1. При помощи команды *docker push* собранный в ходе ЛР3 образ разрабатываемого приложения загрузить в Docker hub

```
mvo201-331@mvo201331-VirtualBox:~$ sudo docker login -u vmosh1234
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
```
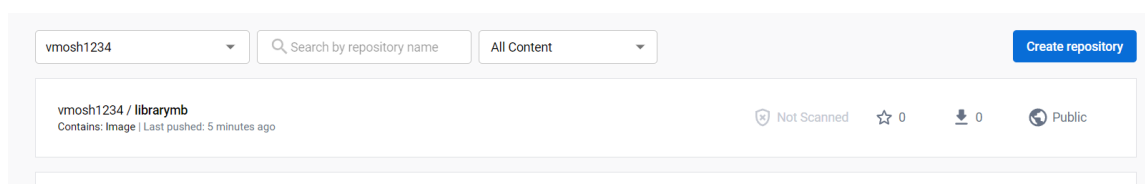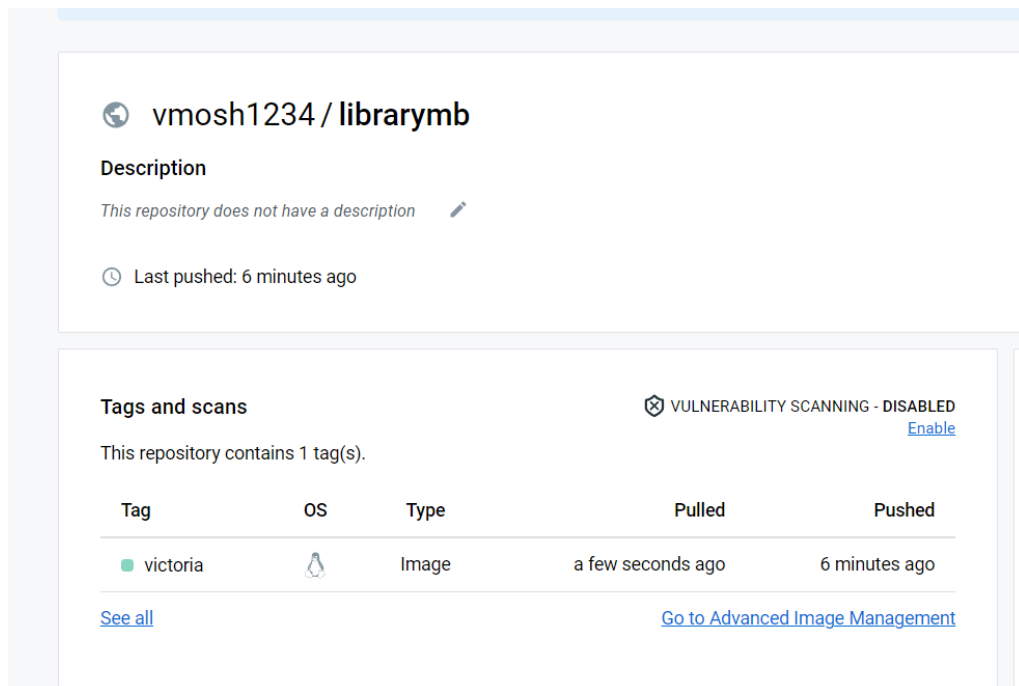
```
mvo201-331@mvo201331-VirtualBox:~/Library-MB/Ver_PK$ sudo docker ps
CONTAINER ID   IMAGE      COMMAND                CREATED        STATUS       P
ORTS                                             NAMES
b6e448b70e10   postgres   "docker-entrypoint.s…" 2 hours ago    Up 2 hours   5
432/tcp, 0.0.0.0:33333->8080/tcp, :::33333->8080/tcp   db
```

```
mvo201-331@mvo201331-VirtualBox:~$ sudo docker commit b6e448b70e10 dockerid/myi
mage
sha256:05ad5e8439320d656209b27976476bef8b770af4ee2876ba15b404edbe45f1fb
```

```
mvo201-331@mvo201331-VirtualBox:~$ sudo docker tag sha256:05ad5e8439320d656209b
27976476bef8b770af4ee2876ba15b404edbe45f1fb vmosh1234/librarymb:victoria
mvo201-331@mvo201331-VirtualBox:~$ sudo docker push vmosh1234/librarymb:victori
a
The push refers to repository [docker.io/vmosh1234/librarymb]
9605458af903: Pushed
27343f8faca0: Pushed
0286e1f6a8d2: Pushed
c926c1dd1cb0: Pushed
6d355cf0466f: Pushed
aa83f3886c32: Pushed
4c3ab3c97fed: Pushed
3ffb66cf39e6: Pushed
f88d7ccc9c55: Pushed
ce7d6d9be0a2: Pushed
611d5cadbf0f: Pushed
289213eab643: Pushed
74ddad23bc40: Pushed
ec4a38999118: Pushed
victoria: digest: sha256:3a3e5d2bbe0fe7c5c77422dfb3a08fca6582045ed00fcc5478d226
da35155338 size: 3246
```

Проверим

vmosh1234 ▼	🔍 Search by repository name	All Content ▼					Create repository

vmosh1234 / librarymb
Contains: Image | Last pushed: 5 minutes ago   ⊗ Not Scanned   ☆ 0   ⬇ 0   🌐 Public

