

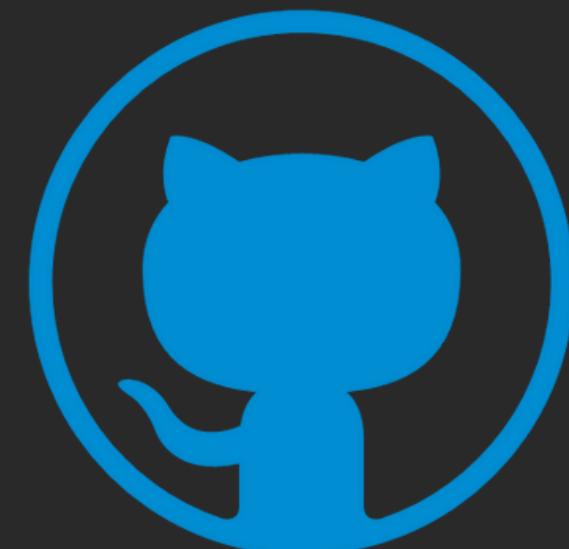
DEMO DEPLOYING WITH OVER SSH

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DevOps Engineer
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Motivation

- Implementation of CI/CD into the project
- Skills for working with new tools



Relevance

- Quickly integrate code into a web page
- Distribution of roles. Every developer doesn't need root privileges
- Secure deployment with plugin "Public over SSH"



AIM

More security deployment

```
ubuntu@ip-172-31-23-126:~$ cp -r /var/lib/jenkins/git_hub_repo/ /var/www/html
```

```
ubuntu@ip-172-31-23-126:~$ usermod -aG sudo Developer
```

```
# Members of the admin group may gain root privileges  
%admin ALL=(ALL) NOPASSWD: ALL
```

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Tasks

1

GitHub

Creating and
configuring a
repository

2

Jenkins

Install Jenkins,
dependencies
and required
plugins

3

GitHub+Jenkins

Key generation.
Transferring keys
from instance to
Jenkins. From
instance to
GitHub

4

Publish over SSH

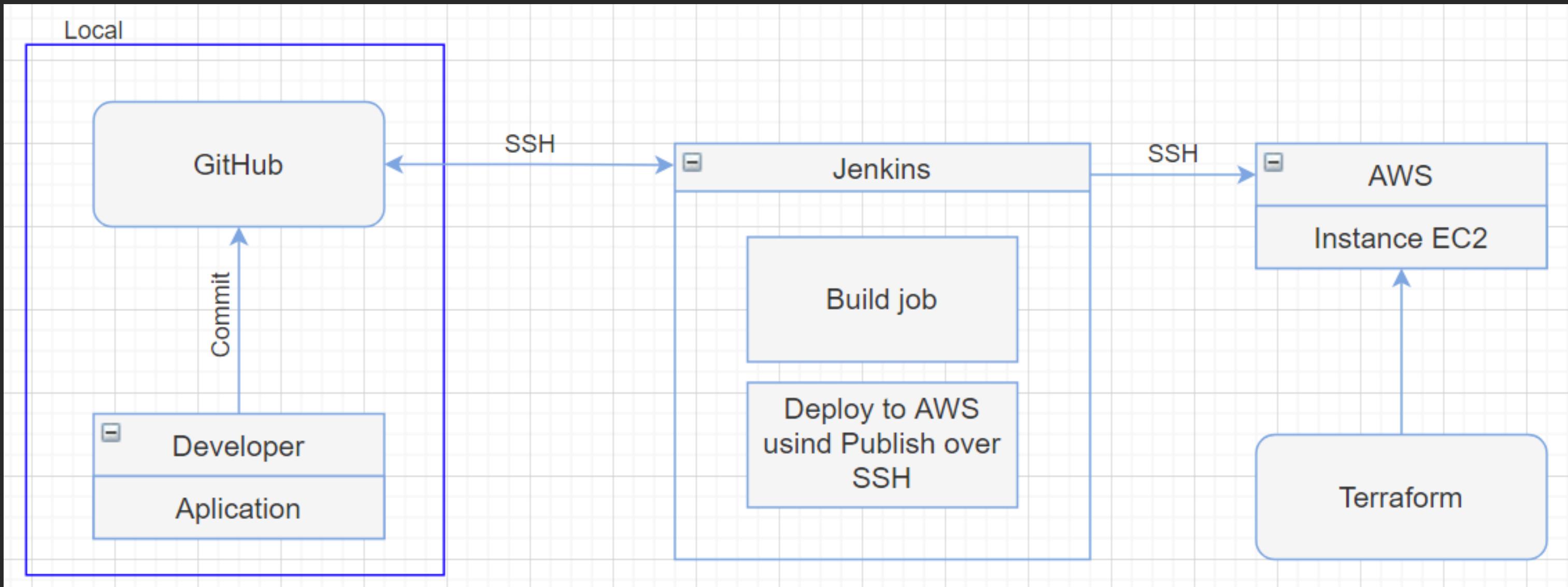
Key generation.
Transferring keys
from instance to
Jenkins. From
instance to GitHub

