

Отчёт по лабораторной работе 2

Архитектура компьютера

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1 Цель работы

Целью работы является изучить идеологию и применение средств контроля версий. Приобрести практические навыки по работе с системой git.

2 Выполнение лабораторной работы

Регистрируюсь на гитхабе

Sign up for GitHub

 Continue with Google

 Continue with Apple

or

 Email^{*}
1132250408@pfur.ru 

Password^{*}
 

Password should be at least 15 characters OR at least 8 characters including a number and a lowercase letter.

Username^{*}
SA-Malutina 

Username may only contain alphanumeric characters or single hyphens and

Рисунок 2.1: Регистрация профиля

Нхожу шаблонный репозиторий и создаю из него свой.

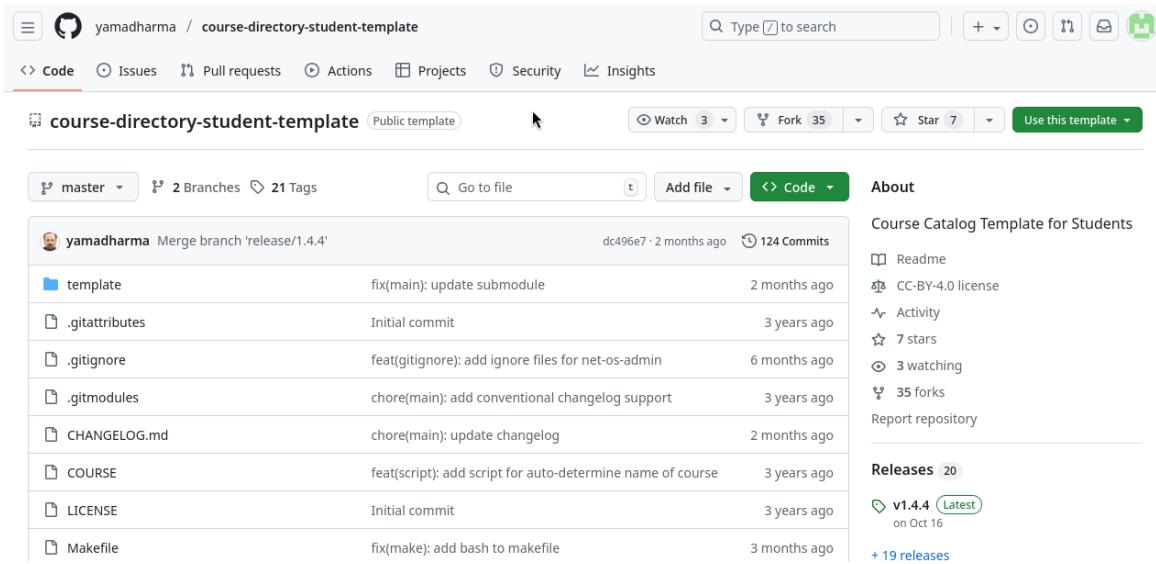


Рисунок 2.2: Шаблон репозитория

Create a new repository

Repositories contain a project's files and version history. Have a project elsewhere? [Import a repository](#).
Required fields are marked with an asterisk (*).

Start with a template
Templates pre-configure your repository with files.

Include all branches
If enabled, all branches from the template repository will be included. Off

1 General

Owner * SA-Malutina / **Repository name *** study_2025_2026_arch-pc
 study_2025_2026_arch-pc is available.

Great repository names are short and memorable. How about [super-system](#)?

Description
0 / 350 characters

Рисунок 2.3: Использование шаблона

Сначала сделаем предварительную конфигурацию git, создаю пользовате-

ля и ставлю параметры.

```
samalutina@VirtualBox:~$ git
usage: git [-v | --version] [-h | --help] [-C <path>] [-c <name>=<value>]
           [--exec-path[=<path>]] [--html-path] [--man-path] [--info-path]
           [-p | --paginate | -P | --no-pager] [--no-replace-objects] [--no-lazy-fetch]
           [--no-optional-locks] [--no-advice] [--bare] [--git-dir=<path>]
           [--work-tree=<path>] [--namespace=<name>] [--config-env=<name>=<envvar>]
           <command> [<args>]

These are common Git commands used in various situations:

start a working area (see also: git help tutorial)
  clone      Clone a repository into a new directory
  init       Create an empty Git repository or reinitialize an existing one

work on the current change (see also: git help everyday)
  add        Add file contents to the index
  mv         Move or rename a file, a directory, or a symlink
  restore    Restore working tree files
  rm         Remove files from the working tree and from the index

examine the history and state (see also: git help revisions)
  bisect     Use binary search to find the commit that introduced a bug
  diff       Show changes between commits, commit and working tree, etc
  grep       Print lines matching a pattern
  log        Show commit logs
  show       Show various types of objects
  status     Show the working tree status

grow, mark and tweak your common history
  backfill   Download missing objects in a partial clone
```

Рисунок 2.4: Опции команды git

```
samalutina@VirtualBox:~$ 
samalutina@VirtualBox:~$ git config --global user.name "SA-Malutina/"
samalutina@VirtualBox:~$ git config --global user.email "1132250408@pfur.ru"
samalutina@VirtualBox:~$ git config --global core.quotePath false
samalutina@VirtualBox:~$ git config --global init.defaultBranch master
samalutina@VirtualBox:~$ git config --global core.autocrlf input
samalutina@VirtualBox:~$ git config --global core.safecrlf warn
samalutina@VirtualBox:~$ █
```

