

МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ
РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное образовательное учреждение
высшего образования
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ФИЗИКО-ТЕХНИЧЕСКИЙ ИНСТИТУТ
Кафедра компьютерной инженерии и моделирования

ОТЧЕТ ПО ПРАКТИЧЕСКОМУ ЗАДАНИЮ №6
«Знакомство с Jenkins»

Практическая работа
по дисциплине «Программная инженерия»
студента 1 курса группы ПИ-б-о-241(1)
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09.03.04 «Программная инженерия»

Симферополь, 2025

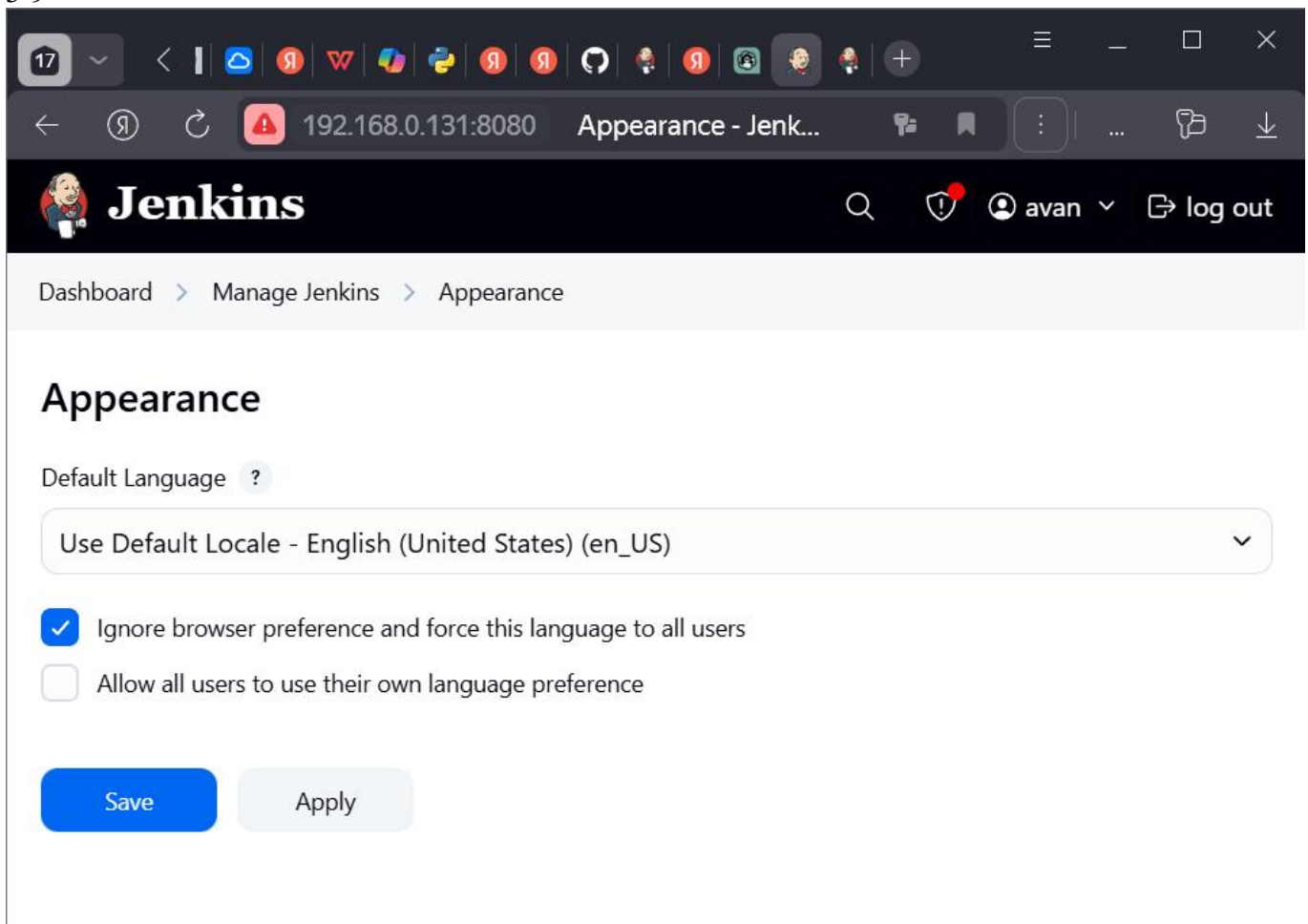
Ход работы

1-2

```
PS C:\Users\ilya2> vim C:\Users\ilya2\.ssh\known_hosts
PS C:\Users\ilya2> ssh avan@192.168.0.131
The authenticity of host '192.168.0.131 (192.168.0.131)' can't be established.
ED25519 key fingerprint is SHA256:K9xTTLq1Q4UtW1D/fzVULKpH/40IDJ035MX+0b/WXGM.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.0.131' (ED25519) to the list of known hosts.
avan@192.168.0.131's password:
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.8.0-60-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro
```

3-9



2.1-5

Dashboard > All > Build History

+ New Item

Build History

Manage Jenkins

My Views

Build Queue

No builds in the queue.

Build Executor Status

0/2

Build History of Jenkins

S	Build	Time Since ↑	Status
<div>✓</div>	<div>Simple #1</div>	23 sec	stable <div>📄</div>

Icon: S M L

⋮

REST API


Jenkins 2.504.1

6



 Delete build '#1'

Console Output

 Download

 Copy

View as plain text



```
Started by user avan
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/Simple
[Simple] $ /bin/sh -xe /tmp/jenkins2439920693794774246.sh
+ echo Simple