5

Test

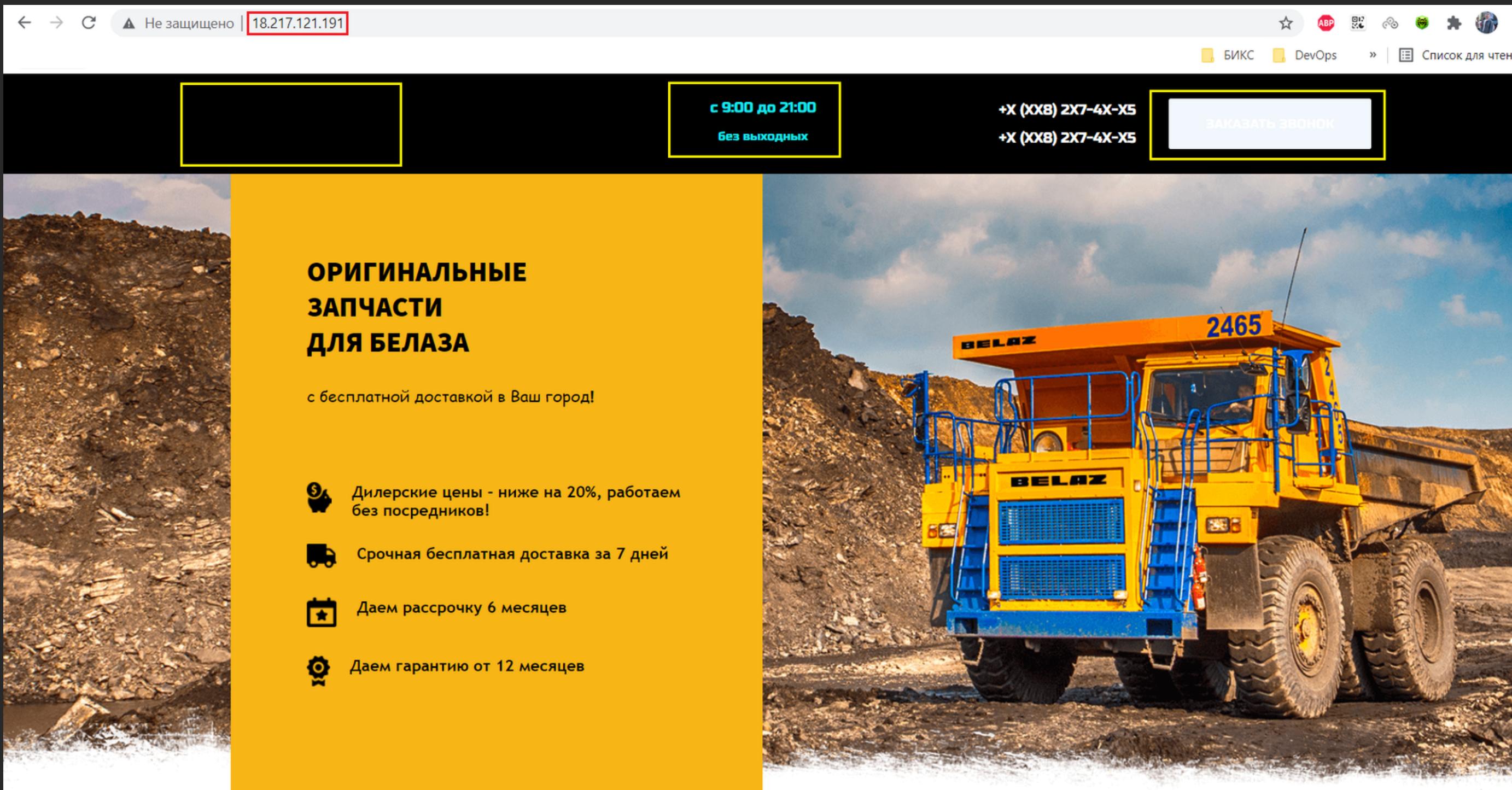
Testing the
project and
resolving
conflicts

How it's work?



The developer makes a change to the project. Then it sends it to GitHub. The administrator builds the project in Jenkins. After that, all changes on GitHub are sent to the web server.

Testing (Fixing bugs)