Рисунок 2.5: Пользователь git

Далее создаю ключи для идентификации.

```
samatutina@VirtualBox:~$ ssh-keygen -C "SA-Malutina/ 1132250408@pfur.ru"
Generating public/private ed25519 key pair.
Enter file in which to save the key (/home/samatutina/.ssh/id_ed25519):
Created directory '/home/samatutina/.ssh'.
Enter passphrase for "/home/samatutina/.ssh/id_ed25519" (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/samatutina/.ssh/id_ed25519
Your public key has been saved in /home/samatutina/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:Vwkej/oFJE7PGc0bKFm1YfY2DW91t+M0bM+c+Oyig4Q SA-Malutina/ 1132250408@pfur.ru
The key's randomart image is:
+--[ED25519 256]--+
| oo** + |
| =Bo+** |
| o.0 *.* |
| .. 0 +oo |
| S . = . |
| E . . 0 . |
| . . . o * |
| . . .o |
| .o o+ |
+---[SHA256]---+
samatutina@VirtualBox:~$
```

Рисунок 2.6: Ключ для передачи

И добавляю ключ в профиль на гитхабе

The screenshot shows the GitHub profile page for user SA-Malutina. On the left, there is a sidebar with account settings like Public profile, Account, Appearance, Accessibility, Notifications, Access, Billing and licensing, Emails, and Password and authentication. The main content area is titled 'SSH keys' and contains a sub-section 'Authentication keys'. It lists a single key entry:

- SSH key 1**: SHA256:Vwkej/oFJE7PGc0bKFm1YfY2DW91t+M0bM+c+Oyig4Q
- Added on Dec 3, 2025
- Never used — Read/write
- A 'Delete' button is located next to the key entry.

At the bottom of the page, there is a note: 'Check out our guide to [connecting to GitHub using SSH keys](#) or troubleshoot [common SSH problems](#)'.

Рисунок 2.7: Сохранение ключа

Теперь я создаю рабочий каталог и клонирую туда репозиторий с гитхаба.

```
Resolving deltas: 100% (86/86), done.
Cloning into '/home/samalutina/work/study/2025-2026/Архитектура компьютера/study_2025_2026_arch-pc/template/report'...
remote: Enumerating objects: 251, done.
remote: Counting objects: 100% (251/251), done.
remote: Compressing objects: 100% (172/172), done.
remote: Total 251 (delta 111), reused 204 (delta 64), pack-reused 0 (from 0)
Receiving objects: 100% (251/251), 775.12 KiB | 3.82 MiB/s, done.
Resolving deltas: 100% (111/111), done.
Submodule path 'template/presentation': checked out '1c93acf9e731bf186384c85de4aff70037314240'
Submodule path 'template/report': checked out '8ee157c58b3362947b1c71492a65d4dc6882d5ad'
samalutina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера$ samalutina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера$ samalutina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера$ cd ~/work/study/2025-2026/"Архитектура компьютера"/study_2025_2026_arch-pc
samalutina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера/study_2025_2026_arch-pc$ echo arch-pc > COURSE
samalutina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера/study_2025_2026_arch-pc$ make prepare
sed: -e expression #1, char 42: unknown option to `s'
samalutina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера/study_2025_2026_arch-pc$ ls
COURSE LICENSE package.json presentation README.git-flow.md template
labs Makefile prepare README.en.md README.md
samalutina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера/study_2025_2026_arch-pc$
```

Рисунок 2.8: Создание рабочего каталога

```
create mode 100644 presentation/presentation/arch-pc--presentation--presentation.qmd
create mode 100644 presentation/presentation/image/kulyabov.jpg
create mode 100644 presentation/report/.gitignore
create mode 100644 presentation/report/.marksman.toml
create mode 100644 presentation/report/.projectile
create mode 100644 presentation/report/Makefile
create mode 100644 presentation/report/_assets/preamble.tex
create mode 100644 presentation/report/_quarto.yml
create mode 100644 presentation/report/_resources/csl/gost-r-7-0-5-2008-numeric.csl
create mode 100644 presentation/report/arch-pc--presentation--report.qmd
create mode 100644 presentation/report/bib/cite.bib
create mode 100644 presentation/report/image/solvay.jpg
samalutina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера/study_2025_2026_arch-pc$ git push
Enumerating objects: 73, done.
Counting objects: 100% (73/73), done.
Delta compression using up to 4 threads
Compressing objects: 100% (56/56), done.
Writing objects: 100% (70/70), 701.26 KiB | 4.84 MiB/s, done.
Total 70 (delta 24), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (24/24), completed with 1 local object.
To github.com:SA-Malutina/study_2025_2026_arch-pc.git
  7811bc4..e923215 master -> master
samalutina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера/study_2025_2026_arch-pc$
```

Рисунок 2.9: Создание рабочего каталога

Загружаю отчет

```
samatina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера/study_2025_2026_arch-pc$ git add .
samatina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера/study_2025_2026_arch-pc$ git commit -am 'add lab01'
[master 2b468ed] add lab01
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 labs/lab01/report/report-1 Малютина.docx
 create mode 100644 labs/lab01/report/report-1 Малютина.pdf
samatina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера/study_2025_2026_arch-pc$ git push
Enumerating objects: 11, done.
Counting objects: 100% (11/11), done.
Delta compression using up to 4 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (7/7), 964.90 KiB | 6.35 MiB/s, done.
Total 7 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (3/3), completed with 3 local objects.
To github.com:SA-Malutina/study_2025_2026_arch-pc.git
 e923215..2b468ed master -> master
samatina@VirtualBox:~/work/study/2025-2026/Архитектура компьютера/study_2025_2026_arch-pc$
```

Рисунок 2.10: push

3 Выводы

В ходе выполнения работы изучили работу с GitHub.