

LaTeX

Лекция 4

Весна 2014

Константин Корилов

- Статус
- Макросы
- Контроль версий*
- Презентация в `LaTeX`

[статус]

Name	Assignments 1	Assignments 2	Assignments 3	Assignments 4
Бубликова Александра				
Валов Антон				
Гребеникова Надежда				
Кашубин Никита				
Логунов Семён				
Плотников Василий				
Смирнов Никита				
Соколов Евгений				
Халметова Эльмира				
Чашкин Георгий				

Что вы уже должны уметь?

- Писать письма
- Оформлять курсовые работы
- Писать статьи
- Экономить время на кликах мышкой

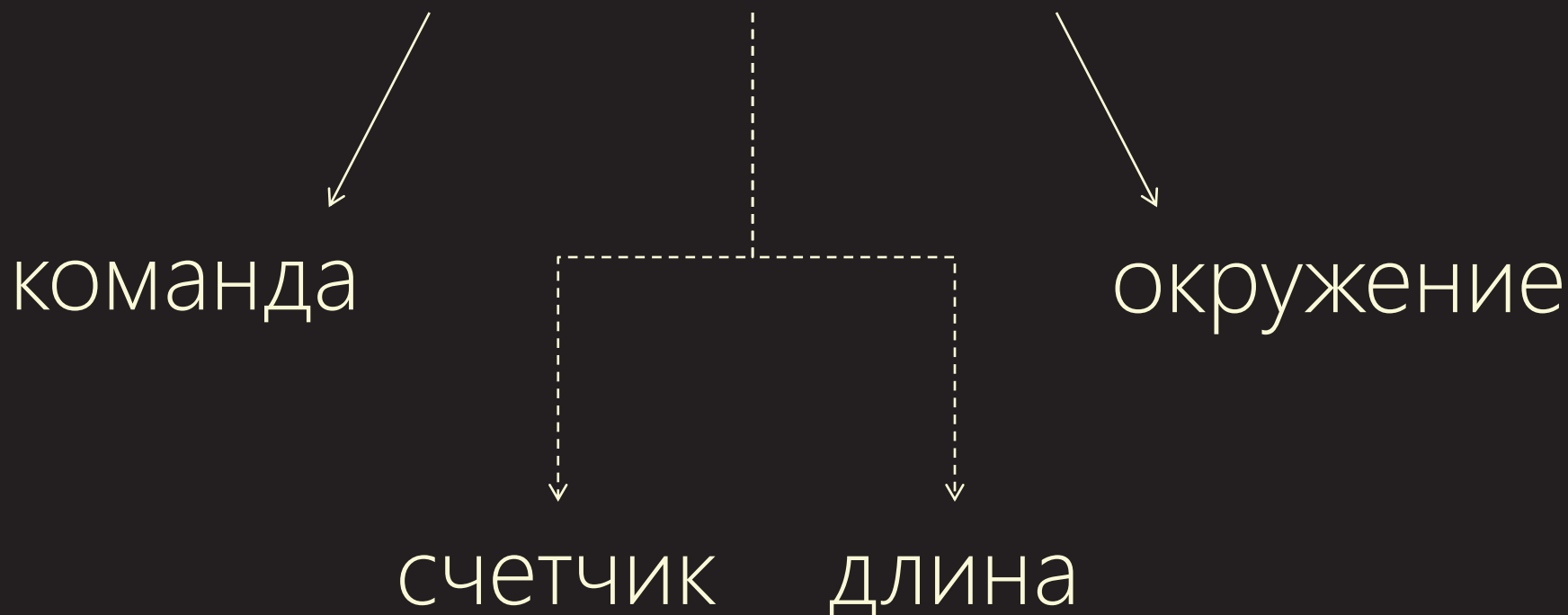
[Макросы в LaTeX]

Макрос?

Μακροσ?

μακρο

Макрос — набор команд



`\newcommand {имя} {замещение}`

`\renewcommand {имя} {замещение}`

Команда

`\newcommand {имя} [n] {#1 бла #n}`

`\renewcommand {имя} [n] {#1 бла #n}`

Команда

`\newcommand* {ИМЯ} {замещение}`

`\renewcommand* {ИМЯ} {замещение}`

`\newcommand* {ИМЯ} [n] {#1 бла #n}`

`\renewcommand* {ИМЯ} [n] {#1 бла #n}`

Команда

[макросы]

\newcounter {ИМЯ}

A=0

Счётчик

`\setcounter {имя} {значение}`

$$A=N$$

`\addtocounter {имя} {значение}`

$$A=A+N$$

`\addtocounter {имя} {\value{имя2}}`

$$A=A+X$$

Счётчик

[макросы]

\arabic {ИМЯ}

\Roman {ИМЯ}

\alph {ИМЯ}

\Alph {ИМЯ}

Счётчик

Встроенные счетчики

\page

\footnote

\figure

\table

\section

...

Счѐтчик

Переопределение

```
\renewcommand {thchapter} {\Alph{chapter}}
```

```
\renewcommand {labelitemi} {bla}
```

```
\renewcommand {labelitemii} {bla}
```

```
\renewcommand {labelitemiii} {bla}
```

```
\renewcommand {labelitemiv} {bla}
```

Счётчик

`\newlength {\name}`

`\name=2em`

`\setlength {\name} {2em plus x minus y}`

`\addtolength {\name} {x}`

`\settowidth {\name} {bla-bla}`

`\vspace {\name}`

`\vspace {2.5\name}`

Длина

[макросы]

```
\begin{имя} \end{имя}  
\newenvironment {имя} {начало} {конец}
```

```
\begin {имя}  
Бла-бла  
\end {имя}
```

Окружение

[макросы]

`\newenvironment` {`имя`} ^{#1 #2 ... #n} [`n`] {начало} {конец}

Окружение

`\renewenvironment {ИМЯ} {начало} {конец}`

`\newenvironment* {ИМЯ} {начало} {конец}`

`\renewenvironment* {ИМЯ} {начало} {конец}`

[Перерыв]



5 минут

[Контроль версий]

"FINAL".doc



FINAL.doc!



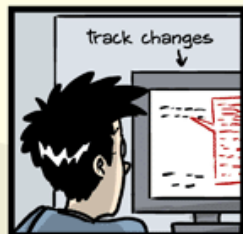
FINAL_rev.2.doc



FINAL_rev.6.COMMENTS.doc



FINAL_rev.8.comments5.
CORRECTIONS.doc



FINAL_rev.18.comments7.
corrections9.MORE.30.doc



FINAL_rev.22.comments49.
corrections.10. #@\$%WHYDID
ICOMETOGRADSCHOOL?????.doc



JORGE CHAM © 2012

[контроль версий]

система контроля версий
version control system
revision control
source code management

[контроль версий]

система контроля версий



[контроль версий]



[контроль версий]



