

Wercker

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Where can you find passing badge? What does it mean to pass?

In your case, the badge will appear at the top of the README file, right below the list of files on GitHub. A green badge means it passed all the tests specified. In this class, to pass you simply need to have an Rmd file that knits successfully.

What does wercker do?

The Wercker does everything specified in wercker.yml. It always starts with three default steps

1. get code: this clones your repository so that it has access to all of your files
2. setup environment: identifies the wercker.yml file and sets itself up
3. wercker-init: initializes itself

These three steps should run without many issues. If they fail, you should try to push again. After these steps, the wercker.yml starts to matter. Here is the yml file for homework 3:

```
build:
  steps:
    - script:
        name: Check for allowed files in repo
        code: |
          Rscript -e "source('https://raw.githubusercontent.com/STA521-F18/HW3/master/HW3_whitelist.R')"
    - script:
        name: Render R markdown for HW
        code: |
          Rscript -e "install.packages('pROC', repos='https://cloud.r-project.org');
install.packages('reshape', repos='https://cloud.r-project.org');
install.packages('caret', repos='https://cloud.r-project.org');
install.packages('palettetown', repos='https://cloud.r-project.org');
install.packages('ROCR', repos='https://cloud.r-project.org');
install.packages('car', repos='https://cloud.r-project.org');
install.packages('plyr', repos='https://cloud.r-project.org');
install.packages('vcd', repos='https://cloud.r-project.org');
install.packages('xtable', repos='https://cloud.r-project.org');
install.packages('stargazer', repos='https://cloud.r-project.org');
install.packages('arm', repos='https://cloud.r-project.org');
library(rmarkdown);render('HW3.Rmd')"
```

This file specifies two steps. The first is “Check for allowed files in repo”, which runs the R script in the url. This script looks like this:

```
allowed_files = c("HW3.Rmd",
                  "HW3.pdf",
                  "HW3.html",
                  "nes5200_processed_voters_realideo.dta",
                  "README.md",
                  "HW3_whitelist.R",
```

```

        "wercker.yml")
files = dir()
disallowed_files = files[!(files %in% allowed_files)]
if (length(disallowed_files) != 0)
{
  cat("Disallowed files found:\n")
  cat("  (Please remove the following files from your repo)\n\n")
  for(file in disallowed_files)
    cat("*",file,"\n")
  quit("no",1,FALSE)
}

```

This script looks at the name of the files in your repository. If there are files that are not in the specified whitelist, then the step will tell you to remove those files. If you encounter an error at this step, you should simply remove all files that are not in the whitelist. The error should be very interpretable.

The next step is “Render R Markdown for HW.” This runs the R script specified in the double quotes. The script installs a long list of packages, then runs the command “render(‘HW3.Rmd’),” which takes the Rmd file and attempts to knit the file. The final step is “store”, which collects the results of the build.

Several common problems

1. Failed to render R Markdown for HW. One reason this could happen is because of packages. Prof Clyde has specified a large number of packages that will be installed. If you use a package that is not in this list, the build will fail. If you need a package that is not in the list, please ask Prof Clyde to add the package so that your build will be successful.
2. Setup environment failed: Likely due to timeout (i.e. the setup environment step takes too long); simply push again.
3. Check for allowed files in repo failed: remove the disallowed files.