

Отчёт по лабораторной работе 1

Математическое моделирование

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Цель работы

Научиться работе с Git и языком разметки Markdown

Задание

Создание отчёта по предыдущей лабораторной работе Git в формате Markdown

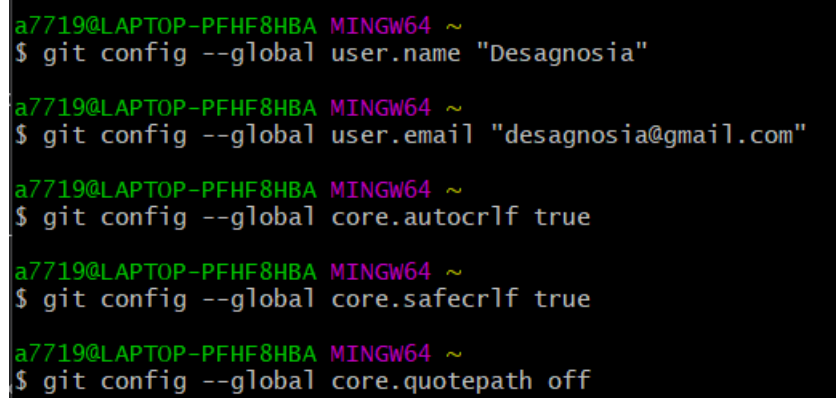
Теоретическое введение

Git — это система контроля версий, которая позволяет отслеживать и фиксировать изменения в коде: вы можете восстановить код в случае сбоя или откатить до более ранних версий. С Git работают через командную строку или инструменты вроде GitHub. Команды Git принимают вид `git`, где аргументом может быть путь к файлу. В команды также включаются опции, которые обозначаются как `-`.

Markdown — это синтаксис (или набор правил), который форматирует текст на веб-страницах. Markdown упрощает форматирование текста для веб-страниц, поскольку теги проще, чем HTML, и они автоматически преобразуются в HTML. Это означает, что вам не нужно знать HTML, чтобы написать что-то для веб-страницы, потому что Markdown переводит ваши теги в HTML для вас. Он охватывает не все возможные теги HTML, а наиболее распространенные параметры форматирования.

Выполнение лабораторной работы

1.1 Подготовка работы с git(рис. 1.1)

A screenshot of a terminal window with a black background and green and white text. The prompt is 'a7719@LAPTOP-PFHF8HBA MINGW64 ~'. Five lines of commands are shown, each followed by its output. The commands are: 'git config --global user.name "Desagnosia"', 'git config --global user.email "desagnosia@gmail.com"', 'git config --global core.autocrlf true', 'git config --global core.safecrlf true', and 'git config --global core.quotepath off'.

```
a7719@LAPTOP-PFHF8HBA MINGW64 ~  
$ git config --global user.name "Desagnosia"  
  
a7719@LAPTOP-PFHF8HBA MINGW64 ~  
$ git config --global user.email "desagnosia@gmail.com"  
  
a7719@LAPTOP-PFHF8HBA MINGW64 ~  
$ git config --global core.autocrlf true  
  
a7719@LAPTOP-PFHF8HBA MINGW64 ~  
$ git config --global core.safecrlf true  
  
a7719@LAPTOP-PFHF8HBA MINGW64 ~  
$ git config --global core.quotepath off
```

Рис. 1: 1.1

1.2 Создание проекта и добавление его в репозиторий(рис. 1.2)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop
$ mkdir hello

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop
$ cd hello

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello
$ touch hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello
$ echo "Hello, world!" > hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git init
Reinitialized existing Git repository in C:/Users/a7719/Desktop/hello/.git/

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git add hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git commit -m "Initial Commit"
On branch master
nothing to commit, working tree clean

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
nothing to commit, working tree clean

```

Рис. 2: 1.2

1.3 Внесение изменений и проверка состояния рабочего каталога(рис. 1.3)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   hello.html

no changes added to commit (use "git add" and/or "git commit -a")

```

Рис. 3: 1.3

1.4 Индексация изменений и работа с историей и тегами(рис. 1.4.1-3 - 1.4.5-7)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git add hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git commit
[master 63ee416] Added h1 tag
1 file changed, 1 insertion(+), 1 deletion(-)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
nothing to commit, working tree clean

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git add hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   hello.html

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git commit -m "Added standard HTML page tags"
[master 68e4cd2] Added standard HTML page tags
1 file changed, 5 insertions(+), 1 deletion(-)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   hello.html

no changes added to commit (use "git add" and/or "git commit -a")

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git add .