Simple
+ whoami
jenkins
+ pwd
/var/lib/jenkins/workspace/Simple
+ ls -al
total 8
drwxr-xr-x 2 jenkins jenkins 4096 May 25 15:03 .
drwxr-xr-x 3 jenkins jenkins 4096 May 25 15:03 ..
Finished: SUCCESS
```

7

 Add description

All

+

S	W	Name ↓	Last Success	Last Failure	Last Duration	
		Simple	1 min 44 sec #1	N/A	0.17 sec	



Icon: S M L

...

3.

The screenshot shows a terminal window on the left and a web browser on the right, both displaying the setup of a GitHub repository for a project named 'Adventure-r/qr'.

Terminal Window:

```

avan@ubuntu6lab: ~/6lab$ git branch -M main
avan@ubuntu6lab:~/6lab$ git remote add origin https://github.com/Adventure-r/qr.git
avan@ubuntu6lab:~/6lab$ git push -u origin main
error: remote origin already exists.
Username for 'https://github.com': Adventur-er
Password for 'https://github.com': 
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (5/5), 409 bytes | 58.00 KiB/s, done.
Total 5 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/Adventure-r/qr.git
 * [new branch]    main -> main
branch 'main' set up to track 'origin/main'.
avan@ubuntu6lab:~/6lab$ ls
main.py  ReadMe.md  requirements.txt
avan@ubuntu6lab:~/6lab$

```

Web Browser:

The browser shows the GitHub repository page for 'Adventure-r/qr'. The repository is a public repository with 0 stars, 0 forks, 0 watching, 1 branch, and 0 tags. The files listed are ReadMe.md, main.py, and requirements.txt, all from the first commit 2 minutes ago. The README file is open, showing the title 'Pure python QR Code generator'.

Code Snippets:

```

import qrcode
img = qrcode.make('Some data here')
img.save("some_file.png")

```

requirements.txt:

```

qrcode[pil]

