --full-generate-key
gpg (GnuPG) 2.3.4; Copyright (C) 2021 Free Software Foundation, Inc.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

gpg: создан каталог '/home/zalihaarsoeva/.gnupg'
gpg: создан щит с ключами '/home/zalihaarsoeva/.gnupg/pubring.kbx'
Выберите тип ключа:
  (1) RSA and RSA
  (2) DSA and Elgamal
  (3) DSA (sign only)
  (4) RSA (sign only)
  (9) ECC (sign and encrypt) *default*
 (10) ECC (только для подписи)
 (14) Existing key from card
Ваш выбор? 1
длина ключей RSA может быть от 1024 до 4096.
Какой размер ключа Вам необходим? (3072) 4096
Запрошенный размер ключа - 4096 бит
Выберите срок действия ключа.
  0 = не ограничен
  <n> = срок действия ключа - n дней
  <n>w = срок действия ключа - n недель
  <n>m = срок действия ключа - n месяцев
  <n>y = срок действия ключа - n лет
Срок действия ключа? (0) 0
Срок действия ключа не ограничен
Все верно? (y/N) Y

GnuPG должен составить идентификатор пользователя для идентификации ключа.

Ваше полное имя: Zali
Имя не должно быть короче 5 символов
Ваше полное имя: Zalina
Адрес электронной почты: zalihaarsoeva@yandex.ru
Примечание:
Вы выбрали следующий идентификатор пользователя:
  "Zalina <zalihaarsoeva@yandex.ru>"
```

```
[zalinaarsoeva@fedora tmp]$ gpg --list-secret-keys --keyid-format LONG
gpg: проверка таблицы доверия
gpg: marginals needed: 3  completes needed: 1  trust model: pgp
gpg: глубина: 0  достоверных: 1  подписанных: 0  доверие: 0-, 0q, 0n, 0m, 0f, 1u
/home/zalinaarsoeva/.gnupg/pubring.kbx
-----
sec   rsa4096/A311FB33AA9847EC 2022-12-05 [SC]
      C74EF19C66189ADF6E2230FAA311FB33AA9847EC
uid   [ абсолютно ] Zalina <zaliarsoeva@yandex.ru>
ssb   rsa4096/F62CEC80F70D9C52 2022-12-05 [E]


[zalinaarsoeva@fedora tmp]$ gpg --armor --export <PGP Fingerprint> | xclip -sel clip
bash: синтаксическая ошибка рядом с неожиданным маркером «|»
[zalinaarsoeva@fedora tmp]$ gpg --armor --export <PGP Fingerprint> | xclip -sel clip
bash: синтаксическая ошибка рядом с неожиданным маркером «|»
[zalinaarsoeva@fedora tmp]$ xclip -sel clip
rsa4096/F62CEC80F70D9C52[zalinaarsoeva@fedora tmp]$ ^C
[zalinaarsoeva@fedora tmp]$ gpg --armor --export
-----BEGIN PGP PUBLIC KEY BLOCK-----