2. Загрузить с Docker Hub образ jetbrains/teamcity-server и развернуть его согласно инструкции на странице образа

https://hub.docker.com/r/jetbrains/teamcity-server
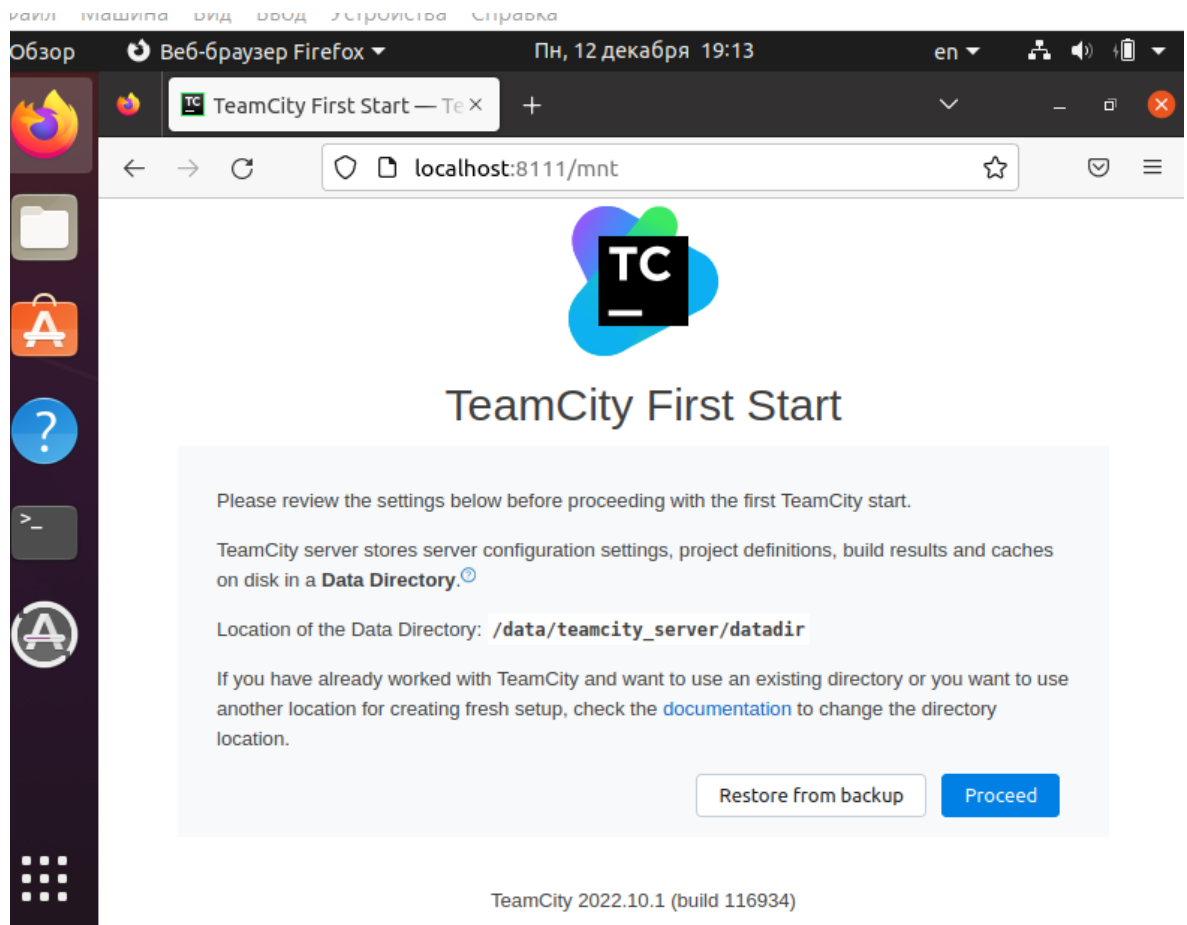