```

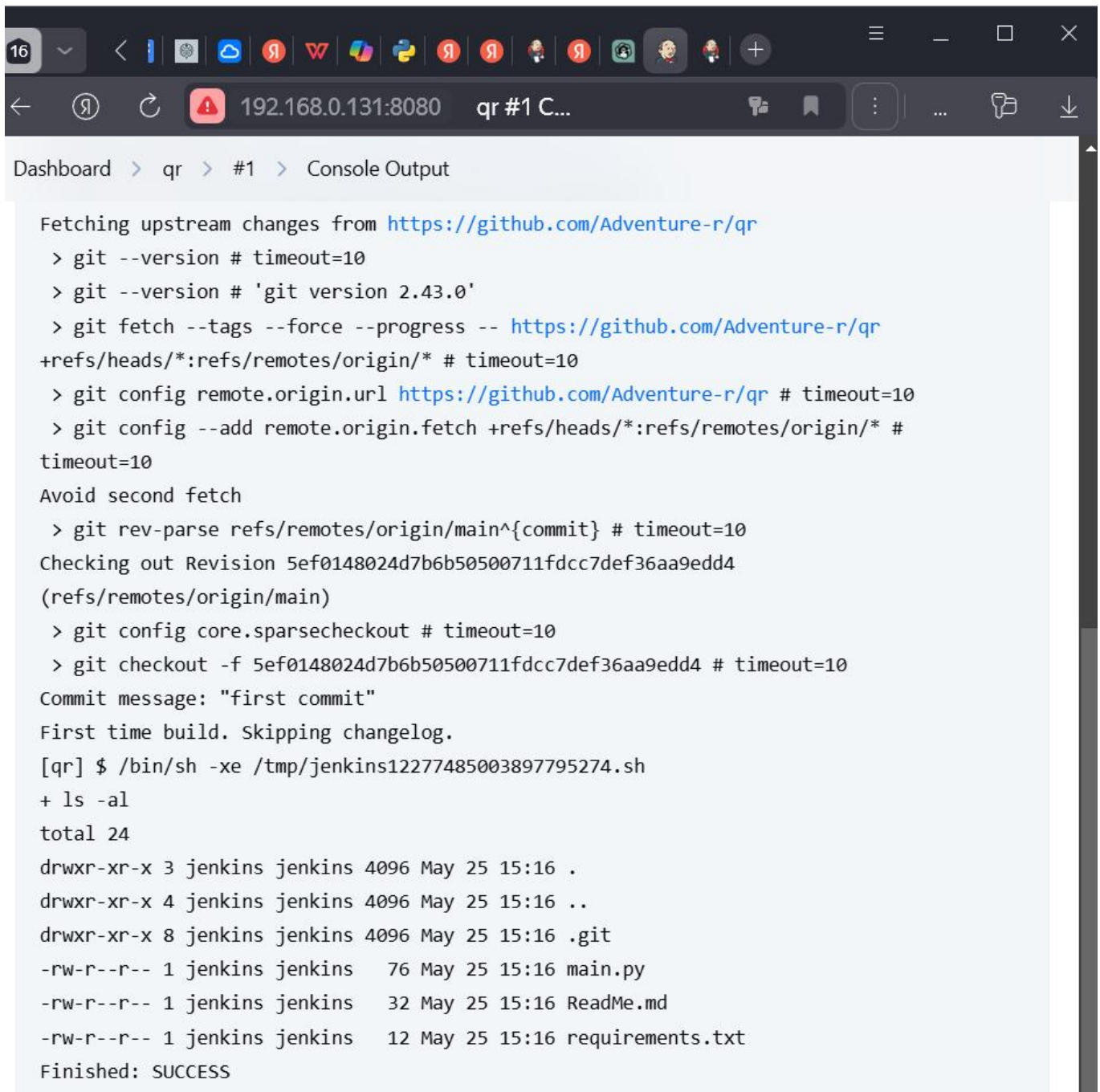
Instructions:

- Инициализируйте в этой папке локальный репозиторий и закоммитуйте содержимое;
- Создайте на github.com репозиторий и синхронизируйте его с локальным. В моём случае это [qr_code_generator](#).

Создаём и настраиваем job

- Перейдите в раздел управления плагинами и установите плагин [Git](#), также как вы

4.1-8



```

Dashboard > qr > #1 > Console Output

Fetching upstream changes from https://github.com/Adventure-r/qr
> git --version # timeout=10
> git --version # 'git version 2.43.0'
> git fetch --tags --force --progress -- https://github.com/Adventure-r/qr
+refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url https://github.com/Adventure-r/qr # timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* #
timeout=10
Avoid second fetch
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
Checking out Revision 5ef0148024d7b6b50500711fdcc7def36aa9edd4
(refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f 5ef0148024d7b6b50500711fdcc7def36aa9edd4 # timeout=10
Commit message: "first commit"
First time build. Skipping changelog.
[qr] $ /bin/sh -xe /tmp/jenkins12277485003897795274.sh
+ ls -al
total 24
drwxr-xr-x 3 jenkins jenkins 4096 May 25 15:16 .
drwxr-xr-x 4 jenkins jenkins 4096 May 25 15:16 ..
drwxr-xr-x 8 jenkins jenkins 4096 May 25 15:16 .git
-rw-r--r-- 1 jenkins jenkins  76 May 25 15:16 main.py
-rw-r--r-- 1 jenkins jenkins  32 May 25 15:16 ReadMe.md
-rw-r--r-- 1 jenkins jenkins  12 May 25 15:16 requirements.txt
Finished: SUCCESS