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git commit -m "Added HTML header"
[master 4d2d242] Added HTML header
1 file changed, 2 insertions(+)

```

Рис. 4: 1.4.1-3

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log
commit 4d2d242c18a6e4f0b02fa8a18d3aa4c66ee612fb (HEAD -> master)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:00:13 2022 +0300

    Added HTML header

commit 68e4cd2ae96d2f751d3d815434a6247d5b4757bd
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:58:14 2022 +0300

    Added standard HTML page tags

commit 63ee41622def8fa2c901e643b912417289ba18b8
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:54:49 2022 +0300

    Added h1 tag

commit 8f9a8740cd11dc35ad984a1a9e807bb44276e66f
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:50:50 2022 +0300

    Initial Commit

commit 9b362c5c23c133c74038ab1e143fd3895b852e6c
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:50:28 2022 +0300

    Initial Commit

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git checkout 9b362c5c23
Note: switching to '9b362c5c23'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

    git switch -c <new-branch-name>

Or undo this operation with:

    git switch -

Turn off this advice by setting config variable advice.detachedHead to false

HEAD is now at 9b362c5 Initial Commit

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello ((9b362c5...))
$ cat hello.html
<h1>Hello, World!</h1>
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello ((9b362c5...))
$ git checkout master
Previous HEAD position was 9b362c5 Initial Commit
Switched to branch 'master'

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ cat hello.html
<html>
<head>
</head>
<body>
<h1>Hello, World!</h1>
</body>
</html>

```

Рис. 5: 1.4.4

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git tag v1

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git checkout v1^
Note: switching to 'v1^'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

    git switch -c <new-branch-name>

Or undo this operation with:

    git switch -

Turn off this advice by setting config variable advice.detachedHead to false

HEAD is now at 68e4cd2 Added standard HTML page tags

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello ((68e4cd2...))
$ cat hello.html
<html>
<body>
<h1>Hello, World!</h1>
</body>
</html>
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello ((68e4cd2...))
$ git tag v1-beta

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello ((v1-beta))
$ git checkout v1
Previous HEAD position was 68e4cd2 Added standard HTML page tags
HEAD is now at 4d2d242 Added HTML header

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello ((v1))
$ git checkout v1-beta
Previous HEAD position was 4d2d242 Added HTML header
HEAD is now at 68e4cd2 Added standard HTML page tags

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello ((v1-beta))
$ git tag
v1
v1-beta

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello ((v1-beta))
$ git log master --all
commit 4d2d242c18a6e4f0b02fa8a18d3aa4c66ee612fb (tag: v1, master)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:00:13 2022 +0300

    Added HTML header

commit 68e4cd2ae96d2f751d3d815434a6247d5b4757bd (HEAD, tag: v1-beta)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:58:14 2022 +0300

    Added standard HTML page tags

commit 63ee41622def8fa2c901e643b912417289ba18b8
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:54:49 2022 +0300

    Added h1 tag

commit 8f9a8740cd11dc35ad984a1a9e807bb44276e66f
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:50:50 2022 +0300

    Initial Commit

commit 9b362c5c23c133c74038ab1e143fd3895b852e6c
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:50:28 2022 +0300

    Initial Commit

```

Рис. 6: 1.4.5-7

1.5 Отмена локальных изменений (до индексации) (рис. 1.5)

```
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello ((v1-beta))
$ git checkout master
Previous HEAD position was 68e4cd2 Added standard HTML page tags
Switched to branch 'master'

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   hello.html

no changes added to commit (use "git add" and/or "git commit -a")

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git checkout hello.html
Updated 1 path from the index

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
nothing to commit, working tree clean

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ cat hello.html
<html>
<head>
</head>
<body>
<h1>Hello, World!</h1>
</body>
</html>
```

Рис. 7: 1.5

1.6 Отмена проиндексированных изменений (перед коммитом)(рис. 1.6)

```
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git add hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git reset HEAD hello.html
Unstaged changes after reset:
M       hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git checkout hello.html
Updated 1 path from the index

