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## Front matter

title: "Отчет по лабораторной работе 1" author: "Гаглов Олег Мелорович"

## Generic options

lang: ru-RU toc-title: "Содержание"

## Bibliography

bibliography: bib/cite.bib csl: pandoc/csl/gost-r-7-0-5-2008-numeric.csl

## Pdf output format

toc: true # Table of contents toc-depth: 2 lof: true # List of figures lot: true # List of tables fontsize: 12pt  
linestretch: 1.5 papersize: a4 documentclass: scrreprt

## l18n polyglossia

polyglossia-lang: name: russian options: - spelling=modern - babelshorthands=true polyglossia-otherlangs:  
name: english

## l18n babel

babel-lang: russian babel-otherlangs: english

## Fonts

mainfont: PT Serif romanfont: PT Serif sansfont: PT Sans monofont: PT Mono mainfontoptions: Ligatures=TeX  
romanfontoptions: Ligatures=TeX sansfontoptions: Ligatures=TeX,Scale=MatchLowercase monofontoptions:  
Scale=MatchLowercase,Scale=0.9

## Biblatex

biblatex: true biblio-style: "gost-numeric" biblatexoptions:

- parenttracker=true
- backend=biber
- hyperref=auto
- language=auto
- autolang=other\*
- citestyle=gost-numeric

## Pandoc-crossref LaTeX customization

figureTitle: "Рис." tableTitle: "Таблица" listingTitle: "Листинг" lofTitle: "Список иллюстраций" lotTitle:  
"Список таблиц" lolTitle: "Листинги"

## Misc options

indent: true header-includes:

- `\usepackage{indentfirst}`
- `\usepackage{float} # keep figures where there are in the text`
- `\floatplacement{figure}{H} # keep figures where there are in the text`

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## Цель работы

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Создание репозитория курса на основе шаблона. Управление GitHub с помощью консоли

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## Задание

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1. Скопировать Репозиторий с GitHub
2. Настроить управление репозиторием
3. Провести установку необходимых для работы репозитория программ

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## Теоретическое введение

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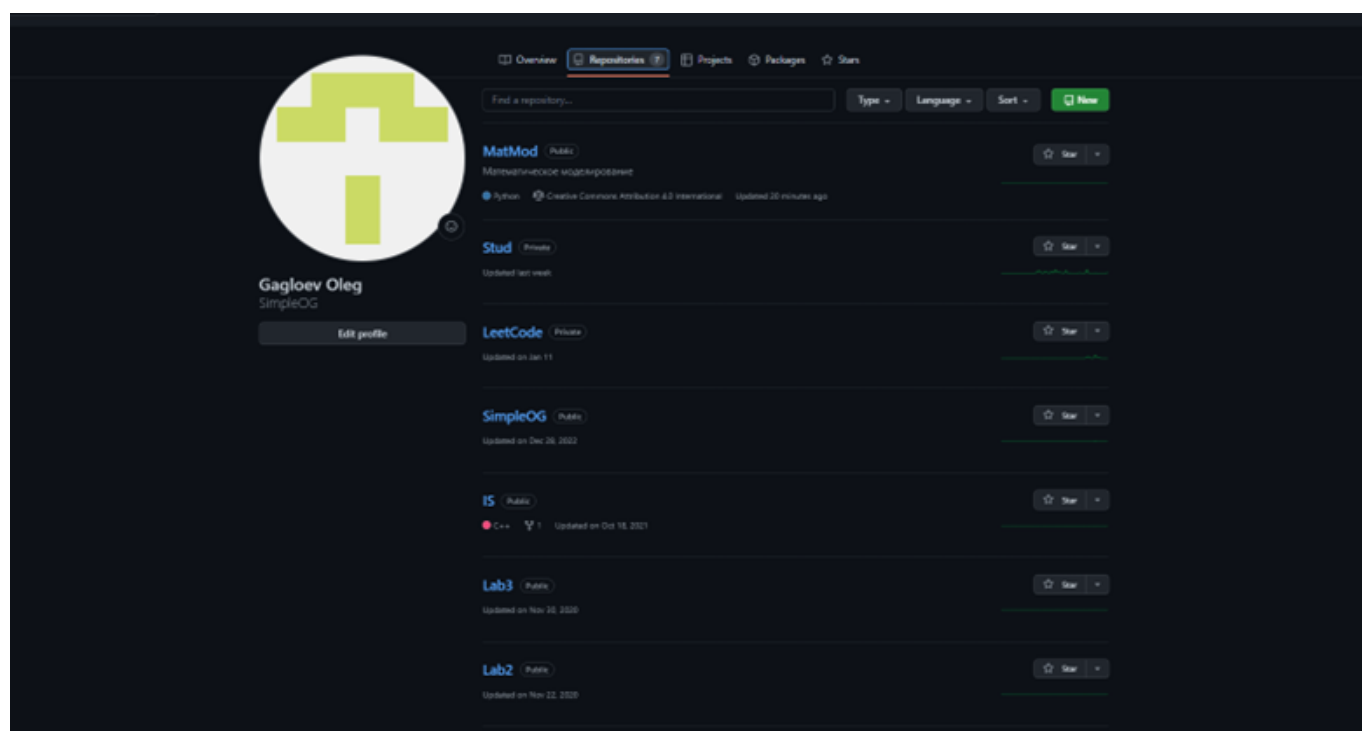
Мы будем использовать репозиторий с GitHub. Для выполнения отчета мы будем использовать markdown