[контроль версий]



rev 1



[контроль версий]



rev 2



rev 1



[контроль версий]



rev 3



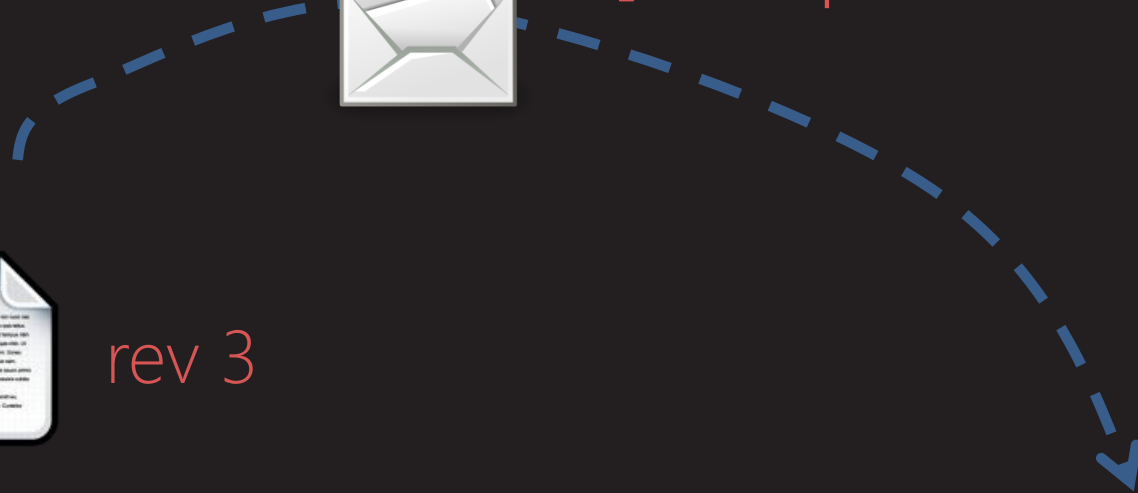
rev 2



rev 1



[контроль версий]



rev 3



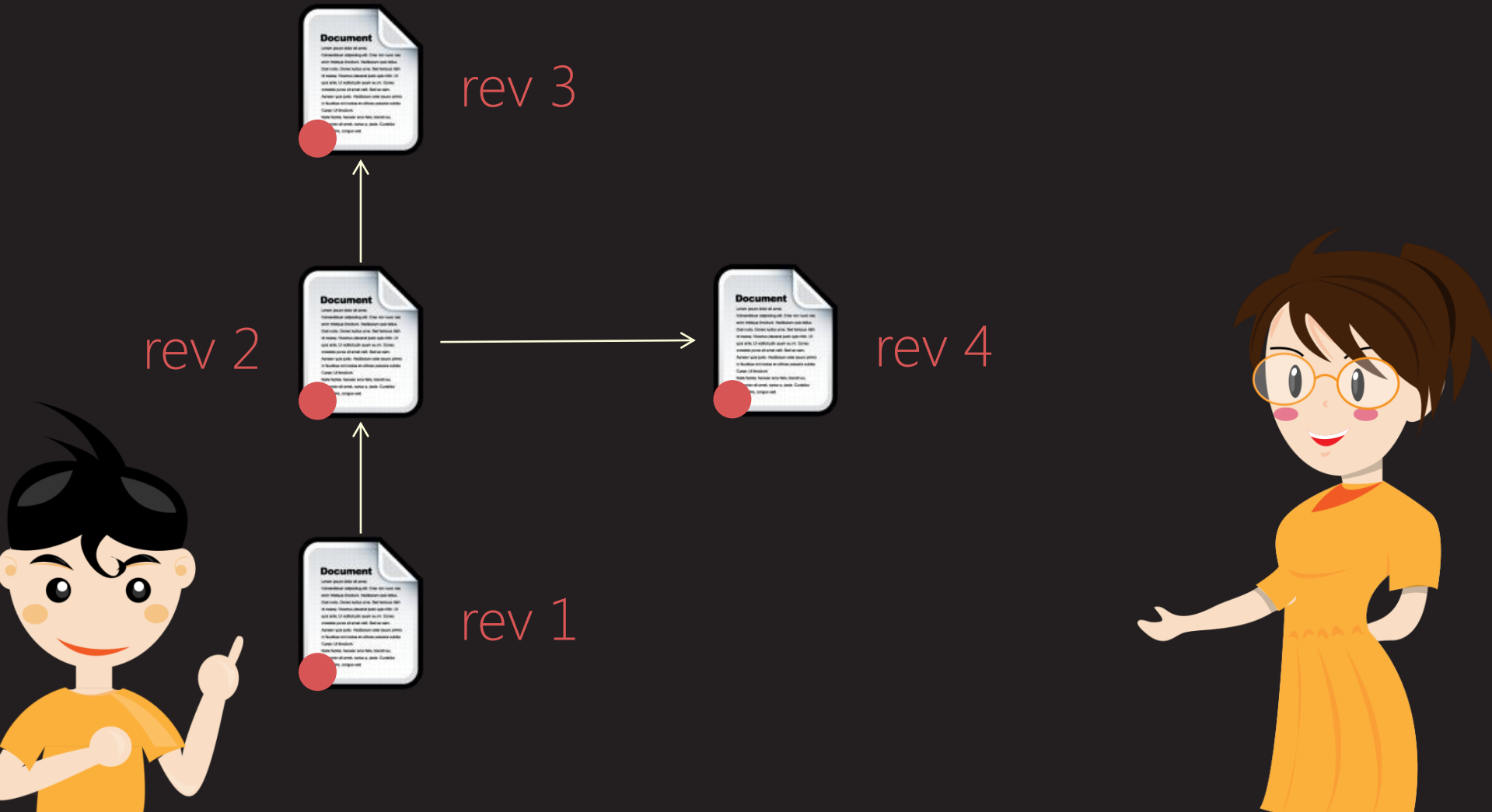
rev 2



rev 1



[контроль версий]



[контроль версий]

rev 5



rev 3



rev 2



rev 4



rev 1



rev 5



rev 2



rev 3

rev 1



[контроль версий]



[контроль версий]

rev 5



rev 3



rev 2



rev 4



rev 1



rev 6



[контроль версий]

rev 5

rev 3

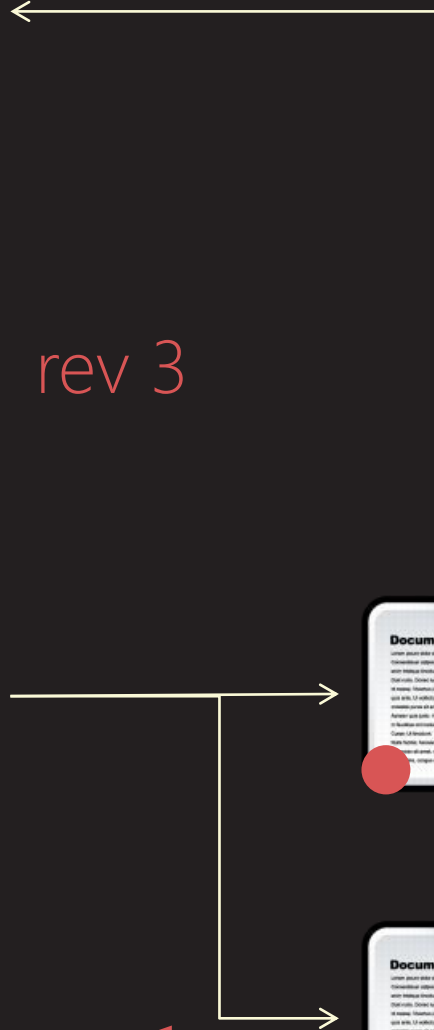
rev 7

rev 2

rev 4

rev 1

rev 6



[контроль версий]