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
nothing to commit, working tree clean
```

Рис. 8: 1.6

1.7 Отмена коммитов(рис. 1.7)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git add hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git commit -m "Oops, we didn't want this commit"
[master 58e60d0] Oops, we didn't want this commit
1 file changed, 1 insertion(+)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git revert HEAD
[master 9efddb2] Revert "Oops, we didn't want this commit"
1 file changed, 1 deletion(-)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log
commit 9efddb230767fb2e2afff6a55c5998930193b4d7 (HEAD -> master)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:17:40 2022 +0300

    Revert "Oops, we didn't want this commit"

    This reverts commit 58e60d0c7fa608536c185def6e128b333b06f1cf.

commit 58e60d0c7fa608536c185def6e128b333b06f1cf
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:17:28 2022 +0300

    Oops, we didn't want this commit

commit 4d2d242c18a6e4f0b02fa8a18d3aa4c66ee612fb (tag: v1)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:00:13 2022 +0300

    Added HTML header

commit 68e4cd2ae96d2f751d3d815434a6247d5b4757bd (tag: v1-beta)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:58:14 2022 +0300

    Added standard HTML page tags

commit 63ee41622def8fa2c901e643b912417289ba18b8
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:54:49 2022 +0300

    Added h1 tag

commit 8f9a8740cd11dc35ad984a1a9e807bb44276e66f
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:50:50 2022 +0300

    Initial Commit

commit 9b362c5c23c133c74038ab1e143fd3895b852e6c
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:50:28 2022 +0300

    Initial Commit

```

Рис. 9: 1.7

1.8 Удаление коммиттов из ветки(рис. 1.8.2-3 - 1.8.5)

```
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log
commit 9efddb230767fb2e2afff6a55c5998930193b4d7 (HEAD -> master)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:17:40 2022 +0300

    Revert "Oops, we didn't want this commit"

    This reverts commit 58e60d0c7fa608536c185def6e128b333b06f1cf.

commit 58e60d0c7fa608536c185def6e128b333b06f1cf
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:17:28 2022 +0300

    Oops, we didn't want this commit

commit 4d2d242c18a6e4f0b02fa8a18d3aa4c66ee612fb (tag: v1)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:00:13 2022 +0300

    Added HTML header

commit 68e4cd2ae96d2f751d3d815434a6247d5b4757bd (tag: v1-beta)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:58:14 2022 +0300

    Added standard HTML page tags

commit 63ee41622def8fa2c901e643b912417289ba18b8
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:54:49 2022 +0300

    Added h1 tag

commit 8f9a8740cd11dc35ad984a1a9e807bb44276e66f
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:50:50 2022 +0300

    Initial Commit

commit 9b362c5c23c133c74038ab1e143fd3895b852e6c
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:50:28 2022 +0300

    Initial Commit

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git tag oops
```

Рис. 10: 1.8.2-3

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git reset --hard v1
HEAD is now at 4d2d242 Added HTML header

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log
commit 4d2d242c18a6e4f0b02fa8a18d3aa4c66ee612fb (HEAD -> master, tag: v1)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:00:13 2022 +0300

    Added HTML header

commit 68e4cd2ae96d2f751d3d815434a6247d5b4757bd (tag: v1-beta)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:58:14 2022 +0300

    Added standard HTML page tags

commit 63ee41622def8fa2c901e643b912417289ba18b8
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:54:49 2022 +0300

    Added h1 tag

commit 8f9a8740cd11dc35ad984a1a9e807bb44276e66f
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:50:50 2022 +0300

    Initial Commit

commit 9b362c5c23c133c74038ab1e143fd3895b852e6c
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:50:28 2022 +0300

    Initial Commit

```

Рис. 11: 1.8.4

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log --all
commit 9efd9db230767fb2e2afff6a55c5998930193b4d7 (tag: oops)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:17:40 2022 +0300

    Revert "Oops, we didn't want this commit"

    This reverts commit 58e60d0c7fa608536c185def6e128b333b06f1cf.

commit 58e60d0c7fa608536c185def6e128b333b06f1cf
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:17:28 2022 +0300

    Oops, we didn't want this commit

commit 4d2d242c18a6e4f0b02fa8a18d3aa4c66ee612fb (HEAD -> master, tag: v1)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:00:13 2022 +0300

    Added HTML header

commit 68e4cd2ae96d2f751d3d815434a6247d5b4757bd (tag: v1-beta)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:58:14 2022 +0300

    Added standard HTML page tags

commit 63ee41622def8fa2c901e643b912417289ba18b8
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:54:49 2022 +0300

    Added h1 tag

commit 8f9a8740cd11dc35ad984a1a9e807bb44276e66f
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:50:50 2022 +0300

    Initial Commit

commit 9b362c5c23c133c74038ab1e143fd3895b852e6c
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 14:50:28 2022 +0300

    Initial Commit

```

Рис. 12: 1.8.5

1.9 Удаление тега oops (рис. 1.9)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git tag -d oops
Deleted tag 'oops' (was 9efddb2)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log --all
commit 4d2d242c18a6e4f0b02fa8a18d3aa4c66ee612fb (HEAD -> master, tag: v1)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:00:13 2022 +0300

