

Homework 1 - Basics of Quantifying Natural Hazards
by Martina Rosskopf & Nina Golombek

Overview

- Moodle 2.0
- RPubs
- Jupyter
- GitHub
- Discussion

Moodle 2.0

A learning management system for the University of Potsdam

Intensions:

- Upload/Shearing of Course Material, slides, data, papers for students
- Submission/Grading of Homework, Essays, other course requirements
- Participate in Tests/Lectures online

How it works:

- Students are provided with the enrollment key during the first lecture
- Self-enrollment can be activated by the Administrator
- All required functions of the individual course Moodle page can be chosen by the lecturer

Moodle 2.0

- Easy Access for Students enrolled at the University of Potsdam
- Lecturers can restrict the access for their class participants only
 - → Upload/visibility of student's contributions are only visible to other course participants (if enabled at all)
 - → Other students can comment on uploaded contributions (if enabled)
- Students log-in with their E-Mail Address & Password
- Students can find their classes in a search window

Moodle 2.0

- Students from affiliate Universities have to get an extra access
 - → takes a lot of time (usually not ready at the beginning of the course)
- If one misses the first lecture, the key necessary to enroll will not be eligible
 - → separate E-Mail to the lecturer required → take sometimes a lot of time to get a reply/access
- If something goes wrong one has to E-Mail the Administrator
 - Takes sometimes weeks to get a reply/solution
- Available only in German → hard for foreigners

RPubs

Easy web publishing from R (with the click of a button)

Intensions:

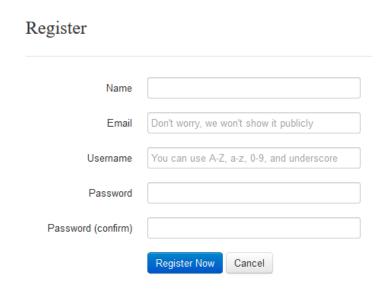
• Create an R Markdown sheet in RStudio \rightarrow share it on *RPubs*

Pre-requirements:

- R & RStudio
- R Markdown package

RPubs

- Easy Instructions & Requirements listed on the "Getting Started" page
- Explicit note to ask for help on RStudio Support Forums
 - Like to get also feedback to make the tools better
- Simple Registration
- See recent Uploads without Registration
- Option to Comment, Share (Copy URL)
- Easy Link to the Community
- Open Plattform



RPubs

- Registration is open to everyone → no control of who sees your publications
- Everyone can comment on your work
- You can already see recent publications even without access
 - Scroll through R Markdown sheets
 - Only see title page of a presentation

Jupyter



 To develop open-source software, open-standards, and services for interactive computing across dozens of programming languages

Intentions:

- Open-Source web application to create and share documents that include live code, text, visualizations
- JupyterHub → multi-user version of the notebook
- Download or Web Application

Jupyter



- The Jupyter Notebook supports > 40 programming languages
- Notebooks can be shared in Jupyter but also via GitHub, E-mail, Dropbox
- Interactive output of the code
- Integration of "Big Data" Tools
- Easy Installation with instructions for different languages
- Shows members of the Steering Counsel \rightarrow friendlier environment
- Simple Sign-up for Mailing Lists and other groups
- No Sign-up needed
- For Anaconda already pre-installed

Jupyter



- Very Complex if you look at it for the first time
 - Takes time to find out which application you need
- JupyterHub connected to GitHub?

GitHub

 A development platform to host and review code, manage projects, and build software

Intensions:

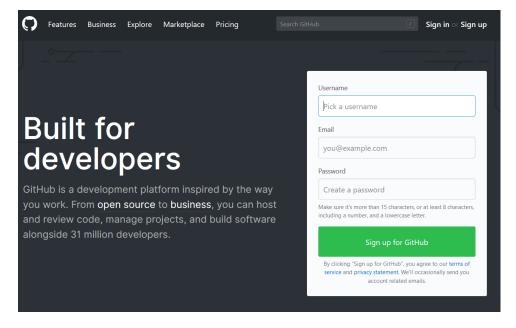
Secure platform to create and share projects (also for Businesses)

GitHub

- They address personal security needs
- An account keeps your work to be open for everyone
- See members of the community (not creators)

GitHub

- One get's hit by this sign-up page right at the first click -> repulsive
- Need to sign-up to bring your team together
- Second thing you see is the GitHub Enterprise where only a trial is free
 → Contact to Sales is encourages
- Not really "Open Source"



Discussion

Moodle 2.0

- For Professors to share something with students
- Not for actual sharing of scientific work

RPubs

If you don't care who sees/comments on your work it's a nice platform

Jupyter

 Once you worked through what you need, it's the perfect place to spread and share your work with selected others

GitHub

• Due to need to pay, it is the least friendly option for personal users