rev 5

rev 3

rev 7

rev 2

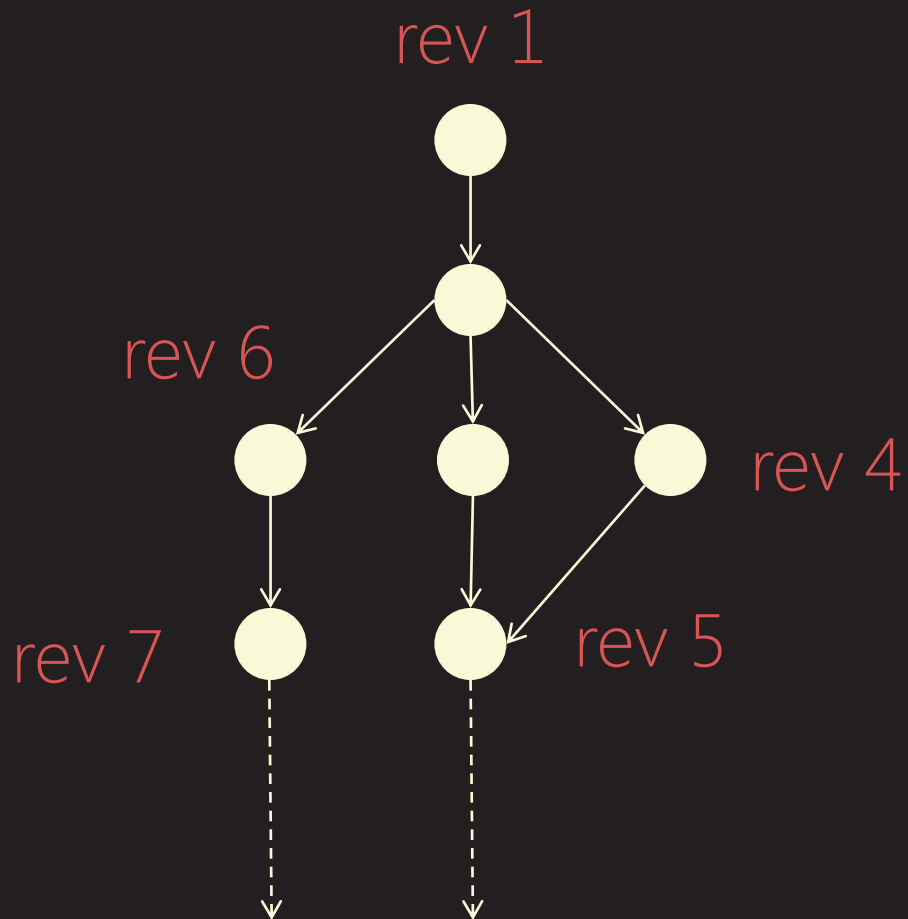
rev 4

rev 1

rev 6

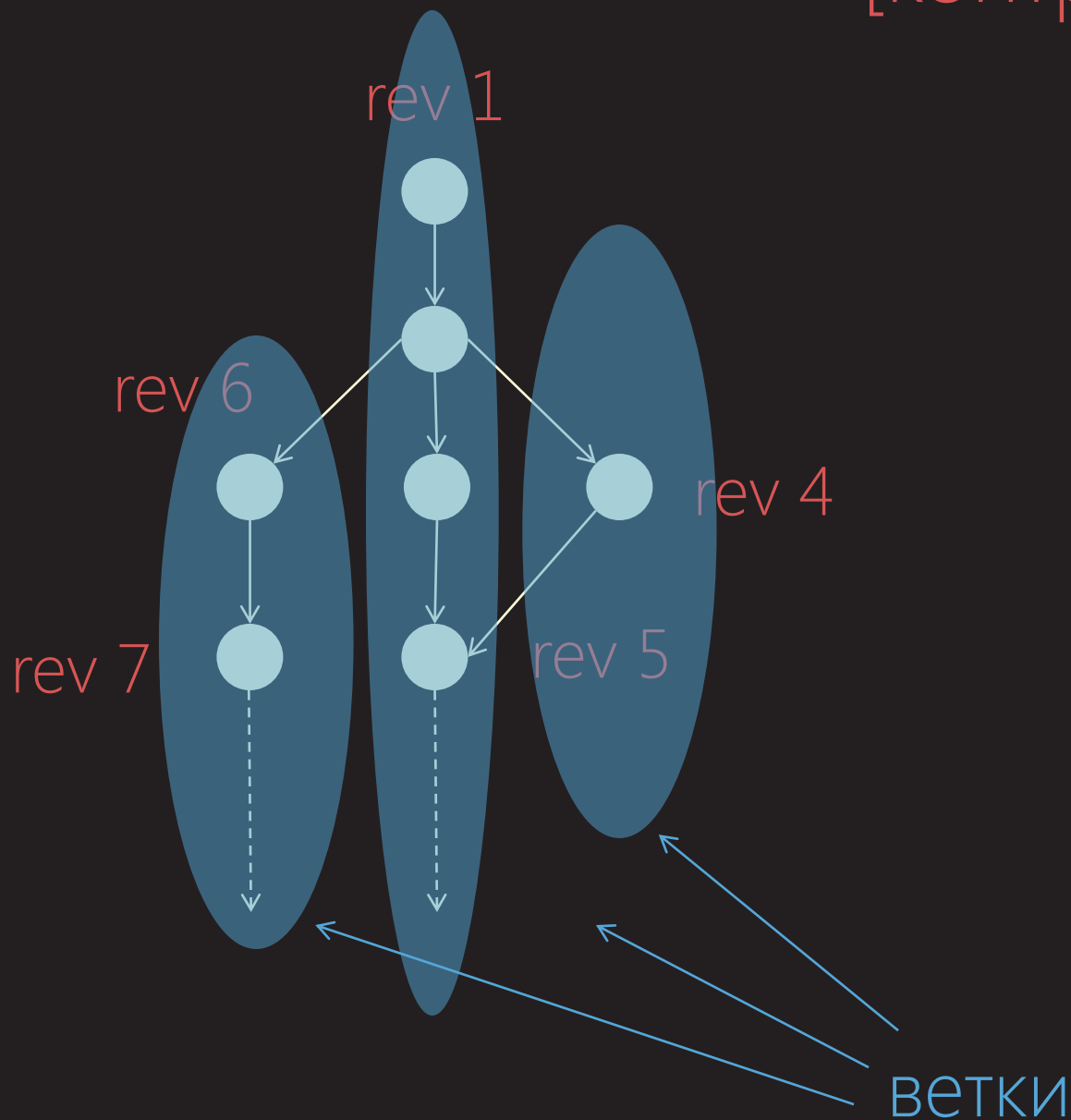


[контроль версий]