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## Выполнение лабораторной работы

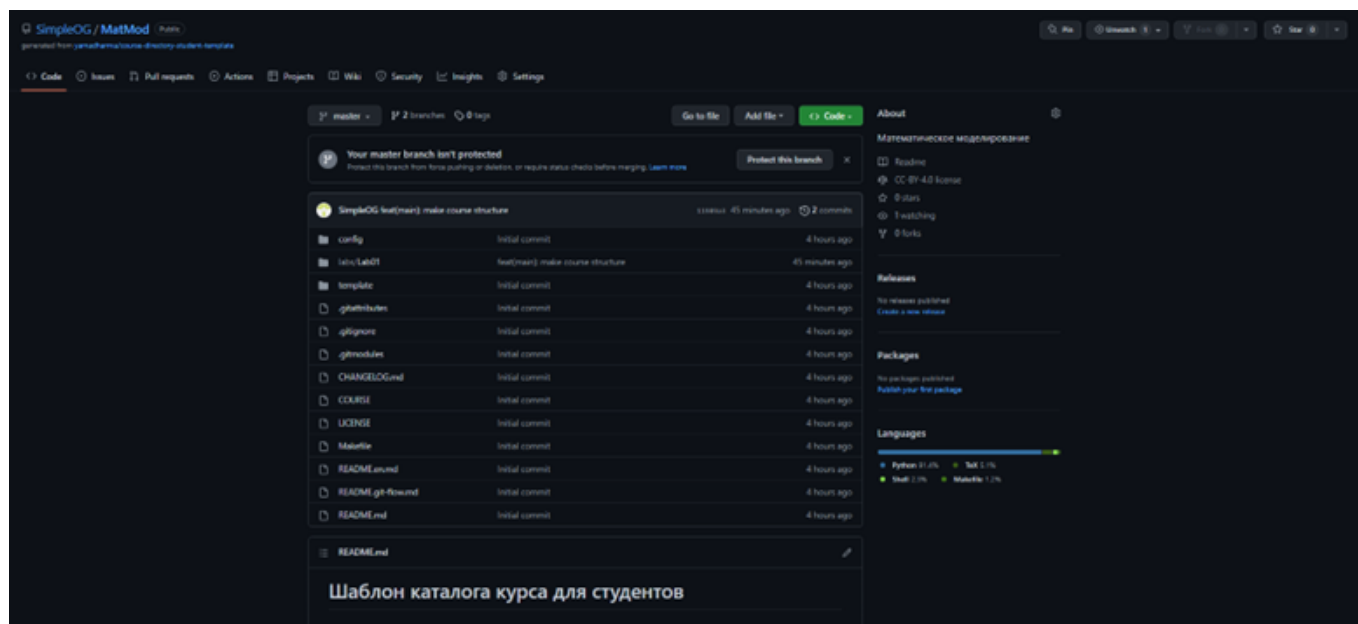
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1. Открываем профиль в GitHub



