

# Version control in Rstudio together with Github

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## Start from a real scenario: daily tasks

- ▶ **Create** things
- ▶ **Save** things
- ▶ **Edit** things
- ▶ Save the thing **again**

Start from a real scenario

# History Tracking

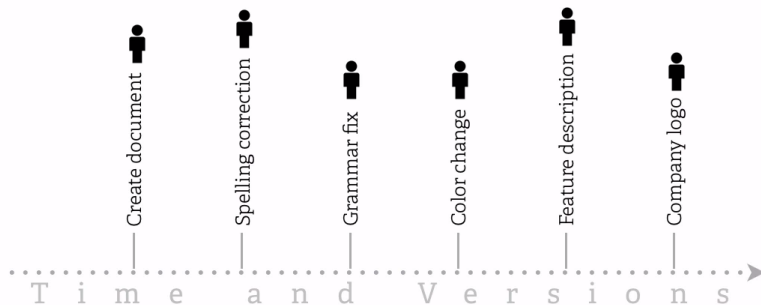


Figure 1: History tracking

Start from a real scenario

# Collaborative History Tracking

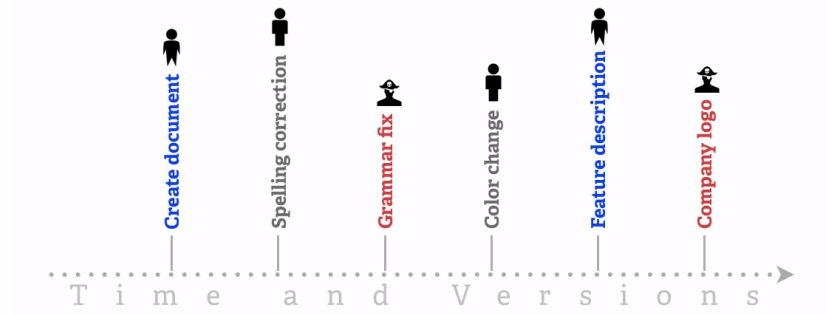


Figure 2: collaborative history tracking

Version control is important!

## Basic Diffs

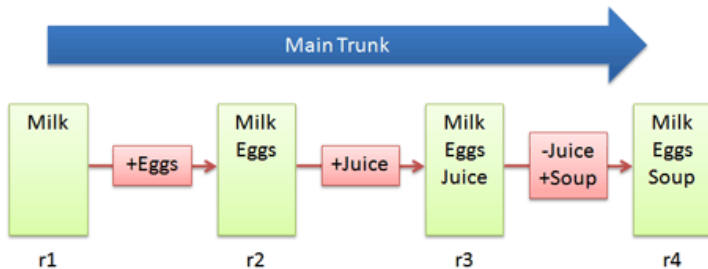


Figure 3: version control

## Cloud storage

- ▶ Dropbox
- ▶ Nutstore

# GitHub



Figure 4: Octocat

## Prerequisites:

- ▶ Basic knowledge of R
- ▶ Working knowledge of RStudio
- ▶ Basic knowledge of command shell
- ▶ Curiosity to explore new stuff!



## Software:

- ▶ R (stable version 3.2.5) <http://cran.r-project.org/>
- ▶ RStudio  
<http://www.rstudio.com/products/rstudio/download/>
- ▶ Git <http://git-scm.com/downloads>
- ▶ GitHub Account <https://github.com/>
- ▶ a good internet connection!

## Step 1:Github

- ▶ GitHub Account:<https://github.com/>
- ▶ Create Repository Steps for creating a repository:

1. Repository name
2. Description (Optional)
3. README
4. Private/Public (Suggested)

## Step 2: SSH key

- ▶ Git/SVN: copy public key
- ▶ Github: key dialogue

## Step 3: Git installment

- ▶ <https://git-scm.com/>
- ▶ Git directory: C:\program and files\git\bin\git.exe

## configuration in terminal

- ▶ `git config --global user.email "your email address"`
- ▶ `git config --global user.name "your user name"`
- ▶ `git config --list`
- ▶ `git push -u origin master`

## create project

- ▶ create project
- ▶ choose version control
- ▶ add repository link

## do version control

- ▶ commit
- ▶ pull and push