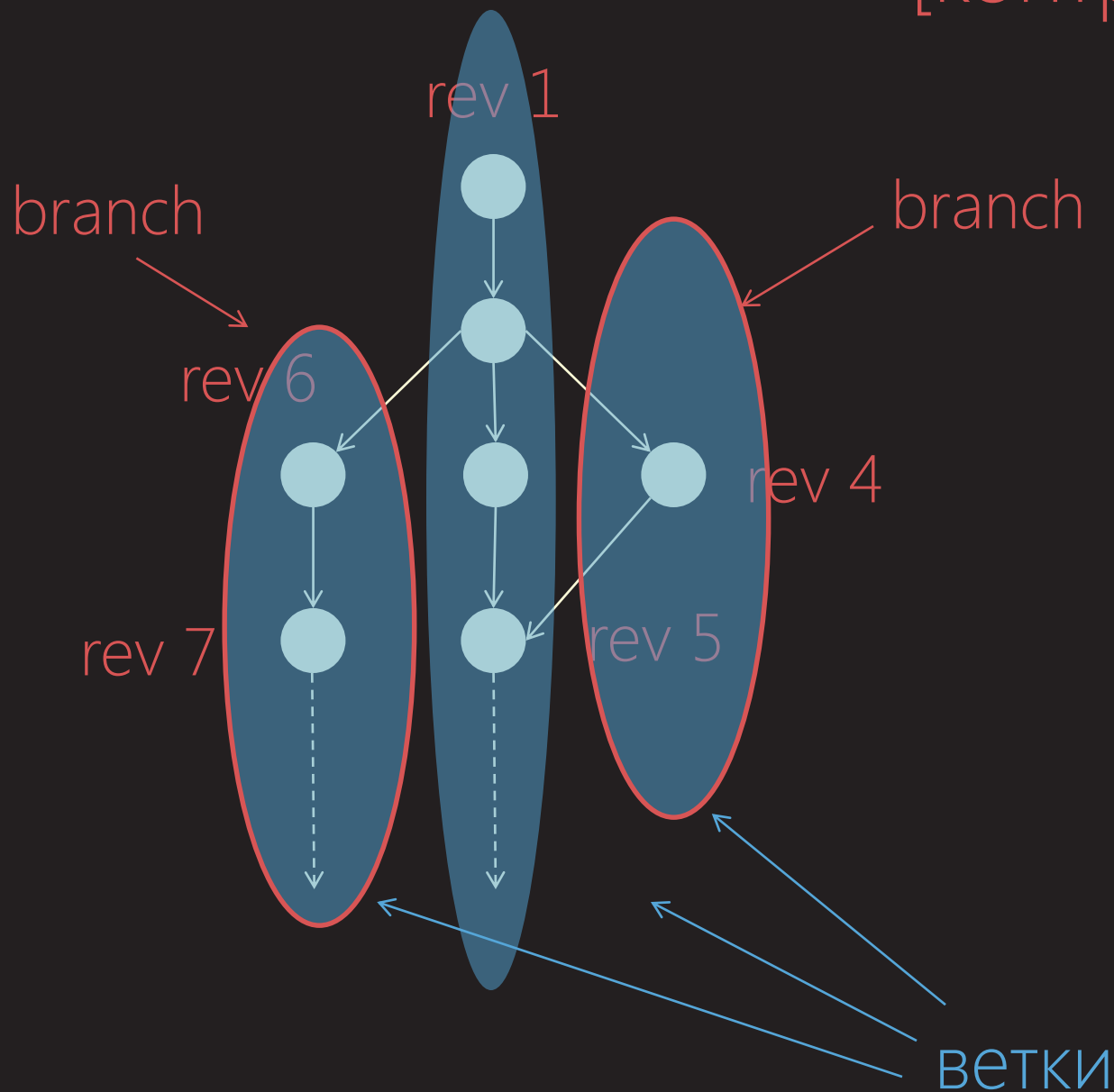


delta
compression

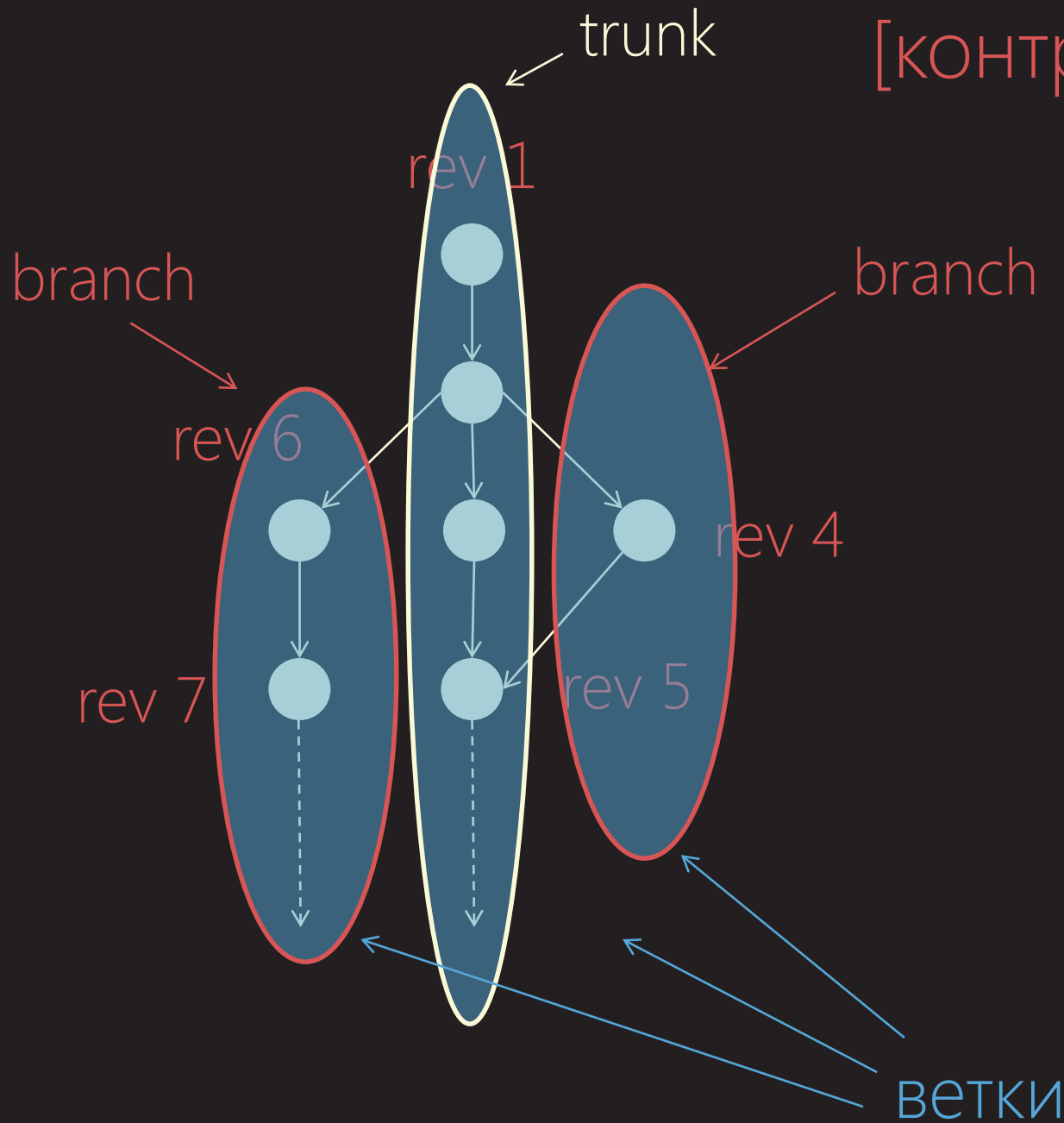
[контроль версий]



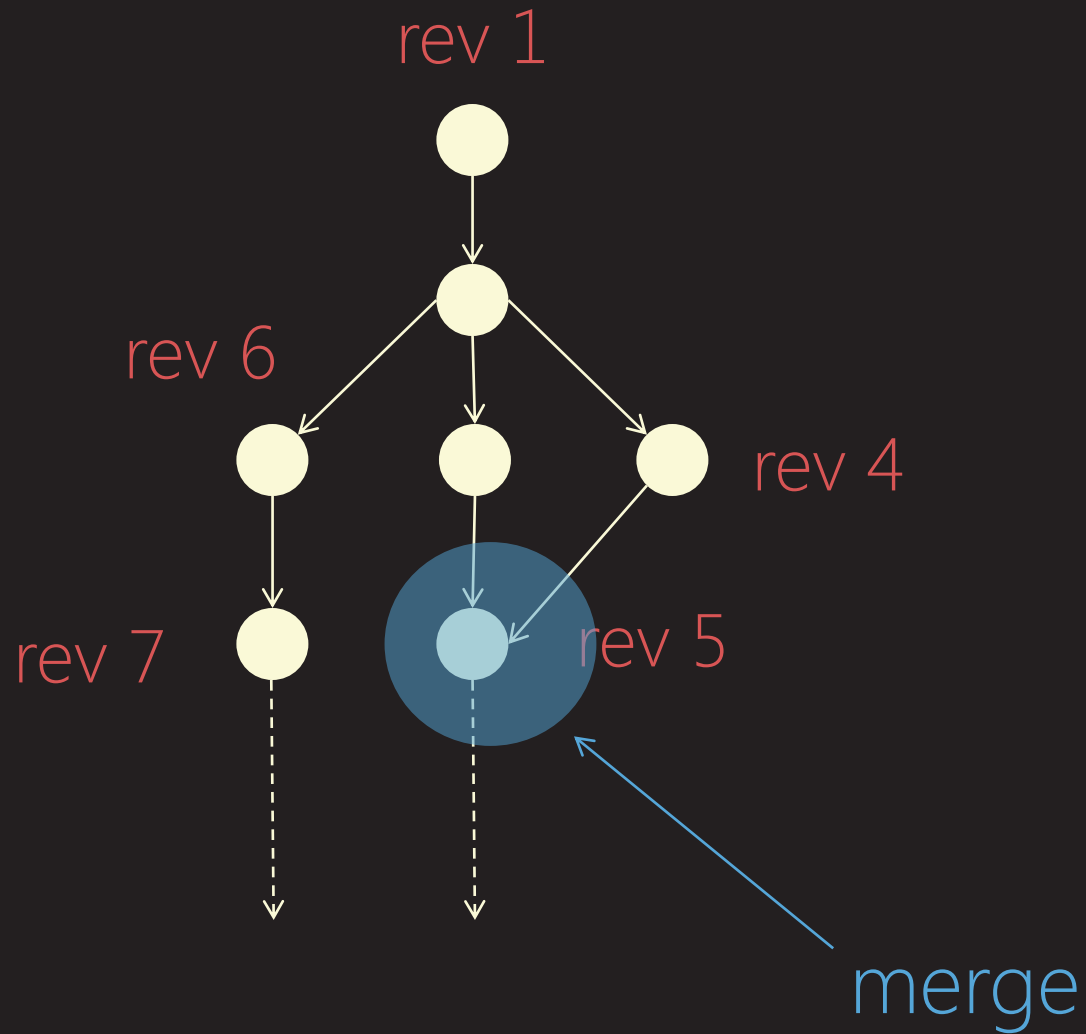
[контроль версий]