{#fig:001 width=40%}

2. Теперь перехожу по ссылке в нужный профиль и создаю репозиторий на основе данного



{#fig:001 width=40%}

3. Скачаю необходимые компоненты

```
(C) Корпорация Майкрософт (Microsoft Corporation). Все права защищены.

Установите последнюю версию PowerShell для новых функций и улучшения! https://aka.ms/PSWindows

PS C:\WINDOWS\system32> choco install make
Chocolatey v1.1.0
Installing the following packages:
make
By installing, you accept licenses for the packages.

make v4.3 [Approved]
make package files install completed. Performing other installation steps.
ShimGen has successfully created a shim for make.exe
The install of make was successful.
Software installed to 'C:\ProgramData\chocolatey\lib\make'

Chocolatey installed 1/1 packages.
See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).

Enjoy using Chocolatey? Explore more amazing features to take your
experience to the next level at
https://chocolatey.org/compare
PS C:\WINDOWS\system32> choco install pandoc
Chocolatey v1.1.0
```

```
PS C:\WINDOWS\system32> choco install pandoc
Chocolatey v1.1.0
Installing the following packages:
pandoc
By installing, you accept licenses for the packages.
Progress: Downloading pandoc 3.1... 100%

pandoc v3.1 [Approved]
pandoc package files install completed. Performing other installation steps.
The package pandoc wants to run 'chocolateyInstall.ps1'.
Note: If you don't run this script, the installation will fail.
Note: To confirm automatically next time, use '-y' or consider:
choco feature enable -n allowGlobalConfirmation
Do you want to run the script?([Y]es/[A]ll - yes to all/[N]o/[P]rint): y

Installing 64-bit pandoc...
pandoc has been installed.
pandoc installed to 'C:\Users\Oleg\AppData\Local\Pandoc'
Added C:\ProgramData\chocolatey\bin\pandoc.exe shim pointed to 'c:\users\oleg\appdata\local\pandoc\pandoc.exe'.
Added C:\ProgramData\chocolatey\bin\pandoc-citeproc.exe shim pointed to 'c:\users\oleg\appdata\local\pandoc\pandoc-citeproc.exe'.
pandoc may be able to be automatically uninstalled.
Environment Vars (like PATH) have changed. Close/reopen your shell to
see the changes (or in powershell/cmd.exe just type 'refreshenv').
```

```

make. *** No targets specified and no makefile found. Stop.
PS C:\WINDOWS\system32> choco install git
Chocolatey v1.1.0
Installing the following packages:
git
By installing, you accept licenses for the packages.
git v2.38.1 already installed.
Use --force to reinstall, specify a version to install, or try upgrade.

Chocolatey installed 0/1 packages.
See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).

Warnings:
- git - git v2.38.1 already installed.
Use --force to reinstall, specify a version to install, or try upgrade.
PS C:\WINDOWS\system32>

```

#### 4. Создадим ключ ssh для удаленного контроля репозитория

```

PS C:\WINDOWS\system32> ssh-keygen -t ed25519 -C "gagloevolegka@gmail.com"
Generating public/private ed25519 key pair.
Enter file in which to save the key (C:\Users\Oleg\.ssh\id_ed25519):
Created directory 'C:\Users\Oleg\.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in C:\Users\Oleg\.ssh\id_ed25519.
Your public key has been saved in C:\Users\Oleg\.ssh\id_ed25519.pub.
The key fingerprint is:
SHA256:fQrjWH9EGIXRdE0MP6Au1sM/LxQcK3ZKG7iaxVHJKvc gagloevolegka@gmail.com
The key's randomart image is:
+--[ED25519 256]--+
|      .B+.+=.      |
|      . ==.00      |
|      +0..00      |
|      . =+=.=      |
|      +S***..      |
|      =+=E+.      |
|      .+= 0.+      |
|      0. 0 ..0      |
|      ..          |
+----[SHA256]-----+