    Added HTML header

```

Рис. 13: 1.9

1.10 Внесение изменений в коммиты(рис. 1.10)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git add hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git commit -m "Added an author comment"
[master 1c5209c] Added an author comment
1 file changed, 1 insertion(+)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git add hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git commit --amend -m "Add an author/email comment"
[master 6810c08] Add an author/email comment
Date: Thu Feb 10 15:27:14 2022 +0300
1 file changed, 1 insertion(+)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log
commit 6810c081ac099a11988b22b8ee36fa4e68dca888 (HEAD -> master)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:27:14 2022 +0300

    Add an author/email comment

commit 4d2d242c18a6e4f0b02fa8a18d3aa4c66ee612fb (tag: v1)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:00:13 2022 +0300

    Added HTML header

```

Рис. 14: 1.10

1.11 Перемещение файлов(рис. 1.11)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git mv hello.html lib

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        renamed:    hello.html -> lib/hello.html

```

Рис. 15: 1.11

1.12 Второй способ перемещения файлов(рис. 1.12)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git commit -m "Moved hello.html to lib"
[master 95f56f4] Moved hello.html to lib
1 file changed, 0 insertions(+), 0 deletions(-)
rename hello.html => lib/hello.html (100%)

```

Рис. 16: 1.12

1.13 Подробнее о структуре(добавление index.html)(рис. 1.13)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git add index.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git commit -m "Added index.html"
[master 5cd4359] Added index.html
1 file changed, 5 insertions(+)
create mode 100644 index.html

```

Рис. 17: 1.13

1.14 Каталог .git(рис. 1.14)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ ls -C .git
COMMIT_EDITMSG  ORIG_HEAD  description  index  logs/  packed-refs
HEAD           config     hooks/       info/  objects/  refs/

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ ls -C .git/objects/
02/  1c/  42/  4d/  5c/  8c/  94/  9e/  bf/  eb/  pack/
0d/  2d/  47/  50/  63/  8d/  95/  a4/  e4/  fc/
15/  3c/  4b/  58/  68/  8f/  9b/  b4/  e6/  info/

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ ls -C .git/objects/02
7def9b7bcaa390ac2f546a3940f91137fa2900

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ cat .git/config
[core]
    repositoryformatversion = 0
    filemode = false
    bare = false
    logallrefupdates = true
    symlinks = false
    ignorecase = true

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ ls .git/refs/
heads/  tags/

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ ls .git/refs/heads/
master

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ ls .git/refs/tags/
v1  v1-beta

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ cat .git/refs/tags/v1
4d2d242c18a6e4f0b02fa8a18d3aa4c66ee612fb

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ cat .git/HEAD
ref: refs/heads/master

```

Рис. 18: 1.14

1.15 Работа непосредственно с объектами git(рис. 1.15a - 1.15b)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log --max-count=1
commit 5cd43590d05c863d84b5c3f1eb545488a5750156 (HEAD -> master)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 15:36:21 2022 +0300

    Added index.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git cat-file -t 5cd43590
commit

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git cat-file -p 5cd43590
tree fcc810978df8a690a541bbe0096a266e9b9cd363
parent 95f56f459a2145bb47b51fb6f472ef3ff3dc05bc
author Desagnosia <desagnosia@gmail.com> 1644496581 +0300
committer Desagnosia <desagnosia@gmail.com> 1644496581 +0300

Added index.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git cat-file -p fcc81097
100644 blob 4259d9fadfd92fd9dbfe3ac19f1a91    index.html
040000 tree bf823d742fae574fbc5619e1d8e072758c4963b2    lib