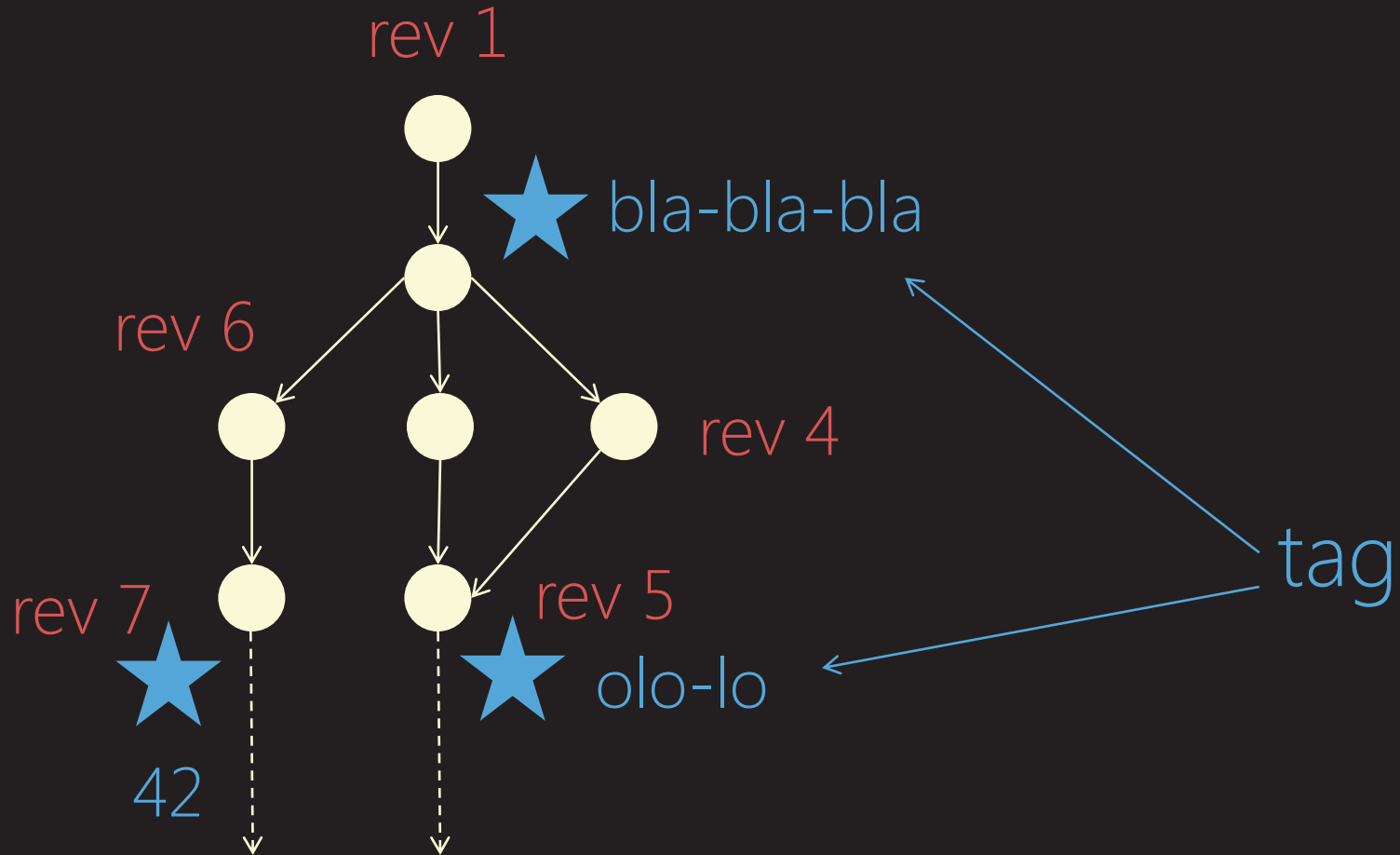
[контроль версий]



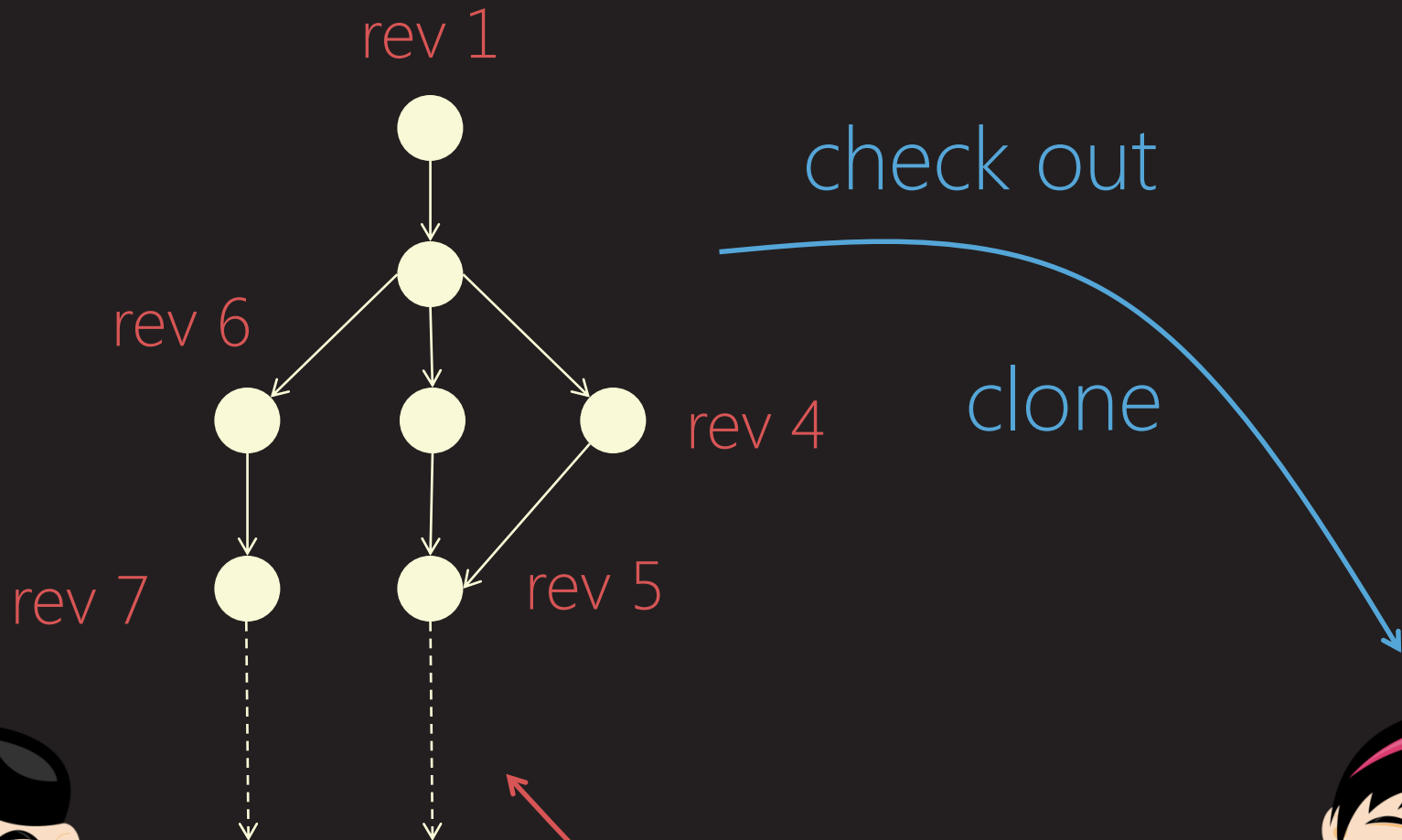
[контроль версий]