```

#### 5. Запустим сервис ssh agent

```

Установите последнюю версию PowerShell для новых функций и улучшения! https://aka.ms/PSWindows
PS C:\WINDOWS\system32> Get-Service ssh-agent | Set-Service -StartupType Automatic -PassThru | Start-Service
PS C:\WINDOWS\system32> ssh-add "C:\Users\Oleg\.ssh\id_rsa"
Identity added: C:\Users\Oleg\.ssh\id_rsa (gagloevolegka@gmail.com)
PS C:\WINDOWS\system32>

```

#### 6. Применим ssh ключ


Go to your personal profile

## SSH keys

New SSH key

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

### Authentication Keys



SSH key

SHA256:p9TNV7Tv+HBI6bGwmeVEaUs1I6Hu8gq+CVAh1B0QtEg

Added on Feb 11, 2023

Never used — Read/write

Delete

Check out our guide to [generating SSH keys](#) or [troubleshoot common SSH problems](#).

## GPG keys

New GPG key

There are no GPG keys associated with your account.

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

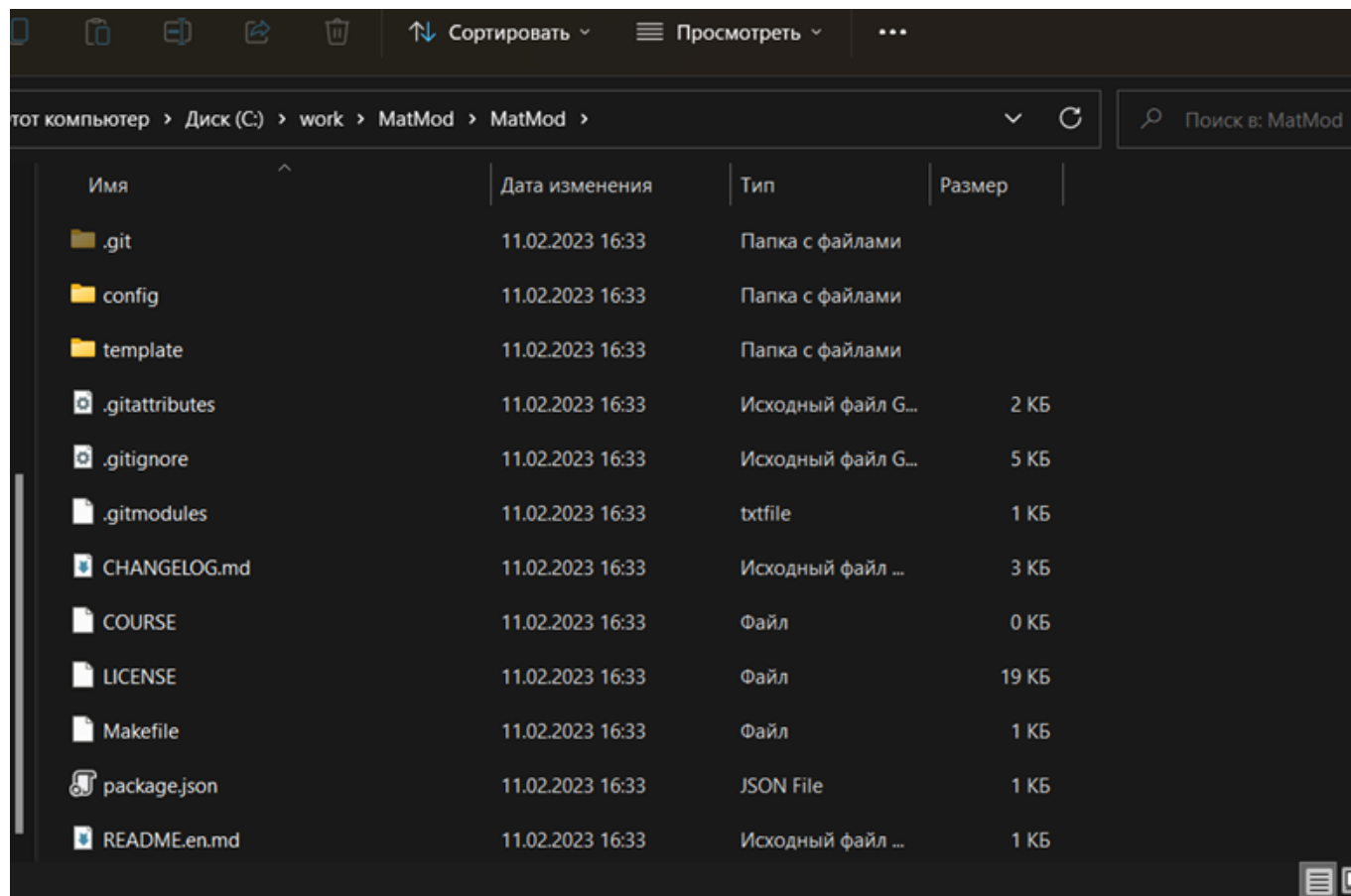
## Vigilant mode

☒ Flag unsigned commits as unverified

This will include any commit attributed to your account but not signed with your GPG or S/MIME key.  
Note that this will include your existing unsigned commits.

### 7. Скачаем репозиторий с ГитХаба в созданную папку

```
PS C:\WINDOWS\system32> cd C:\work\MatMod
PS C:\work\MatMod> git clone --recursive git@github.com:SimpleOG/MatMod.git
Cloning into 'MatMod'...
remote: Enumerating objects: 28, done.
remote: Counting objects: 100% (28/28), done.