Назначим владельца

```
root@mvo201331-VirtualBox:~# sudo chown -R 1000:1000 /teamcity/logs
root@mvo201331-VirtualBox:~# sudo chown -R 1000:1000 /teamcity/data
```
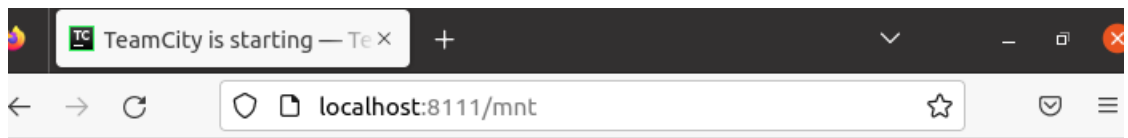
```
root@mvo201331-VirtualBox:~# sudo docker run --name teamcity-server-instance -v
 /teamcity/data:/data/teamcity_server/datadir -v /teamcity/logs:/opt/teamcity/l
ogs -p 8111:8111 jetbrains/teamcity-server
/run-services.sh
/services/check-server-volumes.sh

/run-server.sh
TeamCity server.xml parameter: -config conf/server.xml
Java executable is found: '/opt/java/openjdk/bin/java'
2022-12-12 16:02:49 UTC: Starting TeamCity server
2022-12-12 16:02:49 UTC: TeamCity process PID is 118
NOTE: Picked up JDK_JAVA_OPTIONS:  --add-opens jdk.management/com.sun.managemen
t.internal=ALL-UNNAMED -XX:+IgnoreUnrecognizedVMOptions --add-opens=java.base/j
ava.lang=ALL-UNNAMED --add-opens=java.base/java.io=ALL-UNNAMED --add-opens=java
.base/java.util=ALL-UNNAMED --add-opens=java.base/java.util.concurrent=ALL-UNNA
MED --add-opens=java.rmi/sun.rmi.transport=ALL-UNNAMED
12-Dec-2022 16:02:55.501 INFO [main] org.apache.catalina.startup.VersionLoggerL
istener.log Server version name:   Apache Tomcat/8.5.82
12-Dec-2022 16:02:55.511 INFO [main] org.apache.catalina.startup.VersionLoggerL
istener.log Server built:          Aug 8 2022 21:26:07 UTC
12-Dec-2022 16:02:55.511 INFO [main] org.apache.catalina.startup.VersionLoggerL
istener.log Server version number: 8.5.82.0
12-Dec-2022 16:02:55.512 INFO [main] org.apache.catalina.startup.VersionLoggerL
istener.log OS Name:               Linux
12-Dec-2022 16:02:55.514 INFO [main] org.apache.catalina.startup.VersionLoggerL
```

```
root@mvo201331-VirtualBox: ~

ll be monitored with interval 10 seconds.
12-Dec-2022 16:03:29.004 INFO [localhost-startStop-1] org.apache.catalina.start
up.HostConfig.deployDirectory Deployment of web application directory [/opt/tea
mcity/webapps/ROOT] has finished in [32,299] ms
12-Dec-2022 16:03:29.091 INFO [main] org.apache.coyote.AbstractProtocol.start S
tarting ProtocolHandler ["http-nio-8111"]
12-Dec-2022 16:03:30.006 INFO [main] org.apache.catalina.startup.Catalina.start
 Server startup in 34015 ms
TeamCity version: 2022.10.1 (build 116934), data format version 989
OS: Linux, version 5.15.0-56-generic, amd64, Current user: tcuser, Time zone: G
MT (UTC)
Java: 11.0.16.1, OpenJDK 64-Bit Server VM (11.0.16.1+9-LTS, mixed mode), OpenJD
K Runtime Environment (11.0.16.1+9-LTS), Amazon.com Inc.; JVM parameters: --add
-opens=jdk.management/com.sun.management.internal=ALL-UNNAMED -XX:+IgnoreUnreco
gnizedVMOptions --add-opens=java.base/java.lang=ALL-UNNAMED --add-opens=java.ba
se/java.io=ALL-UNNAMED --add-opens=java.base/java.util=ALL-UNNAMED --add-opens=
java.base/java.util.concurrent=ALL-UNNAMED --add-opens=java.rmi/sun.rmi.transpo
rt=ALL-UNNAMED -Djava.util.logging.config.file=/opt/teamcity/conf/logging.prope
rties -Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManager -Djdk.t
ls.ephemeralDHKeySize=2048 -Djava.protocol.handler.pkgs=org.apache.catalina.web
resources -Dorg.apache.catalina.security.SecurityListener.UMASK=0027 -Xmx2g -XX
:ReservedCodeCacheSize=350m -Dteamcity.configuration.path=../conf/teamcity-star
tup.properties -Dlog4j2.configurationFile=file:/opt/teamcity/bin/../conf/teamci
ty-server-log4j.xml -Dteamcity_logs=/opt/teamcity/bin/../logs -Djava.awt.headle
ss=true -Dignore.endorsed.dirs= -Dcatalina.base=/opt/teamcity -Dcatalina.home=/
opt/teamcity -Djava.io.tmpdir=/opt/teamcity/temp
Startup confirmation is required. Open TeamCity web page in the browser. Server
 is running at http://localhost:8111
```

3. Открыть веб-интерфейс развернутого приложения, завести пользователя-администратора

TeamCity is starting

○ Initializing the TeamCity Data Directory
This page will be reloaded automatically

TeamCity 2022.10.1 (build 116934)

Database connection setup

TeamCity server stores builds history and users-related data in an SQL database.

Select the database type*: Internal (HSQLDB) ⌄

The internal database suits evaluation purposes only and is not intended for production. We strongly recommend using an external database in a production environment.