mQINBGON5VQBEADPdYybqzEf3yU8gSSmfUAyiyA1KD/M+5zAT64kDGwOoSG391Pr
gyegC0xXkAVU4ehjiYVRHy4037ql3zzX20+r0hdmvDuRpLcXo6oZ04kQAa070wBN
UKmFQvrpxDwT45u1MIaYP+DUdcnd02Sox5/erIxj988VsivAozECN5PJlr7/92T2
NS098rijmErHRB+P+m5tnHXfjKjRXW5BDodFCsba1/MvdhaeGfbbWuKeSpyauG9r
ftXz6UKwmjoxX0LEiWh0D46LBbGj0xqGh1tcXk1UvmIs6p9JWEbm926ziVf5PMw7
z018dSbMb0aNI26/qQvtABDS98pafBBhaGNms0Jv+flymRl0dEJa5P1Mkd8TjaXu
tH1b3S23A/542ScvPfgMYukXGKSbcYnSszVzuJ6EvV1ae+laXFaQ5kRV9cZ7z5ts
VmSKTaUbmQDH8WAB03cH6qmJP9rwwIqvYiYyRHLDPaYTeiKmJqXbhtdNpNrFmnUB
vhNFc0/rkYFPndu6C/ZHy0iHF96+7tiJ4BYC10KDZOSiAks6RsYMTXZvM0KATUHN
EqLE8k9Qr5847bgIKcQPhxtmqbqgl8S5XPgvztz47dTj0H/8N9Bpo5nvqbb7Hqd
el5Unhagqs0Wzym4EPjfJN7q105ZI9zTqLABhFEHfpLZ5J+oj46X+Y4FbwARAQAB
tB5aYWxpbmEGPHphbGllhcnNvZXZhQh1bhmRleC5ydT6JAlIEEwEIADwWIQTHTvGc
Zhia324iMPqjEfszqphH7AUCY43lVAIbAwULCQgHAgMiAgEGFQoJCAsCBByCAwEC
HgC4AACgkQoxH7M6qYR+wFfA/9FnoVuA1pmykdLRACMhVChDG3hRBRsMBkCa1h
b8oKk6SasyWiRTi6N+T2dnn79uiKUCG45n7comt854F3Wgl1ji/D5g/D2fHA3//P
A9wczk/KzzYlljFImZHRnJHG3WNpA0ssYSOLstlLyCAYK+jxPidowEmCF9TF8Adt
Ph0yFj2EbS6NrWY3NZN0o2Q00AkxbIyzudnpa72pWhvWsUJbdC7vvKapCrEjdyFo
+qRDv6zkH9xqvN8Iyuu38mFuJFoZr5+0FYitXysOXGeh/yvyELGmwV9Q8ar9Qmly
vPJUVDejSa5r1leaZzsvxiIPsByjKlQqHSxJjRv3826ytMaF1ncLT1IjJde4y7SE8
JlgJKqZMu0sNCh2Fkye6HEb5hRg0xSXupMjDoYk30HeAkhqdKoKfZf799b5GdWAF
q2kv3RzVGUB4CtLmxB00l0h/K5wz7El0Z61XvEMsXIgaJxx6JYRKWbvVJVdFSguL
XlS+TcnTN6VPAucYroGq0bs1Nt6kMLah5UQI94NYkbuooN8cgxcH0tMy84M007/M
2jgF2ilbp9BIPiE6M5lVZF/8Gyl06nHP197nkoZLkmagNkJ4APceEc7Z46e93BPf
xqkVwN0FXpYFwq4/ar/ZzDgawY0l3381TboxcC3rnI5MSQ8HNzfoygTDVxHhu5oS
NPs5Myi5Ag0EY43lVAEQAMk/5hSlcnpBmCBHvdcvvN6Jl/17c+VlcNi0Hpe08v9k
eMxzG0VXA7JXYsZs0GzW9mlxHTybZGKVRWopB10Ew12uGqtT6Ydl41lEYpP5TXCK
```

GPG keys

[New GPG key](#)

This is a list of GPG keys associated with your account. Remove any keys that you do not recognize.

**11**

Email address: zalinaarsoeva@yandex.ru

Key ID: A311FB33AA9847EC

Subkeys: F62CEC80F70D9C52

Added on Dec 5, 2022

[Delete](#)

Learn how to [generate a GPG key and add it to your account](#).

Настройка автоматических подписей коммитов git

```
[zalinaarsoeva@fedora tmp]$ git config --global user.signingkey  
[zalinaarsoeva@fedora tmp]$ git config --global commit.gpgsing true  
[zalinaarsoeva@fedora tmp]$ git config --global gpg.program $(which gpg2)
```