remote: Compressing objects: 100% (27/27), done.
remote: Total 28 (delta 1), reused 11 (delta 0), pack-reused 0
Receiving objects: 100% (28/28), 17.45 KiB | 17.45 MiB/s, done.
Resolving deltas: 100% (1/1), done.
Submodule 'template/presentation' (https://github.com/yamadharma/academic-presentation-markdown-template.git) registered
for path 'template/presentation'
Submodule 'template/report' (https://github.com/yamadharma/academic-laboratory-report-template.git) registered for path
'template/report'
Cloning into 'C:/work/MatMod/MatMod/template/presentation'...
remote: Enumerating objects: 82, done.
remote: Counting objects: 100% (82/82), done.
remote: Compressing objects: 100% (57/57), done.
remote: Total 82 (delta 28), reused 77 (delta 23), pack-reused 0
Receiving objects: 100% (82/82), 92.90 KiB | 970.00 KiB/s, done.
Resolving deltas: 100% (28/28), done.
Cloning into 'C:/work/MatMod/MatMod/template/report'...
remote: Enumerating objects: 101, done.
remote: Counting objects: 100% (101/101), done.
remote: Compressing objects: 100% (70/70), done.
remote: Total 101 (delta 40), reused 88 (delta 27), pack-reused 0
Receiving objects: 100% (101/101), 327.25 KiB | 1003.00 KiB/s, done.
Resolving deltas: 100% (40/40), done.
Submodule path 'template/presentation': checked out 'b1be3800ee91f5809264cb755d316174540b753e'
Submodule path 'template/report': checked out '1d1b61dcac9c287a83917b82e3aef11a33b1e3b2'
PS C:\work\MatMod>
```



