

# Package ‘gitgadget’

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**Type** Package

**Title** 'Rstudio' Addin for Version Control and Assignment Management using Git

**Version** 0.8.1

**Date** 2023-8-23

**Description** An 'Rstudio' addin for version control that allows users to clone repositories, create and delete branches, and sync forks on GitHub, GitLab, etc. Furthermore, the addin uses the GitLab API to allow instructors to create forks and merge requests for all students/teams with one click of a button.

**Depends** R (>= 4.0.0)

**Imports** shiny (>= 1.7.1), miniUI (>= 0.1.1.1), rstudioapi (>= 0.7), curl (>= 3.2), jsonlite (>= 1.5), dplyr (>= 0.8.3), shinyFiles (>= 0.7.5), callr (>= 2.0.4), usethis (>= 1.5.1), markdown

**Suggests** knitr, rmarkdown

**URL** URL: <https://github.com/vnijs/gitgadget>

**BugReports** <https://github.com/vnijs/gitgadget/issues>

**License** GPL-3

**RoxygenNote** 7.2.3

**Encoding** UTF-8

**Language** en-US

**VignetteBuilder** knitr

**NeedsCompilation** no

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**Repository** CRAN

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add_users_repo	<i>Add users to a repo</i>
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### Description

Add users to a repo

### Usage

```
add_users_repo(
  token,
  repo,
  userfile,
  permission = 20,
  server = "https://gitlab.com/api/v4/"
)
```

### Arguments

token	GitLab token
repo	Repo to update
userfile	A csv file with student information (i.e., username, token, and email)
permission	Permission setting for the repo (default is 20, i.e., reporter)
server	The GitLab API server

**Details**

See <https://github.com/vnijs/gitgadget> for additional documentation

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 assign\_work

*Assign work to each student/team by creating a fork of the main repo*


---

**Description**

Assign work to each student/team by creating a fork of the main repo

**Usage**

```
assign_work(
  token,
  groupname,
  assignment,
  userfile,
  tafile = "",
  type = "individual",
  pre = "",
  server = "https://gitlab.com/api/v4/"
)
```

**Arguments**

token	GitLab token
groupname	Group to create on GitLab (defaults to user's namespace)
assignment	Name of the assignment to assign
userfile	A csv file with student information (i.e., username, token, and email)
tafile	A optional csv file with TA information (i.e., username, token, and email)
type	Individual or Team work
pre	Pre-amble for the assignment name, usually groupname + "-"
server	The GitLab API server

**Details**

See <https://github.com/vnijs/gitgadget> for additional documentation

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checkerr	<i>Check error status</i>
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**Description**

Check error status

**Usage**

```
checkerr(code)
```

**Arguments**

code	Code returned by an API request
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**Details**

See <https://github.com/vnijs/gitgadget> for additional documentation

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check_tokens	<i>Check student tokens</i>
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**Description**

Check student tokens

**Usage**

```
check_tokens(  
  userfile,  
  server = Sys.getenv("git.server", "https://gitlab.com/api/v4/")  
)
```

**Arguments**

userfile	A csv file with student information (i.e., username, token, and email)
server	The GitLab API server

**Details**

See <https://github.com/vnijs/gitgadget> for additional documentation

---

collect_work	<i>Create merge requests for each student/team</i>
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---

**Description**

Create merge requests for each student/team

**Usage**

```
collect_work(  
    token,  
    assignment,  
    userfile,  
    type = "individual",  
    server = "https://gitlab.com/api/v4/"  
)
```

**Arguments**

token	GitLab token
assignment	Name of the assignment (e.g., "class345/class345-assignment1")
userfile	A csv file with student information (i.e., username, token, and email)
type	Individual or Team work
server	The GitLab API server

**Details**

See <https://github.com/vnijs/gitgadget> for additional documentation

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create_group	<i>Create a group on GitLab using the API</i>
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---

**Description**

Create a group on GitLab using the API

**Usage**

```
create_group(  
    token,  
    groupname = "",  
    userfile = "",  
    permission = 20,  
    server = "https://gitlab.com/api/v4/"  
)
```

**Arguments**

token	GitLab token
groupname	Group to create on GitLab (defaults to user's namespace)
userfile	A csv file with student information (i.e., username, token, and email)
permission	Permission setting for the group (default is 20, i.e., reporter)
server	The GitLab API server