```

11-12

Dashboard > qr > #2 > Console Output

```
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
Checking out Revision 5ef0148024d7b6b50500711fdcc7def36aa9edd4
(refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f 5ef0148024d7b6b50500711fdcc7def36aa9edd4 # timeout=10
Commit message: "first commit"
> git rev-list --no-walk 5ef0148024d7b6b50500711fdcc7def36aa9edd4 # timeout=10
[qr] $ /bin/bash /tmp/jenkins7588686003941723817.sh
The virtual environment was not created successfully because ensurepip is not
available. On Debian/Ubuntu systems, you need to install the python3-venv
package using the following command.
```

```
apt install python3.12-venv
```

You may need to use sudo with that command. After installing the python3-venv package, recreate your virtual environment.

Failing command: /var/lib/jenkins/workspace/qr/venv/bin/python3

```
/tmp/jenkins7588686003941723817.sh: line 3: venv/bin/activate: No such file or
directory
/tmp/jenkins7588686003941723817.sh: line 4: pip: command not found
/tmp/jenkins7588686003941723817.sh: line 5: python: command not found
Build step 'Execute shell' marked build as failure
Finished: FAILURE
```

Builds






Today

 #3 3:21 PM #2 3:18 PM #1 3:16 PM

Workspace of qr on Built-In Node

qr /

 .git venv main.py May 25, 2025, 3:16:50 PM 76 B  ReadMe.md May 25, 2025, 3:16:50 PM 32 B  requirements.txt May 25, 2025, 3:16:50 PM 12 B  some_file.png May 25, 2025, 3:21:27 PM 456 B  (all files in zip)

-  Build Now
-  Configure
-  Delete Project
-  Git Polling Log
-  Rename

Builds



No builds

Today

 #1 3:26 PM



timer

 Add description

— .. .

7-10

The screenshot shows a web browser window with a dark theme. The address bar displays the URL `192.168.0.131:8080` and the page title is "Workspace of tim...". The breadcrumb navigation shows "Dashboard > timer > Workspace of timer on Built-In Node".

Below the breadcrumb, there are two actions: "Git Polling Log" (with a document icon) and "Rename" (with a pencil icon).

A "Builds" section is visible, containing a search bar labeled "Filter" and a list of builds:

- Today
- ✓ #2 3:30 PM
- ✓ #1 3:26 PM

Below the builds, the main heading is "Workspace of timer on Built-In Node". Underneath, there is a breadcrumb "timer /" followed by a search input field and a right arrow button.

The workspace content shows a file tree with folders `.git` and `venv`, and a list of files:

File Name	Last Modified	Size	Icon
<code>main.py</code>	May 25, 2025, 3:30:09 PM	78 B	Eye icon
<code>other_file.png</code>	May 25, 2025, 3:30:14 PM	566 B	Eye icon
<code>ReadMe.md</code>	May 25, 2025, 3:26:09 PM	32 B	Eye icon
<code>requirements.txt</code>	May 25, 2025, 3:26:09 PM	12 B	Eye icon
<code>some_file.png</code>	May 25, 2025, 3:26:19 PM	456 B	Eye icon

At the bottom of the file list, there is a link: [\(all files in zip\)](#).

6.1-8

The screenshot shows the Jenkins dashboard in a web browser. The address bar displays the URL `beb5-185-239-123-204.ngrok-free.app` and the page title is "Das...".

The Jenkins logo is visible on the left, and the user "avan" is logged in, with a "log out" link on the right. A search icon and a shield icon are also present.

The breadcrumb navigation shows "Dashboard >".

Below the breadcrumb, there is a link: [+ New Item](#).