You can start with the internal database and then migrate the data to an external one after successful evaluation.
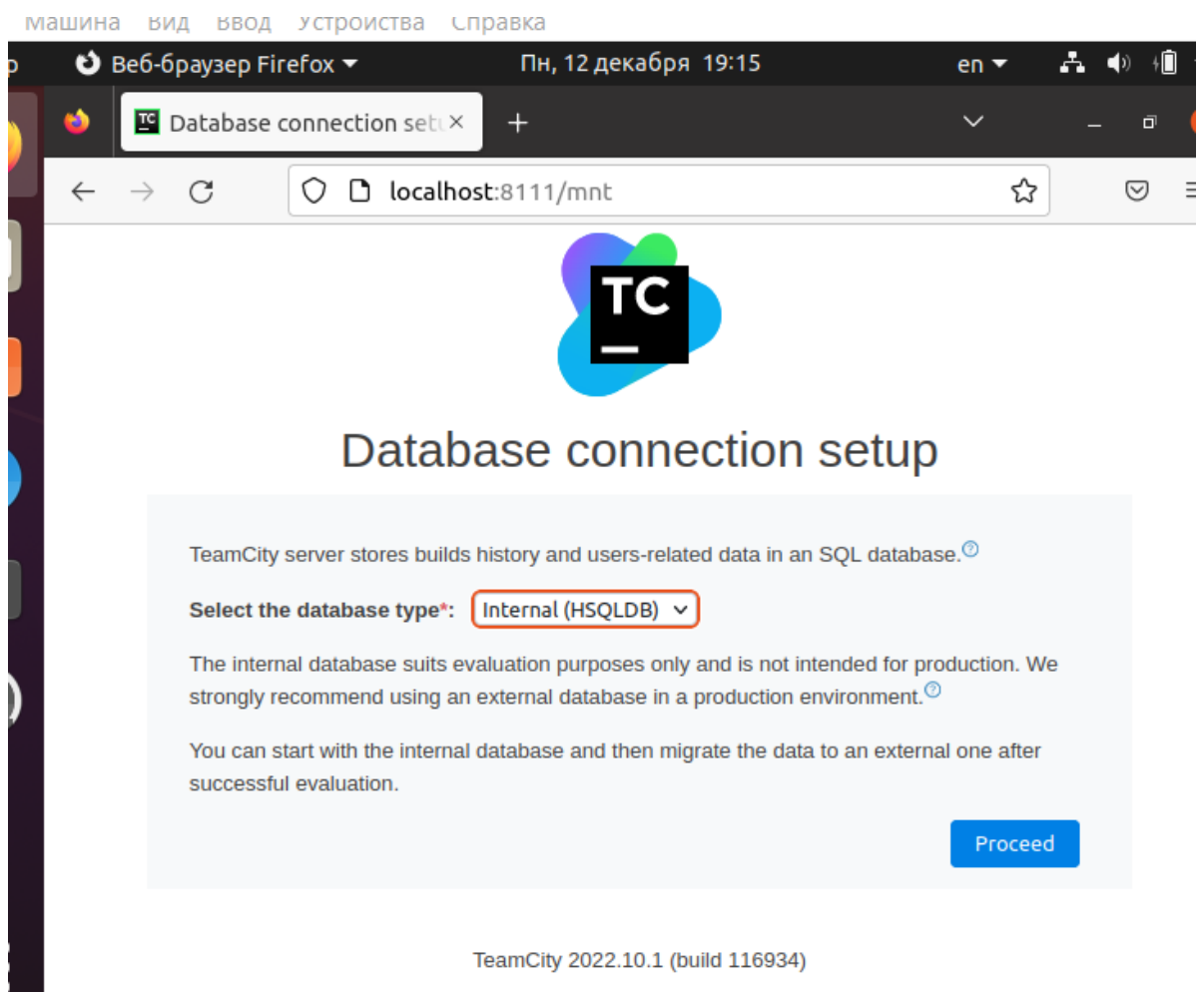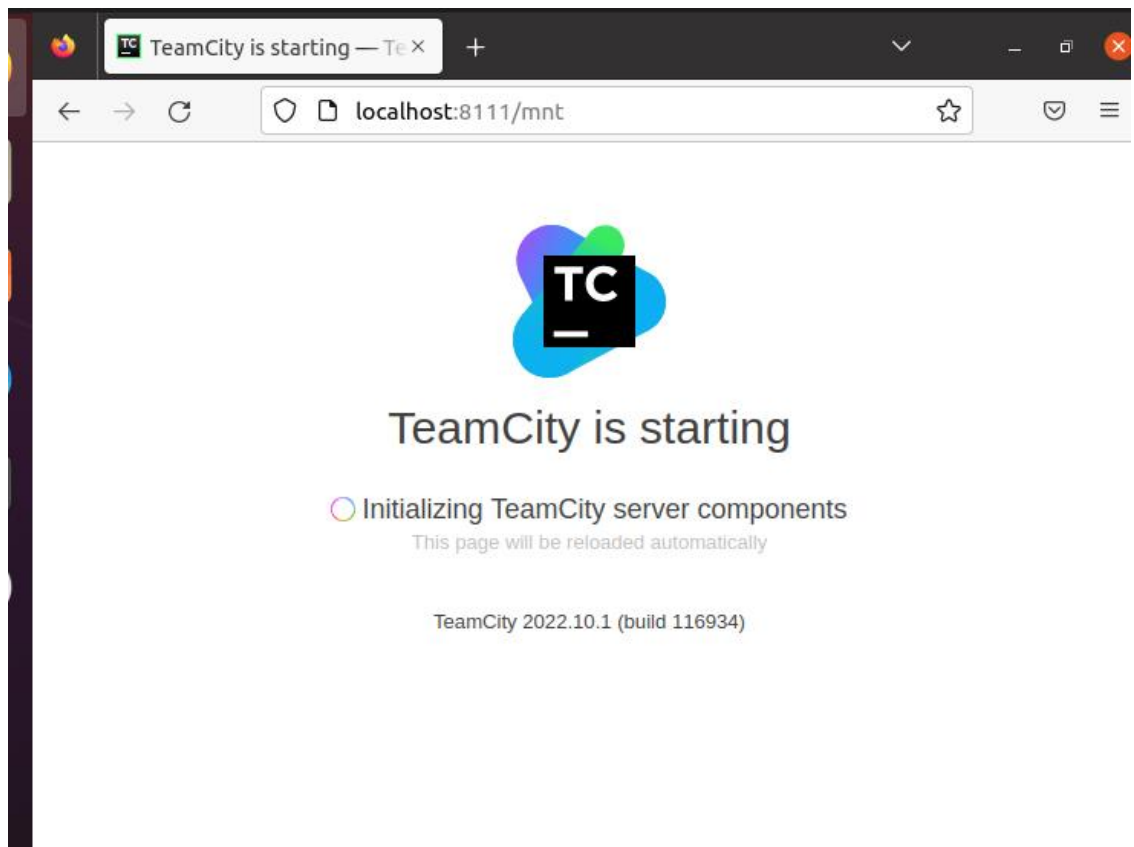
Proceed

TeamCity 2022.10.1 (build 116934)

TeamCity is starting

○ Initializing TeamCity server components
This page will be reloaded automatically