**Details**

See <https://github.com/vnijs/gitgadget> for additional documentation

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create_repo	<i>Create the main repo from a local directory</i>
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---

**Description**

Create the main repo from a local directory

**Usage**

```
create_repo(
  username = Sys.getenv("git.user"),
  token = Sys.getenv("git.token"),
  repo = basename(getwd()),
  base_dir = dirname(getwd()),
  groupname = "",
  pre = "",
  ssh = FALSE,
  server = "https://gitlab.com/api/v4/"
)
```

**Arguments**

username	Username
token	Token (e.g., Sys.getenv("git.token") or Sys.getenv("GITHUB_PAT"))
repo	Name of the repo (assignment)
base_dir	Base directory for the repo. file.path(directory, assignment) should exist
groupname	Group to create on GitLab (defaults to user's namespace)
pre	Pre-amble for the repo (assignment) name
ssh	Use SSH for authentication
server	The GitLab API server

**Details**

See <https://github.com/vnijs/gitgadget> for additional documentation

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fetch_work	<i>Fetch all merge requests as local branches and link to a remote</i>
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**Description**

Fetch all merge requests as local branches and link to a remote

**Usage**

```
fetch_work(token, assignment, page = 1, server = "https://gitlab.com/api/v4/")
```

**Arguments**

token	GitLab token
assignment	Name of the assignment (e.g., "class345/class345-assignment1")
page	Number of the results page to select
server	The GitLab API server

**Details**

See <https://github.com/vnijs/gitgadget> for additional documentation

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get_port	<i>noRd export</i>
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**Description**

noRd export

**Usage**

```
get_port()
```

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`gitgadget`*gitgadget*

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**Description**

Run gitgadget in the Rstudio viewer if available

**Usage**

```
gitgadget(port = get_port(), host = "127.0.0.1", launch.browser = TRUE)
```

**Arguments**

`port` Port to use for the app

`host` Host ip to use

`launch.browser` Launch app in viewer (browsers) or only show the URL

**Details**

See <https://github.com/vnijs/gitgadget> for documentation

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`gitgadget_callr`*Launch gitgadget in a separate process*

---

**Description**

Launch gitgadget in a separate process

**Usage**

```
gitgadget_callr()
```

**Details**

Using the callr package to launch gitgadget in a separate process so the console is not blocked. Rstudio viewer is used if available. See <https://github.com/vnijs/gitgadget> for documentation



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gitgadget_url	<i>Start gitgadget and show url to open the application in an external browser</i>
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**Description**

Start gitgadget and show url to open the application in an external browser

**Usage**

```
gitgadget_url()
```

**Details**

See <https://github.com/vnijs/gitgadget> for documentation

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projID	<i>Find project ID</i>
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**Description**

Find project ID

**Usage**

```
projID(path_with_namespace, token, server, owned = TRUE, search = "")
```

**Arguments**

path_with_namespace	Repo name together with the group or user namespace
token	GitLab token
server	The GitLab API server
owned	Restrict listing to only repos owned by the user? TRUE or FALSE
search	Search term to use to narrow down the set of projects

**Details**

See <https://github.com/vnijs/gitgadget> for additional documentation

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read_ufile	<i>Reach user file</i>
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**Description**

Reach user file

**Usage**

```
read_ufile(userfile, cols = c("userid", "team", "token"))
```

**Arguments**

userfile	File with student information
cols	Column names that must exists in the file

**Details**

See <https://github.com/vnijs/gitgadget> for additional documentation

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remove_project	<i>Remove a project</i>
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**Description**

Remove a project

**Usage**

```
remove_project(token, id, server)
```

**Arguments**

token	GitLab token
id	Project ID
server	The GitLab API server

**Details**

See <https://github.com/vnijs/gitgadget> for additional documentation

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remove_users_repo	<i>Remove users from a repo</i>
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**Description**

Remove users from a repo

**Usage**

```
remove_users_repo(token, repo, userfile, server = "https://gitlab.com/api/v4/")
```

**Arguments**

token	GitLab token
repo	Repo the update
userfile	A csv file with student information (i.e., username, token, and email)
server	The GitLab API server

**Details**

See <https://github.com/vnijs/gitgadget> for additional documentation

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