9-14

Dashboard > eventstart >

GitHub Hook Log

 GitHub

 Rename

Builds

Filter

 Today

#1 7:14 PM

eventstart

Add description

Permalinks

- [Last build \(#1\), 1 min 15 sec ago](#)
- [Last stable build \(#1\), 1 min 15 sec ago](#)
- [Last successful build \(#1\), 1 min 15 sec ago](#)
- [Last completed build \(#1\), 1 min 15 sec ago](#)

REST API

Jenkins 2.504.1

7.1-12

Последний вывод

```

Started by user avan
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/docker
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/docker/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/Adventure-r/qr.git # timeout=10
Fetching upstream changes from https://github.com/Adventure-r/qr.git
> git --version # timeout=10
> git --version # 'git version 2.43.0'
> git fetch --tags --force --progress -- https://github.com/Adventure-r/qr.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
Checking out Revision f863bab6d901fa33f13179d034226ba4b9c7c399 (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f f863bab6d901fa33f13179d034226ba4b9c7c399 # timeout=10
Commit message: "added Dockerfile"
> git rev-list --no-walk f863bab6d901fa33f13179d034226ba4b9c7c399 # timeout=10
[docker] $ /bin/sh -xe /tmp/jenkins12733634978859378094.sh
  
```

```

+ docker build --file=docker/Dockerfile -t qrcode .
#0 building with "default" instance using docker driver

#1 [internal] load build definition from Dockerfile
#1 transferring dockerfile: 201B 0.0s done
#1 DONE 0.1s

#2 [internal] load metadata for docker.io/library/python:3.12.3-alpine
#2 ...

#3 [auth] library/python:pull token for registry-1.docker.io
#3 DONE 0.0s

#2 [internal] load metadata for docker.io/library/python:3.12.3-alpine
#2 DONE 1.8s

#4 [internal] load .dockerignore
#4 transferring context: 2B done
#4 DONE 0.0s

#5 [1/5] FROM docker.io/library/python:3.12.3-alpine@sha256:32385e61c3414ffa5a6dbf52feace89f758ad68709a48d376d56a0232162665a
#5 DONE 0.0s

#6 [internal] load build context
#6 transferring context: 64B done
#6 DONE 0.1s

#7 [2/5] WORKDIR /app
#7 CACHED

#8 [3/5] COPY requirements.txt /app
#8 CACHED

#9 [4/5] COPY main.py /app
#9 CACHED

#10 [5/5] RUN pip install -r requirements.txt
#10 CACHED

#11 exporting to image
#11 exporting layers done
#11 writing image sha256:1a470d945fae48447ba5ab1d7d4a814f86a134d64bf208da3a0abbc800fcbc4e 0.0s done
#11 naming to docker.io/library/qrcode 0.0s done
#11 DONE 0.1s
[docker] $ /bin/sh -xe /tmp/jenkins12692903441516672690.sh
+ docker run --rm -d --name=qrcodegen -p 5000:5000 qrcode
e5bc57d4f4f80046bfcc9508d2cee7a7002f5ab9d1882b610d899f375096587
+ sleep 5
[docker] $ /bin/sh -xe /tmp/jenkins14543678624176593693.sh
+ curl localhost:5000/qr?msg=hello
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload  Total   Spent    Left   Speed

  0   0   0    0    0    0     0      0  --:--:-- --:--:-- --:--:--    0
100 634 100 634    0    0 16013    0  --:--:-- --:--:-- --:--:-- 16256
[docker] $ /bin/sh -xe /tmp/jenkins12848422709115248946.sh
+ docker stop qrcodegen
qrcodegen
[docker] $ /bin/sh -xe /tmp/jenkins210036801185164438.sh
+ docker login -u avangarden -p ****
WARNING! Using --password via the CLI is insecure. Use --password-stdin.
Login Succeeded
[docker] $ /bin/bash /tmp/jenkins16838719604984599246.sh
Finished: SUCCESS

```

Попытался открыть докерхаб, image beta и теперь всё время



Something went wrong!

We've logged this error and will review it as soon as we can.

If this keeps happening, please [file a support ticket](#) with the below ID.

Error ID: KTX6TX07Qeif-300ppee0Q

Возможно проблема с впн, но я не знаю рабочих на пк бесплатных впн