TeamCity 2022.10.1 (build 116934)



Машина Вид Ввод Устройства Справка

Веб-браузер Firefox ▾   Пн, 12 декабря 20:07   en ▾

localhost:8111/showAgreement.html

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☑ Accept license agreement

☑ Send anonymous usage statistics to TeamCity development team (can be turned off at any time)

Continue »


```
[TeamCity] Super user authentication token: 6656838521578492942 (use empty user
name with the token as the password to access the server)
[2022-12-13 09:35:13,620]   WARN [ no auth; http-nio-8111-exec-9] -   jetbrains
.buildServer.SERVER - Attempt to open Setup Administrator page while server con
figuration was completed. Request: GET '/setupAdmin.html', from client 172.17.0
.1:39930, no auth
[TeamCity] Super user authentication token: 6656838521578492942 (use empty user
name with the token as the password to access the server)
[TeamCity] Super user authentication token: 6656838521578492942 (use empty user
name with the token as the password to access the server)
```
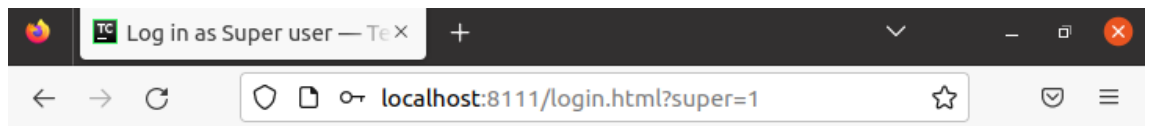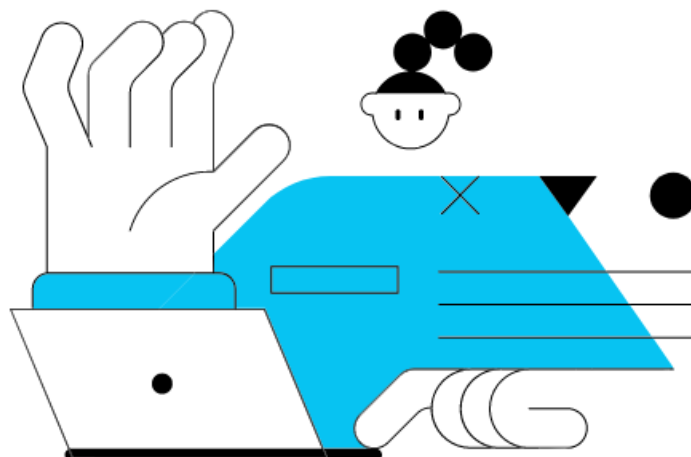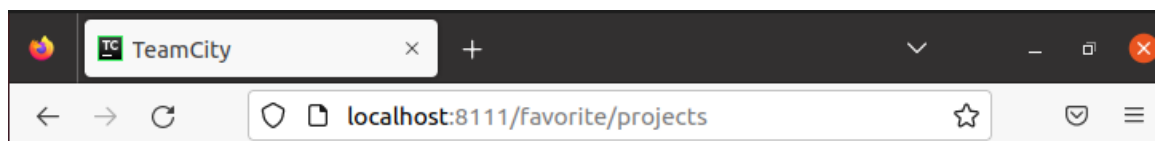
Log in as Super user

Authentication token: ⑦

•••••••••••••••••
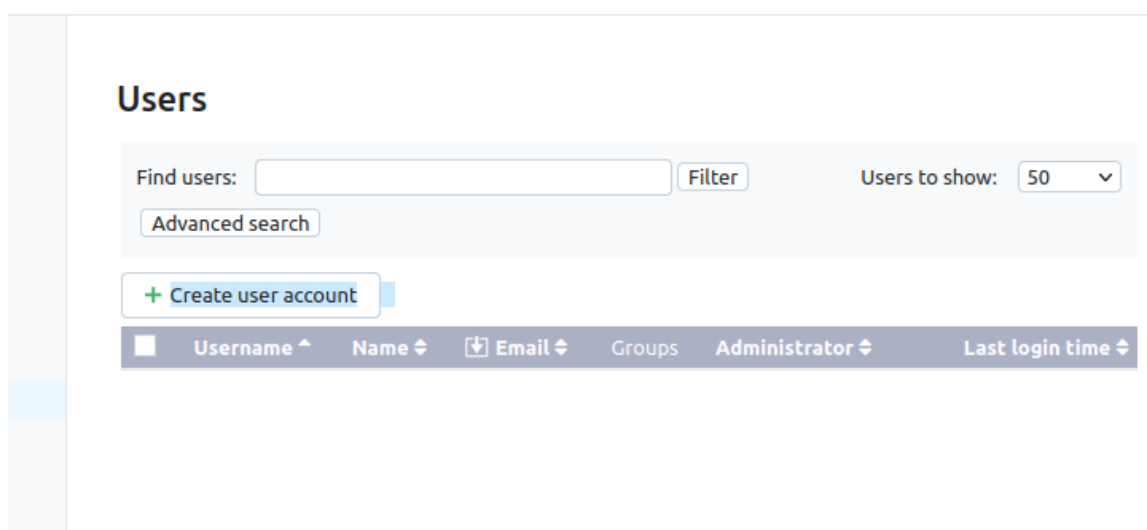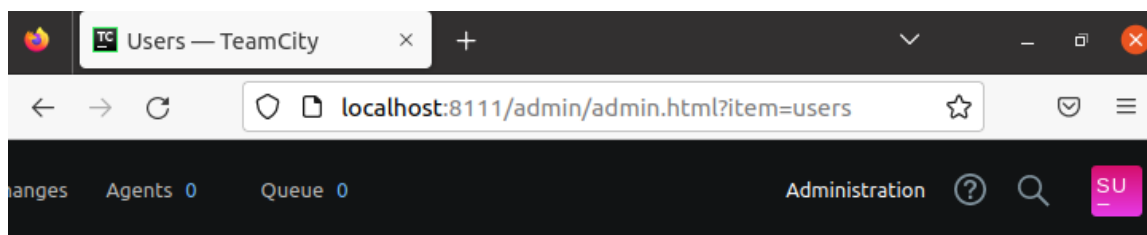
☑ Remember me

Log in

Version 2022.10.1 (build 116934)

Welcome to TeamCity

Create project...

