



Open Science Community Saudi Arabia

مجتمع العلوم المفتوحة في المملكة العربية السعودية

# مقدمة في لغة الأَر وممارسات العلوم المفتوحة

Beginners Guide for R through Open Data Science Practices



Scriberia

| **Twitter:** @batool664 | **Web:** <https://batool-almazouq.netlify.app/> | د.بتول المرزوق

## مرحبا في كورس "مقدمة في لغة الأ R وممارسات العلوم المفتوحة"

التاريخ: ٢٠ جولي ٢٠٢٢

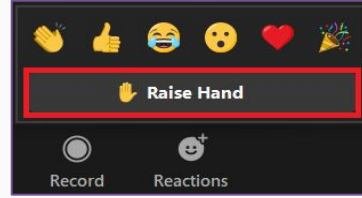
تسجيل الاسماء

الاسم / المدينة / حسابات وسائل التواصل الاجتماعي لمن يرغب (twitter و GitHub وما إلى ذلك)  
• بتول المرووق / الشرقية / GitHub: BatooolMM / @OpenSciSaudi / Twitter: @batoool664

سؤال عام لرفع التوتر وكسر الجليد

ماهو اجمل كتاب أو مقالة قرأته؟

• بتول: Teaching Tech Together



## قواعد الدورة

- كتابة الاسم في Google Doc
- الإجابة على Icebreaker question
- إطفاء الجوال
- القواعد السلوكية
- لا تتردد في طرح أي سؤال خلال الجلسة



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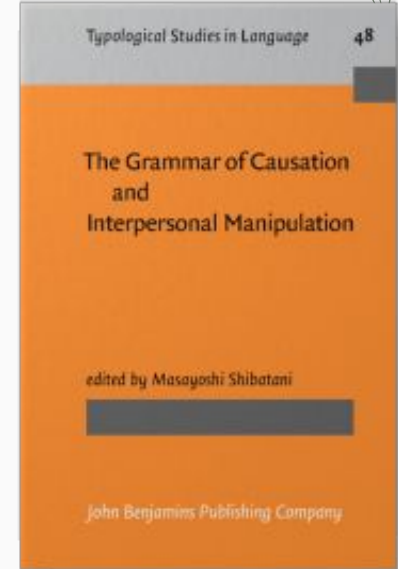
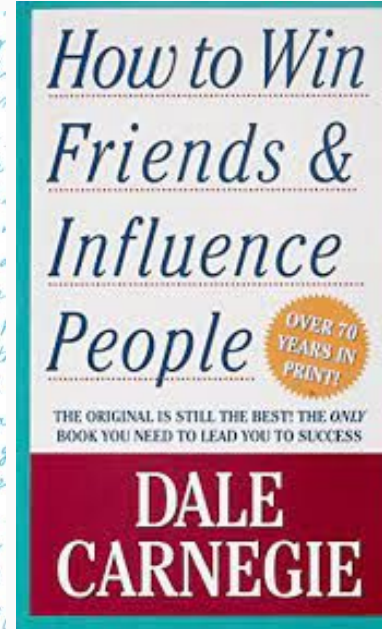
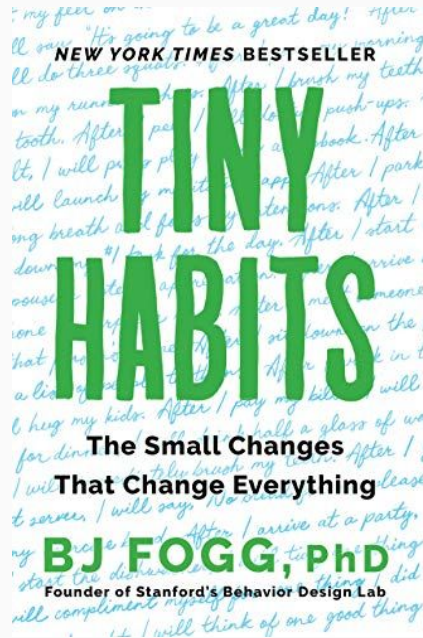
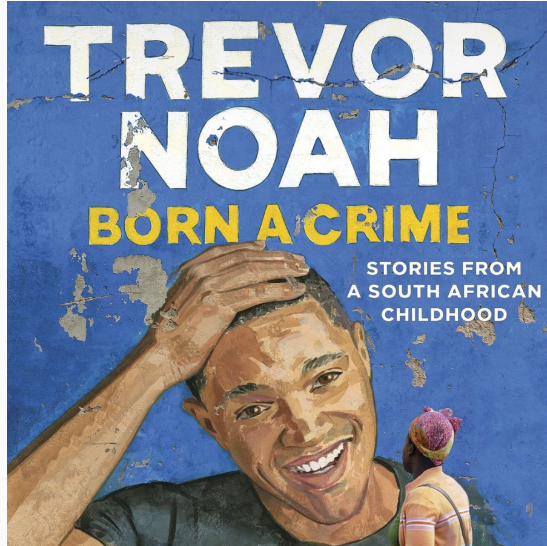