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git cat-file -p bf823d7
100644 blob 471cf72aad851126b64ed0db3daf2655a453d432    hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git cat-file -p 471cf72
<!-- Author: Ilia A. Yukhnin (1032192886@pfur.ru) -->
<html>
<head>
</head>
<body>
<h1>Hello, world!</h1>
</body>
</html>

```

Рис. 19: 1.15а

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git cat-file -p 6810c
tree bf823d742fae574fbc5619e1d8e072758c4963b2
parent 4d2d242c18a6e4f0b02fa8a18d3aa4c66ee612fb
author Desagnosia <desagnosia@gmail.com> 1644496034 +0300
committer Desagnosia <desagnosia@gmail.com> 1644496110 +0300

Add an author/email comment

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git cat-file -p 4d2d24
tree 0d6d6b0ad7a7fdd8a51228826a2d38a4cb4ad0c2
parent 68e4cd2ae96d2f751d3d815434a6247d5b4757bd
author Desagnosia <desagnosia@gmail.com> 1644494413 +0300
committer Desagnosia <desagnosia@gmail.com> 1644494413 +0300

Added HTML header

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git cat-file -p 68e4cd
tree ebd91c47dbde5af62f65651f6c50f2d1f8ceb482
parent 63ee41622def8fa2c901e643b912417289ba18b8
author Desagnosia <desagnosia@gmail.com> 1644494294 +0300
committer Desagnosia <desagnosia@gmail.com> 1644494294 +0300

Added standard HTML page tags

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git cat-file -p 63ee41
tree 15ad1d9ece91450f9fa26a2cc3f7395bdfc7fad7
parent 8f9a8740cd11dc35ad984a1a9e807bb44276e66f
author Desagnosia <desagnosia@gmail.com> 1644494089 +0300
committer Desagnosia <desagnosia@gmail.com> 1644494089 +0300

Added h1 tag

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git cat-file -p 8f9a
tree 027def9b7bcaa390ac2f546a3940f91137fa2900
parent 9b362c5c23c133c74038ab1e143fd3895b852e6c
author Desagnosia <desagnosia@gmail.com> 1644493850 +0300
committer Desagnosia <desagnosia@gmail.com> 1644493850 +0300

Initial Commit

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git cat-file -p 9b362
tree 15ad1d9ece91450f9fa26a2cc3f7395bdfc7fad7
author Desagnosia <desagnosia@gmail.com> 1644493828 +0300
committer Desagnosia <desagnosia@gmail.com> 1644493828 +0300

Initial Commit

```

Рис. 20: 1.15b

1.16 Создание ветки(рис. 1.16)


```
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git checkout -b style
Switched to a new branch 'style'

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git status
On branch style
nothing to commit, working tree clean

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ touch lib/style.css

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ vim lib/style.css

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git add lib/style.css

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git commit -m "Added css stylesheet"
[style b75385d] Added css stylesheet
1 file changed, 3 insertions(+)
create mode 100644 lib/style.css

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git add lib/hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git commit -m "Hello uses style.css"
[style 4c4e57a] Hello uses style.css
1 file changed, 2 insertions(+)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git add index.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git commit -m "Updated index.html"
[style cea4b35] Updated index.html
1 file changed, 4 insertions(+)
```

Рис. 21: 1.16

1.17 Навигация по веткам(рис. 1.17)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git checkout master
Switched to branch 'master'

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ cat lib/hello.html
<!-- Author: Ilia A. Yukhnin (1032192886@pfur.ru) -->
<html>
<head>
</head>
<body>
<h1>Hello, World!</h1>
</body>
</html>

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git checkout style
Switched to branch 'style'

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ cat lib/hello.html
<!-- Author: Ilia A. Yukhnin (1032192886@pfur.ru) -->
<html>
<head>
<link type="text/css" rel="stylesheet"
media="all" href="style.css" />
</head>
<body>
<h1>Hello, World!</h1>
</body>
</html>

```

Рис. 22: 1.17

1.18 Изменения в ветке master(рис. 1.18)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ echo "This is the Hello world example from the git tutorial." > README.md

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git add README.md

```

Рис. 23: 1.18

1.19 Создание коммит изменений README.md в ветку master(рис. 1.19)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log --graph --all
* commit 176f88712397ee98b46fc906d8cb3bd2258adb03 (HEAD -> master)
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 23:48:06 2022 +0300

    Added README

* commit cea4b3517c2c50d43e6ca7a80cecb77b9fcbe07d (style)
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 19:55:24 2022 +0300

    Updated index.html

* commit 4c4e57a168837090b673be639cb657eee03be476
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 19:54:44 2022 +0300

    Hello uses style.css

* commit b75385d0e6b7dd36dae5ea1c9a8849ca3fb7ec57
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 19:52:25 2022 +0300

    Added css stylesheet

* commit 5cd43590d05c863d84b5c3f1eb545488a5750156
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 15:36:21 2022 +0300

    Added index.html

```

Рис. 24: 1.19

1.20 Слияние веток(рис. 1.20)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git checkout style
Switched to branch 'style'

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git merge master
Merge made by the 'ort' strategy.
 README.md | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 README.md

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git log --graph --all
*   commit ded11676dd380366c222434629eb220039a2ffcf (HEAD -> style)
|\  Merge: cea4b35 176f887
| | Author: Desagnosia <desagnosia@gmail.com>
| | Date: Thu Feb 10 23:51:30 2022 +0300
| |
| | Merge branch 'master' into style
| |
*   commit 176f88712397ee98b46fc906d8cb3bd2258adb03 (master)
| | Author: Desagnosia <desagnosia@gmail.com>
| | Date: Thu Feb 10 23:48:06 2022 +0300
| |
| | Added README