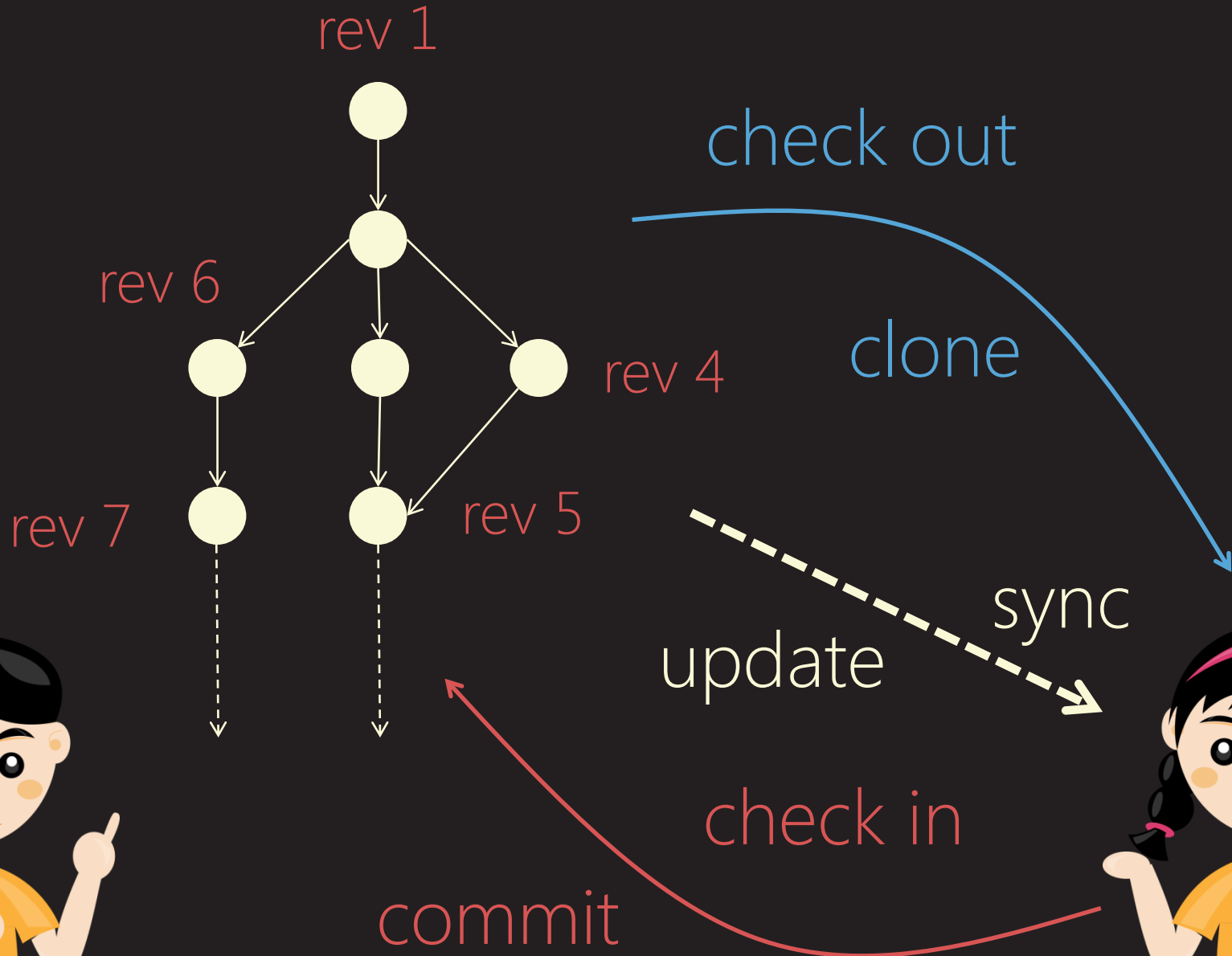
[контроль версий]



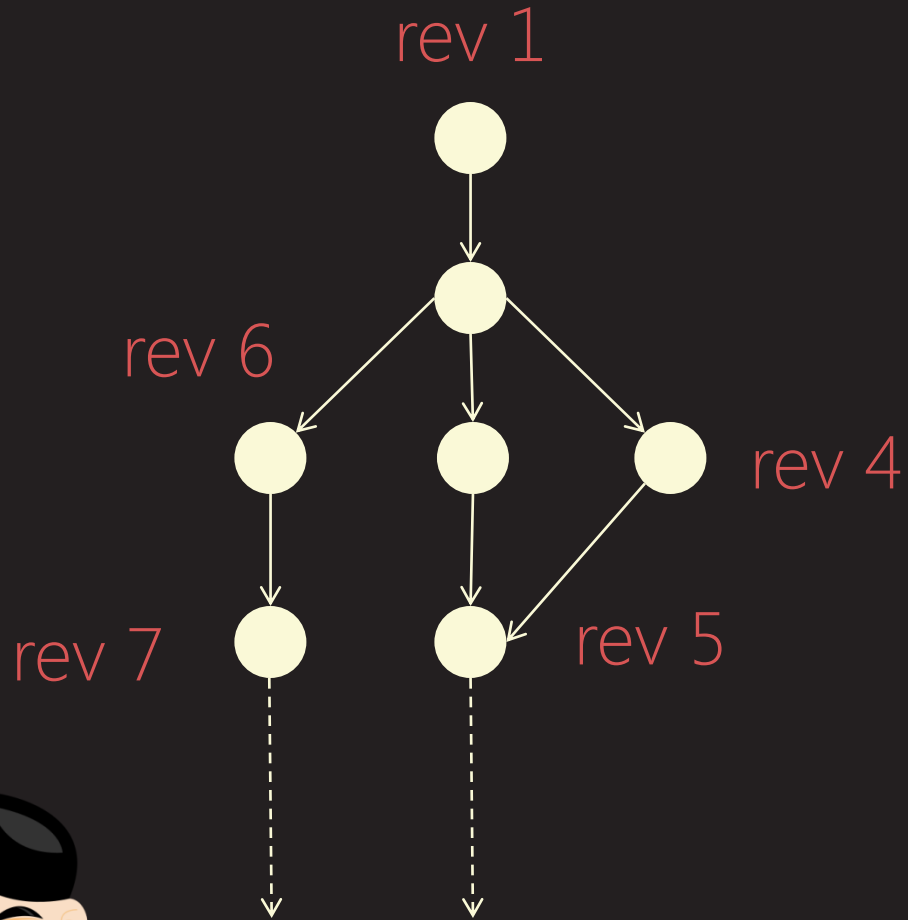
[контроль версий]



[контроль версий]