4. В панели администрирования завести по одному пользователю для каждого члена команды

TC   Projects | ⌄   Changes   Agents 0   Queue 0

Administration / Users

Create a New User Account

Username: *   Victoria

Name: Victoria Moshnikova

Email address: victoria_mosh@mail.ru

Built-in Authentication

New password: *   ••••

Confirm new password: *   ••••

Administrator status

☑ Give this user administrative privileges

Create a New User Account

User "Victoria Moshnikova" has been created successfully.

Username: *   Daria

Name: Daria Balashova

Email address: balashova-darya2002@mail.ru
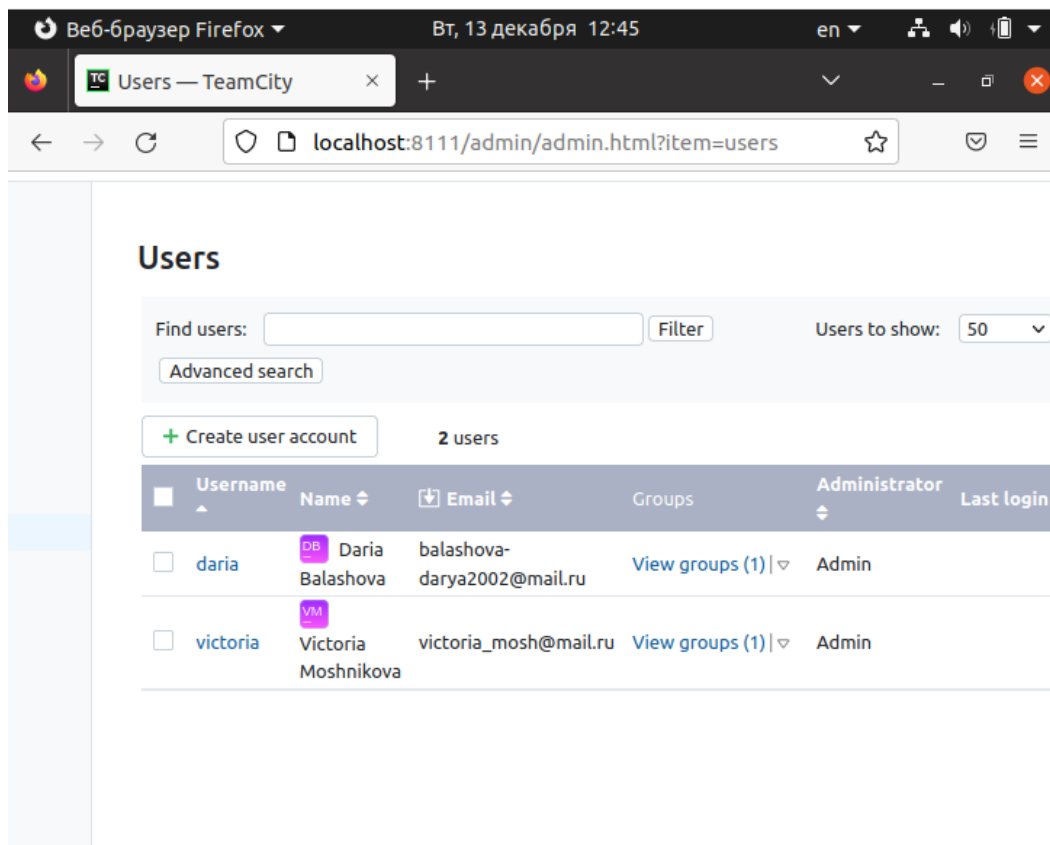
Built-in Authentication