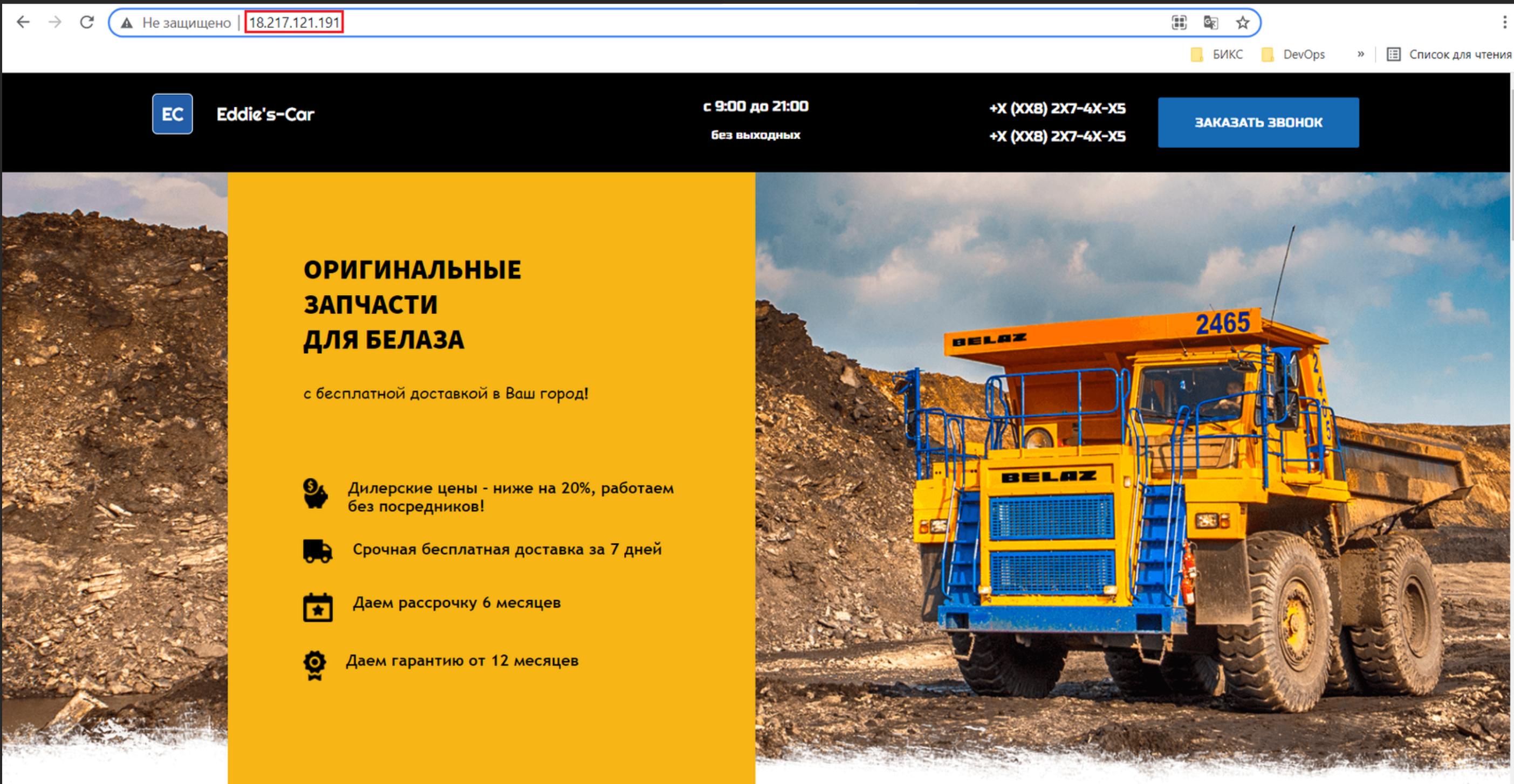
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Testing (Fixing bugs)

```
user@DESKTOP-1M02HIA MINGW64 /d/Google Drive/Projects/Demo (master)
$ git push origin master
Enumerating objects: 33, done.
Counting objects: 100% (33/33), done.
Delta compression using up to 4 threads
Compressing objects: 100% (31/31), done.
Writing objects: 100% (31/31), 1.90 MiB | 3.81 MiB/s, done.
Total 31 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/OlesYudin/Demo.git
  b34aa95..541d13b  master -> master

+ echo Build Start
Build Start
+ ls -la
total 40
drwxr-xr-x 5 jenkins jenkins 4096 Oct 13 10:52 .
drwxr-xr-x 8 jenkins jenkins 4096 Oct 12 19:30 ..
drwxr-xr-x 8 jenkins jenkins 4096 Oct 13 11:02 .git
-rw-r--r-- 1 jenkins jenkins 39 Oct 13 10:12 README.md
drwxr-xr-x 2 jenkins jenkins 4096 Oct 13 10:52 css
drwxr-xr-x 2 jenkins jenkins 4096 Oct 13 10:52 img
-rw-r--r-- 1 jenkins jenkins 8747 Oct 13 10:52 index.html
-rw-r--r-- 1 jenkins jenkins 1138 Oct 13 10:12 jenkinsfile
+ pwd
/var/lib/jenkins/workspace/Demo-deploy
+ uname -a
Linux ip-172-31-34-116 5.4.0-1045-aws #47~18.04.1-Ubuntu SMP Tue Apr 13 15:58:14 UTC 2021 x86_64 x86_64 x86_64 GNU/Linux
+ echo Build Finish
Build Finish
SSH: Connecting from host [ip-172-31-34-116]
SSH: Connecting with configuration [AWS Jenkins] ...
SSH: Disconnecting configuration [AWS Jenkins] ...
SSH: Transferred 29 file(s)
Finished: SUCCESS
```

Testing (Fixing bugs)



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Do you have
any questions?