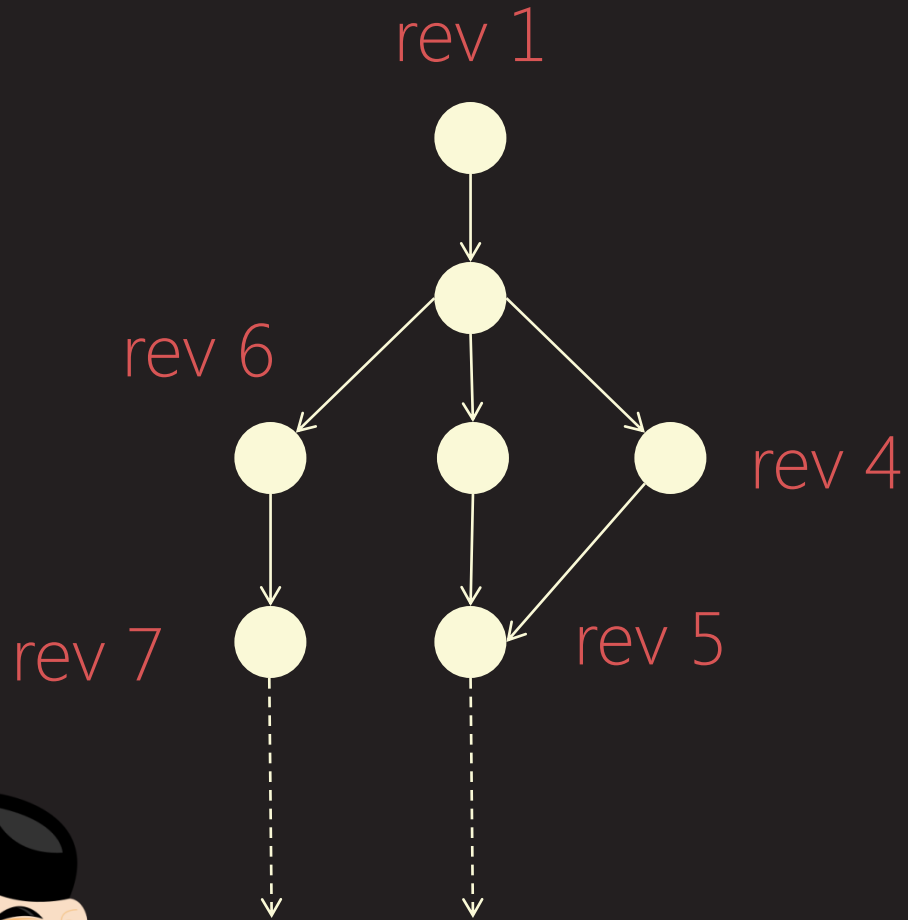
[контроль версий]



lock / unlock



[контроль версий]



~~lock / unlock~~



[контроль версий]



GNU Bazaar



Perforce





GNU Bazaar



[контроль версий]



Perforce

клиент-серверные

распределенные



[контроль версий]

rev 1



>



[контроль версий]

rev 1



```
> svn checkout http://bla-bla.ru/trunk
```

Checked out revision 1.



[контроль версий]

rev 1



```
> svn co http://bla-bla.ru/trunk
```

Checked out revision 1.



[контроль версий]



text.tex



data.csv



lib.bib

rev 1



```
> svn add *
```

Adding ./text.tex

Adding ./data.csv

Adding ./lib.bib



[контроль версий]



text.tex



data.csv



lib.bib

```
> svn commit
```

Committed revision 2.

rev 1



rev 2



[контроль версий]



text.tex



data.csv



lib.bib

```
> svn import ./
```

rev 1



rev 2



[контроль версий]



text.tex



data.csv



lib.bib

```
> svn diff --revision 2:3 text.tex
```

rev 1



rev 2



rev 3



[контроль версий]



text.tex



data.csv



lib.bib

```
> svn update
```

```
./text.tex U
```

```
Updated to revision 3.
```

rev 1



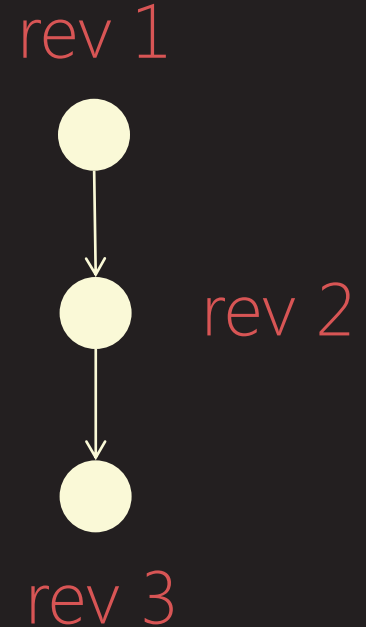
rev 2



rev 3



[контроль версий]



- > svn log
- > svn status
- > svn revert ./text.tex
- > svn merge -r 3:x <http://bla-bla.ru/bla>
- > svn copy <http://bla-bla> <http://olo-lo>
- > svn switch <http://olo-lo>

[Презентация в LaTeX]

beamer

[презентация в latex]

```
\documentclass [10pt,pdf]{beamer}
```

```
\usetheme{Antibes}
```

```
\usecolortheme{seahorse}
```

```
\title{Бла-бла}
```

```
\author{Бла-бла-бла}
```

```
\date{2013}
```

```
\begin{document}
```

```
\maketitle
```

beamer

[презентация в latex]

```
\begin{frame}
```

```
\frametitle{Бла-бла-бла}
```

```
\end{frame}
```

Antibes

- └ Секция
- └ Подсекция

Название слайда

Нумерованный список:

- Раз
- Два
- Три

Пример

Текст примера

$$\text{LoG}(\sigma; x, y) = \nabla^2 \mathbf{G} = \frac{1}{\sigma^3 \sqrt{2\pi}} \left(2 - \frac{x^2 + y^2}{\sigma^2} \right) e^{-\frac{x^2 + y^2}{2\sigma^2}}. \quad (1)$$

Комбинация фильтров Лапласа и Гаусса и есть оператор лапласиана гауссианы (1).

Navigation icons: back, forward, search, etc.

[Домашнее задание]

Домашнее задание №4

1. Сделать презентацию одного из пакетов `latex`, используя пакет `beamer`;
2. Прислать `pdf`;
3. Подготовиться к выступлению (5 минут).

korikov.constantine@sphstu.ru

backup

[типографика]

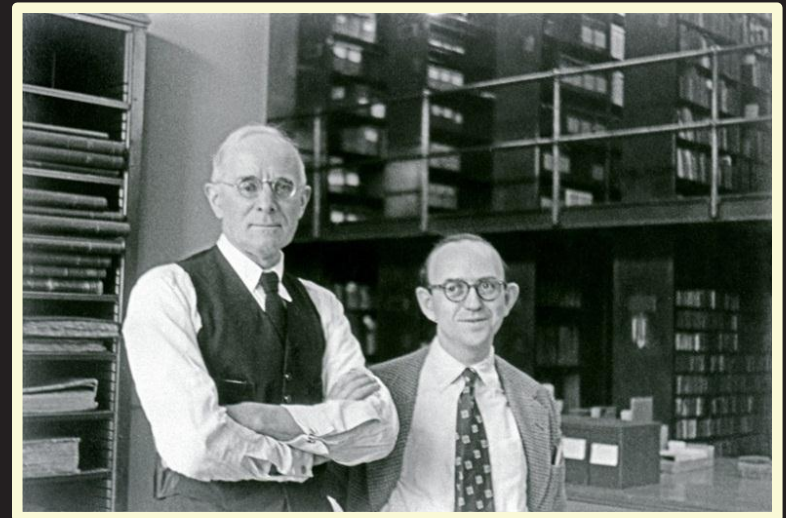


The Times newspaper's offices in Wapping, London Photograph: Martin Godwin

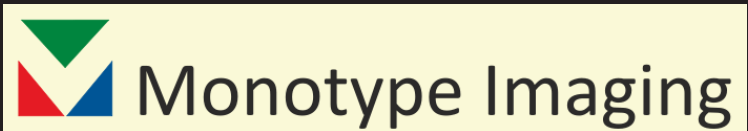
[типографика]



The Times newspaper's offices in Wapping, London
Photograph: Martin Godwin



James Wells (right), with Stanley Morison, 1960.