New password: *   ••••

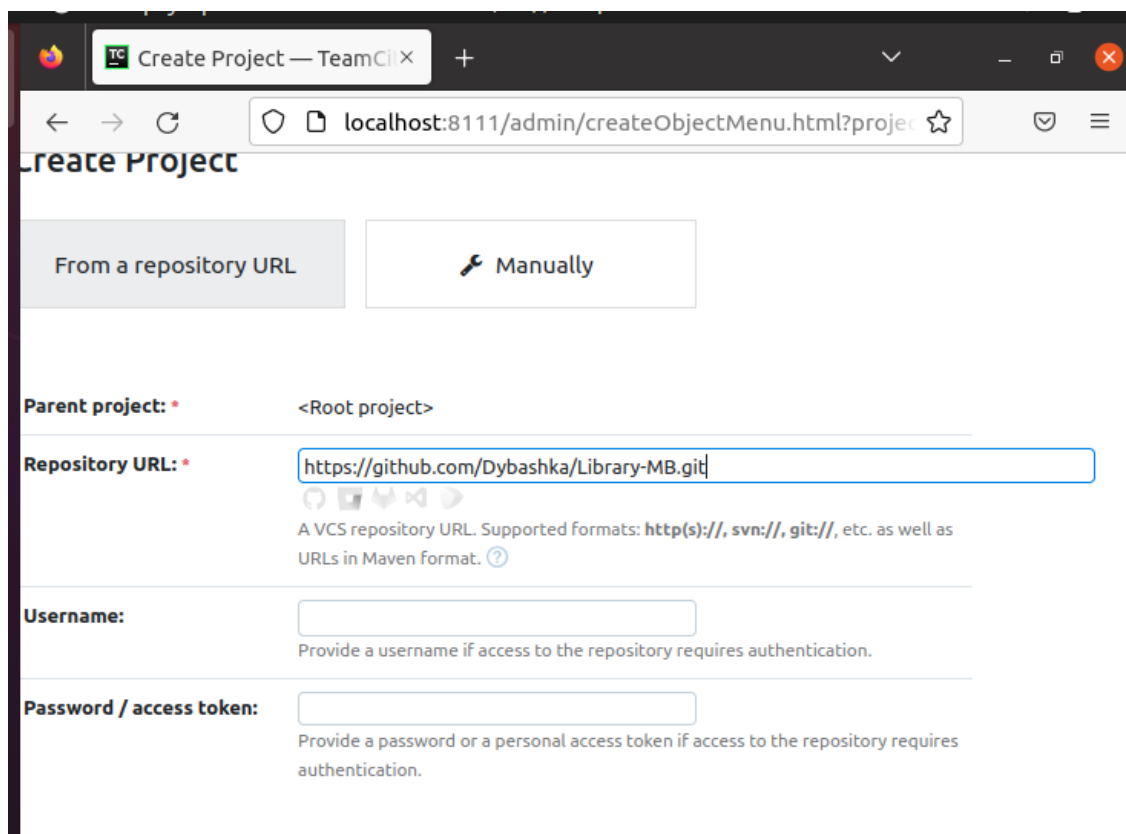Confirm new password: *   ••••

Administrator status

☑ Give this user administrative privileges

☑ Stay on this page to create more users after submit

5. Завести репозиторий в TeamCity, привязав репозиторий проекта

TC Create Project From URL ✕   +

localhost:8111/admin/objectSetup.html?init=1&objec ☆

Create Project From URL

✓ The connection to the VCS repository has been verified

Project name: *   Library MB

**Build configuration
name:** *   Build

VCS root: (Git) https://github.com/Dybashka/Library-MB.git

Default branch: *   refs/heads/main

The main branch or tag to be monitored

Branch specification: Edit branch specification:

refs/heads/*

Branches to monitor besides the default one as a newline-delimited set of rules in the
form of **+|-:branch name** with the optional * placeholder. Part matched by * (or part
inside **parentheses**) will be shown as a build logical branch name. ⑦

[Proceed]   [Cancel]