```
create mode 100644 labs/lab01/presentation/Makefile
create mode 100644 labs/lab01/presentation/image/kulyabov.jpg
create mode 100644 labs/lab01/presentation/presentation.md
create mode 100644 labs/lab01/report/Makefile
create mode 100644 labs/lab01/report/bib/cite.bib
create mode 100644 labs/lab01/report/image/placeimg_800_600_tech.jpg
create mode 100644 labs/lab01/report/pandoc/csl/gost-r-7-0-5-2008-numeric.csl
create mode 100644 labs/lab01/report/report.md
create mode 100644 labs/lab02/presentation/Makefile
create mode 100644 labs/lab02/presentation/image/kulyabov.jpg
create mode 100644 labs/lab02/presentation/presentation.md
create mode 100644 labs/lab02/report/Makefile
create mode 100644 labs/lab02/report/bib/cite.bib
create mode 100644 labs/lab02/report/image/placeimg_800_600_tech.jpg
create mode 100644 labs/lab02/report/pandoc/csl/gost-r-7-0-5-2008-numeric.csl
create mode 100644 labs/lab02/report/report.md
create mode 100644 labs/lab03/presentation/Makefile
create mode 100644 labs/lab03/presentation/image/kulyabov.jpg
create mode 100644 labs/lab03/presentation/presentation.md
create mode 100644 labs/lab03/report/Makefile
create mode 100644 labs/lab03/report/bib/cite.bib
create mode 100644 labs/lab03/report/image/placeimg_800_600_tech.jpg
create mode 100644 labs/lab03/report/pandoc/csl/gost-r-7-0-5-2008-numeric.csl
create mode 100644 labs/lab03/report/report.md
create mode 100644 labs/lab04/presentation/Makefile
create mode 100644 labs/lab04/presentation/image/kulyabov.jpg
create mode 100644 labs/lab04/presentation/presentation.md
create mode 100644 labs/lab04/report/Makefile
create mode 100644 labs/lab04/report/bib/cite.bib
create mode 100644 labs/lab04/report/image/placeimg_800_600_tech.jpg
create mode 100644 labs/lab04/report/pandoc/csl/gost-r-7-0-5-2008-numeric.csl
create mode 100644 labs/lab04/report/report.md
create mode 100644 labs/lab05/presentation/Makefile
create mode 100644 labs/lab05/presentation/image/kulyabov.jpg
create mode 100644 labs/lab05/presentation/presentation.md
create mode 100644 labs/lab05/report/Makefile
create mode 100644 labs/lab05/report/bib/cite.bib
create mode 100644 labs/lab05/report/image/placeimg_800_600_tech.jpg
create mode 100644 labs/lab05/report/pandoc/csl/gost-r-7-0-5-2008-numeric.csl
create mode 100644 labs/lab05/report/report.md
create mode 100644 labs/lab06/presentation/Makefile
create mode 100644 labs/lab06/presentation/image/kulyabov.jpg
create mode 100644 labs/lab06/presentation/presentation.md
create mode 100644 labs/lab06/report/Makefile
create mode 100644 labs/lab06/report/bib/cite.bib
```

Загрузка шаблона репозитория и синхронизация

```
[zalinaarsoeva@fedora os-intro]$ git add .
[zalinaarsoeva@fedora os-intro]$ git commit -am 'feat(main): make course structure
>
```

Подготовка репозитория и коммит изменений

ArsoevaZalina / study_2022-2023_os-introPublic

Pin

Unwatch1

Fork0

<> Code

Issues

Pull requests

Actions

Projects

Wiki

Security

Insights

Settings

masterstudy_2022-2023_os-intro / labs /

Go to file

Add file

ArsoevaZalina feat(main): make course structuree35bad9 34 minutes agoHistory

..

lab01feat(main): make course structure34 minutes ago

lab02feat(main): make course structure34 minutes ago

lab03feat(main): make course structure34 minutes ago

lab04feat(main): make course structure34 minutes ago

lab05feat(main): make course structure34 minutes ago

lab06feat(main): make course structure34 minutes ago

lab07feat(main): make course structure34 minutes ago

lab08feat(main): make course structure34 minutes ago

lab09feat(main): make course structure34 minutes ago

Вывод

Мы приобрели практические навыки работы с сервисом github.