```

Рис. 25: 1.20

1.21 Создание конфликта(рис. 1.21)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git checkout master
Switched to branch 'master'

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git add lib/hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git commit -m "Life is great"
[master ce839c3] Life is great
1 file changed, 2 insertions(+), 1 deletion(-)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log --graph --all
* commit ce839c32619d6341e3a70f9f6f7a610c49746389 (HEAD -> master)
| Author: Desagnosia <desagnosia@gmail.com>
| Date: Thu Feb 10 23:53:47 2022 +0300
|
| Life is great
|
| * commit ded11676dd380366c222434629eb220039a2ffcf (style)
| | Merge: cea4b35 176f887
| | Author: Desagnosia <desagnosia@gmail.com>
| | Date: Thu Feb 10 23:51:30 2022 +0300
| |
| | Merge branch 'master' into style
| |
| * commit 176f88712397ee98b46fc906d8cb3bd2258adb03
| | Author: Desagnosia <desagnosia@gmail.com>
| | Date: Thu Feb 10 23:48:06 2022 +0300
| |
| | Added README

```

Рис. 26: 1.21

1.22 Разрешение конфликтов(рис. 1.22)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git checkout style
Switched to branch 'style'

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git merge master
Auto-merging lib/hello.html
CONFLICT (content): Merge conflict in lib/hello.html
Automatic merge failed; fix conflicts and then commit the result.

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style|MERGING)
$ git add lib/hello.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style|MERGING)
$ git commit -m "Merged master fixed conflict."
[style f1f2cb9] Merged master fixed conflict.

```

Рис. 27: 1.22

1.23 Сброс ветки style(рис. 1.23)

```
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git checkout style
Already on 'style'

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git log --graph
*   commit f1f2cb96b806ba4133034bf45e809a627ce44edc (HEAD -> style)
|   Merge: ded1167 ce839c3
|   Author: Desagnosia <desagnosia@gmail.com>
|   Date: Thu Feb 10 23:56:26 2022 +0300
|
|   Merged master fixed conflict.
|
*   commit ce839c32619d6341e3a70f9f6f7a610c49746389 (master)
|   Author: Desagnosia <desagnosia@gmail.com>
|   Date: Thu Feb 10 23:53:47 2022 +0300
|
|   Life is great
|
*   commit ded1167dd380366c222434629eb220039a2ffcf
|   Merge: cea4b35 176f887
|   Author: Desagnosia <desagnosia@gmail.com>
|   Date: Thu Feb 10 23:51:30 2022 +0300
|
|   Merge branch 'master' into style
|
*   commit 176f88712397ee98b46fc906d8cb3bd2258adb03
|   Author: Desagnosia <desagnosia@gmail.com>
|   Date: Thu Feb 10 23:48:06 2022 +0300
|
|   Added README
|
*   commit cea4b3517c2c50d43e6ca7a80cecb77b9fcbe07d
|   Author: Desagnosia <desagnosia@gmail.com>
|   Date: Thu Feb 10 19:55:24 2022 +0300
|
|   Updated index.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git reset --hard cea4b351
HEAD is now at cea4b35 Updated index.html

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git log --graph --all
*   commit ce839c32619d6341e3a70f9f6f7a610c49746389 (master)
|   Author: Desagnosia <desagnosia@gmail.com>
|   Date: Thu Feb 10 23:53:47 2022 +0300
|
|   Life is great
|
*   commit 176f88712397ee98b46fc906d8cb3bd2258adb03
|   Author: Desagnosia <desagnosia@gmail.com>
|   Date: Thu Feb 10 23:48:06 2022 +0300
|
|   Added README
|
*   commit cea4b3517c2c50d43e6ca7a80cecb77b9fcbe07d (HEAD -> style)
|   Author: Desagnosia <desagnosia@gmail.com>
|   Date: Thu Feb 10 19:55:24 2022 +0300
|
|   Updated index.html
|
*   commit 4c4e57a168837090b673be639cb657eee03be476
|   Author: Desagnosia <desagnosia@gmail.com>
|   Date: Thu Feb 10 19:54:44 2022 +0300
|
|   Hello uses style.css
|
*   commit b75385d0e6b7dd36dae5ea1c9a8849ca3fb7ec57
|   Author: Desagnosia <desagnosia@gmail.com>
|   Date: Thu Feb 10 19:52:25 2022 +0300
|
|   Added css stylesheet
|
*   commit 5cd43590d05c863d84b5c3f1eb545488a5750156
|   Author: Desagnosia <desagnosia@gmail.com>
|   Date: Thu Feb 10 15:36:21 2022 +0300
|
|   Added index.html
```