---

localhost:8111/admin/editProject.html?projectId=Lib ☆

ges   Agents 0   Queue 0   Administration ⑦ 🔍 SU

t>   [Actions ▾] [Go to project page]
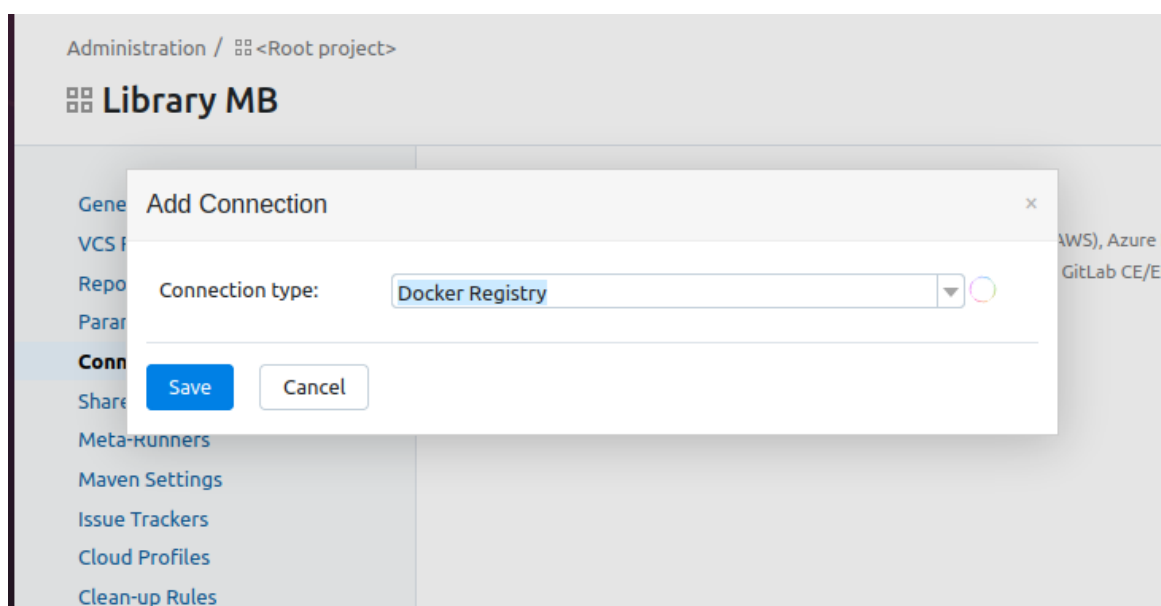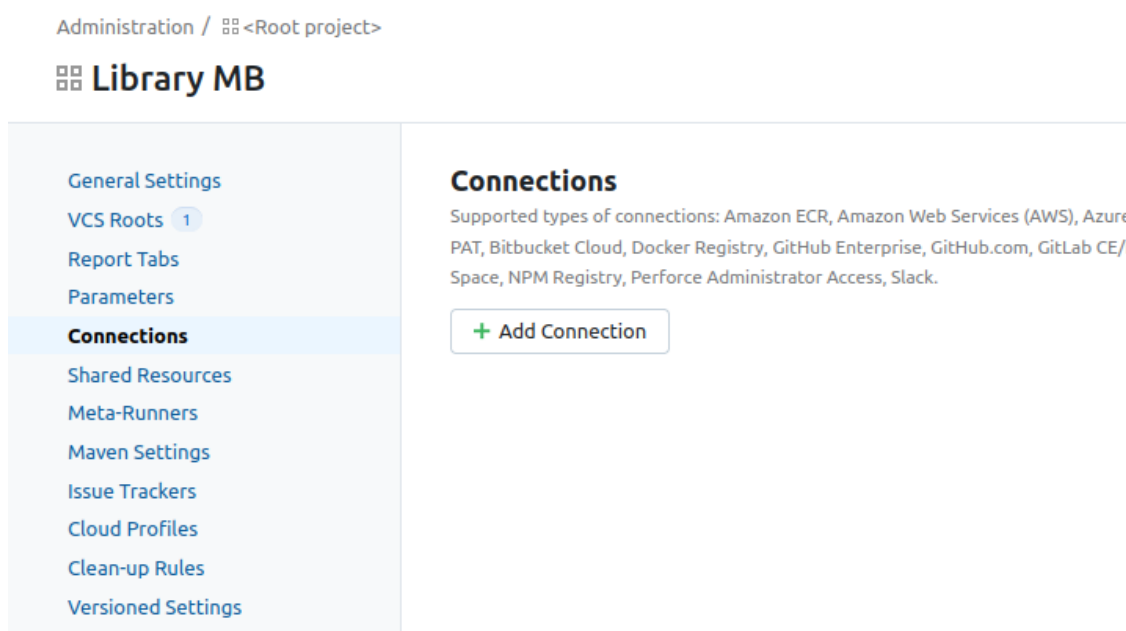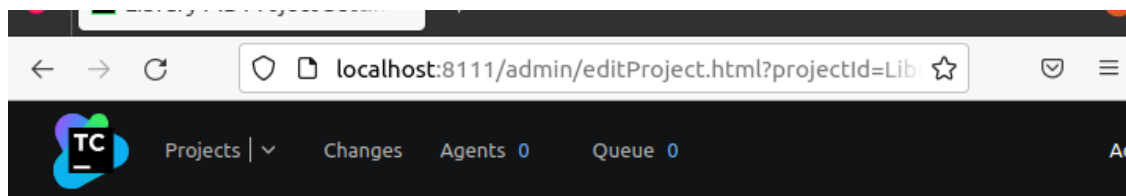
Name: *   Library MB

Project ID: * ⑦   LibraryMb

Regenerate ID

This ID is used in URLs, REST API, HTTP requests to the server, and configuration
settings in the TeamCity Data Directory.

Description:

Default template: ⑦   <No default template selected>

The template will be attached to all build configurations in this project and its
subprojects unless redefined in a subproject.

🔧 Show advanced options

6. По выбору студента - либо из предложенных вариантов сборки, либо из реализованных студентом создать конфигурацию (последовательность шагов) для сборки разрабатываемого приложения (для всех веток) в Docker образ и отправки его в Docker Hub (для ветки «в разрабтке» (dev) и ветки «в эксплуатации» (prod))

Add Connection ✕

Connection type:	Docker Registry ▾
Display name: *	Docker Registry
	Provide some name to distinguish this connection from others.
	Display name must not be empty
Registry address: * ⑦	https://docker.io
	Format: [http(s)://]hostname[:port], by default https:// is used
	Please enter registry address
Username:	
	Leave blank for anonymous access
Password:	
	Leave blank for anonymous access

Projects | ▾   Changes   Agents 0   Queue 0   Ad

Docker Support

Docker Support tracks pushed images and adds a dedicated tab with information about them ⑦

☐ On server clean-up, delete pushed Docker images from registry

Sign in to the following Docker registries before the build:
To configure connections, use the Project Connections page

+ Add registry connection

Name	Parameters Description	
Docker Registry	https://docker.io	Delete

Save   Cancel   View as code

View as code | (?)

New Build Step: Docker |▽

Runner for Docker commands   Change runner

Step name: `Docker build`

Optional, specify to distinguish this build step from other steps.

Docker command: ⦿ build   ○ push   ○ other...

Docker Command Parameters

Dockerfile source: ⓘ   `File ▾`

Path to file: *   `Dockerfile`   ▤ ▥

The specified path should be relative to the checkout directory.

Context folder: ` `   ▤ ▥

If blank, the folder containing the Dockerfile will be used. Use "." to set to the checkout directory path.

Image platform: `<Any>                          ▾`

Allows to choose compatible agents with a specific docker image OS platform.

Image name:tag   `vmosh1234/librarymb:1.0%build.counter%`   ▤

Newline-separated list of the image name:tag(s).

Build step removed.

Build Steps

In this section you can configure the sequence of build steps to be executed. Each build step is represented by a build runner and provides integration with a specific build or test tool. ⓘ

[+ Add build step]   [✎ Auto-detect build steps]

Build Step	Parameters Description		
1. Docker build	Docker Docker build; Dockerfile location: Dockerfile Execute: If all previous steps finished successfully	Edit	☰ ▾