[типографика]

3 октября 1932 года

[типографика]

Times New Roman



Фрагмент обложки журнала Monotype Recorder (1932)

[типографика]

Times New Roman

Засечки



[типографика]

Times New Roman

Засечки



Helvetica

[типографика]

Oral-B



 **Lufthansa**



Microsoft



Panasonic

Jeep



OLYMPUS

[типографика]

Times New Roman

Засечки

Serif

Helvetica

Без засечек

Sans-Serif

Generated text

Duis natibus, convallisis ligula, elementi.
Vestiquam. Nunc eget molliciturpiscinia
vitae met, tris illa purus.
Fuscingillamcorperdiet wisis imper id non,
imper consecutus. Alique sapien enim enim
dis y. Nulla ac nequam antesque nulla
solliciturpis parturpis. Proin imper ristibus
ornaretium lor ultri , sus. Fuscipis. Sed
diculum eget malesuada. Pellentum ac, vel
dui lectus. Ut tellus eget ornar, tin ; Mauris
aucibus, nectum. Nunc vel monte ac, dui.
Praesenenas in consecutus et, cursus. Nam
dui perdi

Generated text

Duis natibus, convallisis ligula,
elementi. Vestiquam. Nunc eget
molliciturpiscinia vitae met, tris illa
purus. Fuscingillamcorperdiet wisis
imper id non, imper consecutus. Alique
sapien enim enim dis y. Nulla ac
nequam antesque nulla solliciturpis
parturpis. Proin imper ristibus
ornaretium lor ultri , sus. Fuscipis. Sed
diculum eget malesuada. Pellentum ac,
vel dui lectus. Ut tellus eget ornar, tin ;
Mauris aucibus, nectum. Nunc vel
monte ac, dui. Praesenenas in
consecutus et, cursus. Nam dui perdi

[типографика]

Generated text

Duis natibus, convallisis ligula, elementi. Vestiquam. Nunc eget molliciturpiscinia vitae met, tris illa purus. Fusingillamcorperdiet wisis imper id non, imper consecutus. Alique sapien enim enim dis y. Nulla ac nequam antesque nulla solliciturpis parturpis. Proin imper ristibus ornaretium lor ultri, sus. Fuscipis. Sed diculum eget malesuada. Pellentum ac, vel dui lectus. Ut tellus eget ornam, tin; Mauris aucibus, nectum. Nunc vel monte ac, dui. Praesenenas in consecutus et, cursus. Nam dui perdi

Times New Roman

Generated text

Duis natibus, convallisis ligula, elementi. Vestiquam. Nunc eget molliciturpiscinia vitae met, tris illa purus. Fusingillamcorperdiet wisis imper id non, imper consecutus. Alique sapien enim enim dis y. Nulla ac nequam antesque nulla solliciturpis parturpis. Proin imper ristibus ornaretium lor ultri, sus. Fuscipis. Sed diculum eget malesuada. Pellentum ac, vel dui lectus. Ut tellus eget ornam, tin; Mauris aucibus, nectum. Nunc vel monte ac, dui. Praesenenas in consecutus et, cursus. Nam dui perdi

Helvetica

[типографика]

Generated text
Generated text

Generated text
Generated text

Generated text
Generated text

Generated text
Generated text

Generated text
Generated text



[типографика]

Times New Roman

Базовая линия

Helvetica

[типографика]

Times New Roman

Интерлиньяж

Helvetica

[типографика]

Times New Roman



без кернинга

Helvetica

[типографика]

Times||New Roman



трекинг

Helvetica

[типографика]

Times New Roman



пропорциональный

Consolas



моноширинный

[типографика]

Times New Roman
Times New Roman
Times New Roman

начертание

[типографика]

Times New Roman

Times New Roman

Times New Roman

Times New

Times New Roman

Roman

Шрифт є Гарнитура

SERIF / АНТИКВА

SANS SERIF / ГРОТЕСКИ (РУБЛЕННЫЙ)

DECORATIVE & DISPLAY / АКЦИДЕНТНЫЕ И
ДЕКОРАТИВНЫЕ ШРИФТЫ

SCRIPT / РУКОПИСНЫЕ ШРИФТЫ

BLACK LETTER / ГОТИЧЕСКИЕ ШРИФТЫ

OLD SLAVONIAN / СТАРОСЛАВЯНСКИЕ ШРИФТЫ

NON ALPHABETIC & SYMBOL / НЕАЛФАВИТНЫЕ И
СИМВОЛЬНЫЕ ШРИФТЫ

Выдерживать интерлиньяж

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised...

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Регулируйте трекинг

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only the leap into electronic typesetting, remaining essentially unchanged. It was popularised...

TIGHT

IMPROVED READABILITY

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised...

Регулируйте кернинг

Helvetica
INCONSISTENT PAIRED LETTERSPACING

Helvetica
IMPROVED UNITY BETWEEN LETTERS

Ограничивайте длину строки

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised...

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type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised...

40-60

Не смешивайте много шрифтов на одной странице

HEADLINE

sub heading

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown **PRINTER TOOK A GALLERY** of type and scrambled it to make a type specimen book.

It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised...

PAGE 315

bold
italic

Шрифт с засечками для больших текстов

serifs serifs se
erifs serifs ser
serifs serifs se
erifs serifs ser

Выбирайте подходящие цвета

**I'm not happy
with how I look**

**MUCH
happier now!**

Не увлекайтесь выравниванием текста по центру



Dude, you
look kinda
ragged today!

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown pinter took a galley of



I know... :*(

type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised...

Не выбирайте слишком большой размер шрифта

What looks more professional? The left block of text or the right one? Normally non-experienced designers (and yes I did it too!) will immediately use a 12 point font for body copy. Smaller or slightly smaller font sizes creates a more professional and modern look. Large body copy can be clunky -- think about the font of a children's book... clunky right?

What looks more professional? The left block of text or the right one? Normally non-experienced designers (and yes I did it too!) will immediately use a 12 point font for body copy. Smaller or slightly smaller font sizes creates a more professional and modern look. Large body copy can be clunky -- think about the font of a children's book... clunky right?

Используйте многоколоночный дизайн

The Grid System The ultimate resource in grid systems. <i>"The grid system is an aid, not a guarantee. It permits a number of possible uses and each designer can look for a solution appropriate to his personal style. But one must learn how to use the grid; it is an art that requires practice."</i> Josef Müller-Brockmann				
Articles	Tools	Books	Templates	Blog
Compose to a Vertical Rhythm On the Web, vertical rhythm is contributed to by three factors: font size, line height and margin or padding. All of these factors must be calculated with care in order that the rhythm is maintained. 04.Dec.2008	960 Grid System An effort to streamline web development workflow by providing commonly used dimensions, based on a width of 960 pixels. There are two variants: 12 and 16 columns, which can be used separately or in tandem. 04.Dec.2008	Geometry of Design The book focuses on the classic systems of proportioning, such as the golden section and root rectangles, as well as systems such as the Fibonacci Series. 04.Dec.2008	InDesign 8.5x11 Grid System (12) Adobe InDesign file with a grid system for an 8.5"x11" page that is divided into 12 columns and rows using the Rule of Thirds (Golden Ratio). Includes a 12pt baseline grid. 29.Nov.2008	UX Magazine A well designed collaborative site, with a very nice grid structure, that focuses on user experience. 02.Dec.2008