Рис. 28: 1.23

1.24 Сброс ветки master(рис. 1.24)

```
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git checkout master
Switched to branch 'master'

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log --graph
* commit ce839c32619d6341e3a70f9f6f7a610c49746389 (HEAD -> master)
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 23:53:47 2022 +0300
  |
  | Life is great
  |
* commit 176f88712397ee98b46fc906d8cb3bd2258adb03
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 23:48:06 2022 +0300
  |
  | Added README
  |
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git reset --hard 176f887
HEAD is now at 176f887 Added README

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log --graph --all
* commit 176f88712397ee98b46fc906d8cb3bd2258adb03 (HEAD -> master)
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 23:48:06 2022 +0300
  |
  | Added README
  |
  * commit cea4b3517c2c50d43e6ca7a80cecb77b9fcbe07d (style)
  | Author: Desagnosia <desagnosia@gmail.com>
  | Date: Thu Feb 10 19:55:24 2022 +0300
  | |
  | | Updated index.html
  | |
  * commit 4c4e57a168837090b673be639cb657eee03be476
  | Author: Desagnosia <desagnosia@gmail.com>
  | Date: Thu Feb 10 19:54:44 2022 +0300
  | |
  | | Hello uses style.css
  | |
```

Рис. 29: 1.24

1.25 Перебазирование(рис. 1.25)


```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git checkout style
Switched to branch 'style'

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git rebase master
Successfully rebased and updated refs/heads/style.
g
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git log --graph
* commit 716f4ce649a4d0e4c17fc840c590a0f1f6817719 (HEAD -> style)
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 19:55:24 2022 +0300

    Updated index.html

* commit 0c00747d910eea30fda5802e66a226b05a5fd7d5
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 19:54:44 2022 +0300

    Hello uses style.css

* commit 3a6d918ed7f83ddc781f9e8284990fdb2e661059
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 19:52:25 2022 +0300

    Added css stylesheet

* commit 176f88712397ee98b46fc906d8cb3bd2258adb03 (master)
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 23:48:06 2022 +0300

    Added README

* commit 5cd43590d05c863d84b5c3f1eb545488a5750156
  Author: Desagnosia <desagnosia@gmail.com>
  Date: Thu Feb 10 15:36:21 2022 +0300

    Added index.html

```

Рис. 30: 1.25

1.26 Слияние в ветку master(рис. 1.26)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (style)
$ git checkout master
Switched to branch 'master'

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git merge style
Updating 176f887..716f4ce
Fast-forward
 index.html | 4 ++++
 lib/hello.html | 2 ++
 lib/style.css | 3 +++
 3 files changed, 9 insertions(+)
 create mode 100644 lib/style.css

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/hello (master)
$ git log
commit 716f4ce649a4d0e4c17fc840c590a0f1f6817719 (HEAD -> master, style)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 19:55:24 2022 +0300

    Updated index.html

commit 0c00747d910eea30fda5802e66a226b05a5fd7d5
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 19:54:44 2022 +0300

    Hello uses style.css

```

Рис. 31: 1.26

1.27 Клонирование репозитория (рис. 1.27)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/hello (master)
$ cd ..

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo
$ pwd
/c/Users/a7719/Desktop/gitrepo

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo
$ ls
hello/

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo
$ git clone hello cloned_hello
Cloning into 'cloned_hello'...
done.

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo
$ ls
cloned_hello/  hello/

```

Рис. 32: 1.27

1.28 Просмотр клонированного репозитория(рис. 1.28)

```
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo
$ cd cloned_hello/

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ ls
README.md  index.html  lib/

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git log --all
commit 716f4ce649a4d0e4c17fc840c590a0f1f6817719 (HEAD -> master, origin/style, origin/master, origin/HEAD)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 19:55:24 2022 +0300

    Updated index.html

commit 0c00747d910eea30fda5802e66a226b05a5fd7d5
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 19:54:44 2022 +0300
```

Рис. 33: 1.28

1.29 Origin(рис. 1.29)

```
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git remote
origin

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git remote show origin
* remote origin
  Fetch URL: C:/Users/a7719/Desktop/gitrepo/hello
  Push URL: C:/Users/a7719/Desktop/gitrepo/hello
  HEAD branch: master
  Remote branches:
    master tracked
    style tracked
  Local branch configured for 'git pull':
    master merges with remote master
  Local ref configured for 'git push':
    master pushes to master (up to date)
```

Рис. 34: 1.29

1.30 Удаленные ветки(рис. 1.30)

```
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git branch
* master

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git branch -a
* master
  remotes/origin/HEAD -> origin/master
  remotes/origin/master
  remotes/origin/style
```