8. Запустим make, чтобы выполнить содержимое файла makefile

```
PS C:\work\MatMod\labs\Lab01> make
pandoc "report.md" --filter pandoc/filters/pandoc_fignos.py --filter pandoc/filters/pandoc_eqnos.py --filter pandoc/filters/pandoc_tablenos.py --filter pandoc/filters/pandoc_secnos.py --number-sections --citeproc -o "report.docx"
Traceback (most recent call last):
  File "C:\work\MatMod\labs\Lab01\pandoc\filters\pandoc_fignos.py", line 57, in <module>
    import pandocxnos
  File "C:\work\MatMod\labs\Lab01\pandoc\filters\pandocxnos\__init__.py", line 3, in <module>
    from .core import *
  File "C:\work\MatMod\labs\Lab01\pandoc\filters\pandocxnos\core.py", line 33, in <module>
    import psutil
ModuleNotFoundError: No module named 'psutil'
Error running filter pandoc/filters/pandoc_fignos.py:
Filter returned error status 1
make: [Makefile:25: report.docx] Error 83 (ignored)
pandoc "report.md" --filter pandoc/filters/pandoc_fignos.py --filter pandoc/filters/pandoc_eqnos.py --filter pandoc/filters/pandoc_tablenos.py --filter pandoc/filters/pandoc_secnos.py --pdf-engine=lualatex --pdf-engine-opt=--shell-escape --citeproc --number-sections -o "report.pdf"
Traceback (most recent call last):
  File "C:\work\MatMod\labs\Lab01\pandoc\filters\pandoc_fignos.py", line 57, in <module>
    import pandocxnos
  File "C:\work\MatMod\labs\Lab01\pandoc\filters\pandocxnos\__init__.py", line 3, in <module>
    from .core import *
  File "C:\work\MatMod\labs\Lab01\pandoc\filters\pandocxnos\core.py", line 33, in <module>
    import psutil
ModuleNotFoundError: No module named 'psutil'
Error running filter pandoc/filters/pandoc_fignos.py:
Filter returned error status 1
make: [Makefile:28: report.pdf] Error 83 (ignored)
PS C:\work\MatMod\labs\Lab01>
```

9. Скачаем дополнительные файлы, чтобы все заработало

Во время установки texlive произошла куча ошибок, поэтому установить не получилось

```
PS C:\Users\Oleg\PycharmProjects\Sasha\venv\Scripts> .\pip install pandocfilters
Collecting pandocfilters
  Downloading pandocfilters-1.5.0-py2.py3-none-any.whl (8.7 kB)
Installing collected packages: pandocfilters
Successfully installed pandocfilters-1.5.0
WARNING: You are using pip version 21.1.2; however, version 23.0 is available.
You should consider upgrading via the 'C:\Users\Oleg\PycharmProjects\Sasha\venv\Scripts\python.exe -m pip install --upgr
```



```
Windows PowerShell
(C) Корпорация Майкрософт (Microsoft Corporation). Все права защищены.

Установите последнюю версию PowerShell для новых функций и улучшения! https://aka.ms/PSWindows

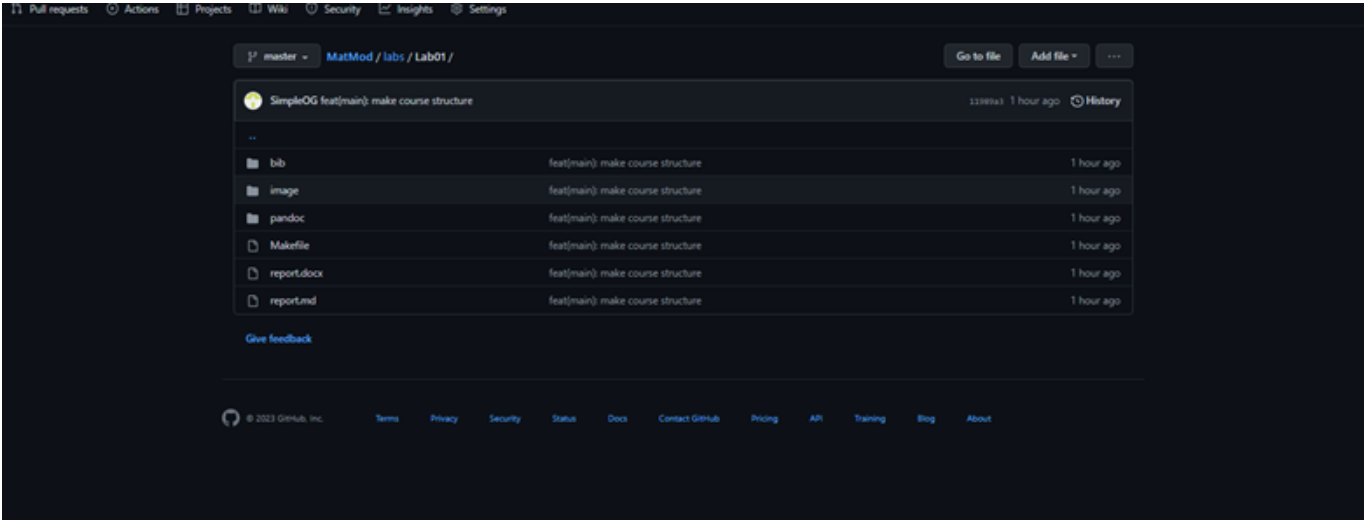
PS C:\WINDOWS\system32> pip install pandocfilters
Requirement already satisfied: pandocfilters in c:\msys64\mingw64\lib\python3.10\site-packages (1.5.0)
PS C:\WINDOWS\system32> cd C:\work\MatMod
PS C:\work\MatMod> make
process_begin: CreateProcess(NULL, bash C:\work\MatMod\config\script\prepare, ...) failed.
make (e=2): =х ёфрхёё эрщёш ёърчээвщ ёрщы.
make: *** [Makefile:27: prepare] Error 2
PS C:\work\MatMod>
```

```
PS C:\Users\Oleg> cd C:\work\MatMod\labs\Lab01
PS C:\work\MatMod\labs\Lab01> make
pandoc "report.md" --filter pandoc/filters/pandoc_fignos.py --filter pandoc/filters/pandoc_eqnos.py --filter pandoc/filters/pandoc_tablenos.py --filter pandoc/filters/pandoc_secnos.py --number-sections --citeproc -o "report.docx"
[WARNING] Could not fetch resource image/placeimg_800_600_tech.jpg: replacing image with description
pandoc "report.md" --filter pandoc/filters/pandoc_fignos.py --filter pandoc/filters/pandoc_eqnos.py --filter pandoc/filters/pandoc_tablenos.py --filter pandoc/filters/pandoc_secnos.py --pdf-engine=lualatex --pdf-engine-opt=--shell-escape --citeproc --number-sections -o "report.pdf"
[WARNING] Could not fetch resource image/placeimg_800_600_tech.jpg: replacing image with description
lualatex not found. Please select a different --pdf-engine or install lualatex
make: [Makefile:28: report.pdf] Error 47 (ignored)
PS C:\work\MatMod\labs\Lab01>
```