Рис. 35: 1.30

1.31 Изменение оригинального репозитория(рис. 1.31)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/hello (master)
$ cd ../hello/

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/hello (master)
$ git add README.md

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/hello (master)
$ git commit -m "Changed README in original repo"
[master 91afa13] Changed README in original repo
1 file changed, 1 insertion(+), 1 deletion(-)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/hello (master)
$ cd ../cloned_hello/

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git fetch
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 362 bytes | 20.00 KiB/s, done.
From C:/Users/a7719/Desktop/gitrepo/hello
716f4ce..91afa13 master -> origin/master

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git log --all
commit 91afa13ab16b8b5b9349abf0780e6f62ae6d2678 (origin/master, origin/HEAD)
Author: Desagnosia <desagnosia@gmail.com>
Date: Fri Feb 11 00:19:21 2022 +0300

    Changed README in original repo

commit 716f4ce649a4d0e4c17fc840c590a0f1f6817719 (HEAD -> master, origin/style)
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 19:55:24 2022 +0300

    Updated index.html

commit 0c00747d910eea30fda5802e66a226b05a5fd7d5
Author: Desagnosia <desagnosia@gmail.com>
Date: Thu Feb 10 19:54:44 2022 +0300

    Hello uses style.css

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/hello (master)
$ cd ../cloned_hello/

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ cat README.md
This is the Hello World example from the git tutorial.
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ cat ../hello/README.md
This is the Hello World example from the git tutorial (changed)

```

Рис. 36: 1.31

1.32 Слияние извлеченных изменений(рис. 1.32)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git merge origin/master
Updating 716f4ce..91afa13
Fast-forward
 README.md | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ cat README.md
This is the Hello World example from the git tutorial (changed)
a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git pull
Already up to date.

```

Рис. 37: 1.32

1.33 Добавление ветки наблюдения(рис. 1.33)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git branch --track style origin/style
branch 'style' set up to track 'origin/style'.

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git branch -a
* master
  style
  remotes/origin/HEAD -> origin/master
  remotes/origin/master
  remotes/origin/style

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git log --max-count=2
commit 91afa13ab16b8b5b9349abf0780e6f62ae6d2678 (HEAD -> master, origin/master,
origin/HEAD)
Author: Desagnosia <desagnosia@gmail.com>
Date:   Fri Feb 11 00:19:21 2022 +0300

    Changed README in original repo

commit 716f4ce649a4d0e4c17fc840c590a0f1f6817719 (origin/style, style)
Author: Desagnosia <desagnosia@gmail.com>
Date:   Thu Feb 10 19:55:24 2022 +0300

    Updated index.html

```

Рис. 38: 1.33

1.34-1.35 Создание чистого репозитория(рис. 1.35)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ cd ..

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo
$ git clone --bare hello hello.git
Cloning into bare repository 'hello.git'...
done.

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo
$ ls hello.git
HEAD config description hooks/ info/ objects/ packed-refs refs/

```

Рис. 39: 1.35

1.36 Добавление удаленного репозитория(рис. 1.36)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo
$ cd hello

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/hello (master)
$ git remote add shared ../hello.git/

```

Рис. 40: 1.36

1.37 Отправка изменений(рис. 1.37)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/hello (master)
$ git add README.md

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/hello (master)
$ git commit -m "Added shared comment to readme"
[master 372ca5e] Added shared comment to readme
1 file changed, 2 insertions(+), 1 deletion(-)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/hello (master)
$ git push shared master
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% (3/3), 401 bytes | 401.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To ../hello.git/
91afa13..372ca5e master -> master

```

Рис. 41: 1.37

1.38 Извлечение общих изменений(рис. 1.38)

```

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/hello (master)
$ cd ../cloned_hello/

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git remote add shared ../hello.git/

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git branch --track shared master
branch 'shared' set up to track 'master'.

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ git pull shared master
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 381 bytes | 31.00 KiB/s, done.
From ../hello
* branch          master      -> FETCH_HEAD
* [new branch]     master      -> shared/master
Updating 91afa13..372ca5e
Fast-forward
 README.md | 3 ++-
 1 file changed, 2 insertions(+), 1 deletion(-)

a7719@LAPTOP-PFHF8HBA MINGW64 ~/Desktop/gitrepo/cloned_hello (master)
$ cat README.md
This is the Hello World example from the git tutorial.
(Changed in the original and pushed to shared)

```

Рис. 42: 1.38

Выводы

В результате проделанной лабораторной работы, познакомился с работой распределённой системы управления версиям Git, а также с языком разметки Markdown