10. Загрузим изменения обратно на ГитХаб

```
PS C:\work\MatMod> git add .
PS C:\work\MatMod>
```

```
PS C:\work\MatMod> git commit -am 'feat(main): make course structure'
[master 11989a3] feat(main): make course structure
15 files changed, 4322 insertions(+), 14 deletions(-)
create mode 100644 labs/Lab01/Makefile
create mode 100644 labs/Lab01/bib/cite.bib
create mode 100644 labs/Lab01/image/placeimg_800_600_tech.jpg
create mode 100644 labs/Lab01/pandoc/csl/gost-r-7-0-5-2008-numeric.csl
create mode 100644 labs/Lab01/pandoc/filters/pandoc_eqnos.py
create mode 100644 labs/Lab01/pandoc/filters/pandoc_fignos.py
create mode 100644 labs/Lab01/pandoc/filters/pandoc_secnos.py
create mode 100644 labs/Lab01/pandoc/filters/pandoc_tablenos.py
create mode 100644 labs/Lab01/pandoc/filters/pandocxnos/__init__.py
create mode 100644 labs/Lab01/pandoc/filters/pandocxnos/core.py
create mode 100644 labs/Lab01/pandoc/filters/pandocxnos/main.py
create mode 100644 labs/Lab01/pandoc/filters/pandocxnos/pandocattributes.py
create mode 100644 labs/Lab01/report.docx
create mode 100644 labs/Lab01/report.md
delete mode 100644 package.json
PS C:\work\MatMod>
```



# Выводы

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Я смог создать и настроить репозиторий на основе шаблона.

# Список литературы

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