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# Icebreaker



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# Feedback



<b>T</b> ماهو أفضل شيء تعلمته اليوم؟
البدايات
لغة الار والعلوم مفتوحة المصدر
How powerful is the R language
بصراحة كل شيء فقط احتاج الي التدريب
r مدخلات ووظائف لغة
Ggplots
طريقة ادخال البيانات ف البرنامج وكيفية الكتابة الصحيحة للبيانات وطريقة تحميل البكجات
جهد للأمانة تشكرون عليه جدا راتنا
Everything

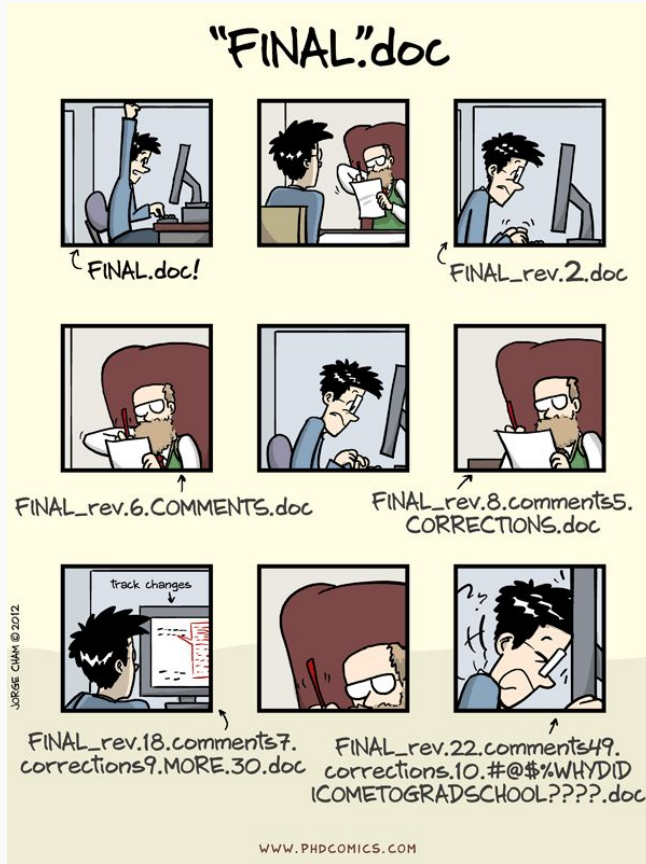




Schedule		
	Setup	Download files required for the lesson
00:00	1. Introduction	What will I learn during this workshop? What are the tools that I will be using? What are the tidy data principles? What is working in a more open way beneficial?
00:30	2. R & RStudio, R Markdown	How do I orient myself in the RStudio interface? How can I work with R in the console? What are built-in R functions and how do I use their help page? How can I generate an R Markdown notebook?
01:30	3. Visualizing data with ggplot2	How can I make publication-grade plots with ggplot2? What are the key concepts underlying ggplot2 plotting? What are some of the visualisations available through ggplot2? How can I save my plot in a specific format (e.g. png)?
03:00	4. Data transformation with dplyr	How do I perform data transformations such as removing columns on my data using R? What are tidy data (in opposition to messy data)? How do I import data into R (e.g. from a web link)? How can I make my code more readable when performing a series of transformation?
04:00	5. Version control with git	What is version control? How do I use it? What is the difference between git and Github? What benefits does a version control system bring in for my research?
05:00	6. Collaborating with you and others with Github	How can I develop and collaborate on code with me or another scientist? How can I give access to my code to another collaborator? How can I keep code synchronised with another scientist? How can I solve conflicts that arise from that collaboration? What is Github?
06:00	7. Become a champion of open (data) science	
07:30	Finish	



هل يبدو هذا مألوفا ...



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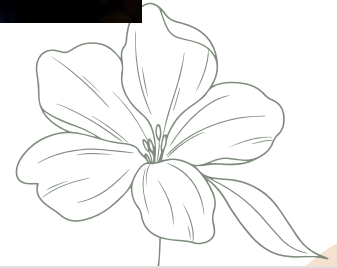
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# GitHub/git

---



```
git push
~/Desktop/test (master ✓) > git push
```



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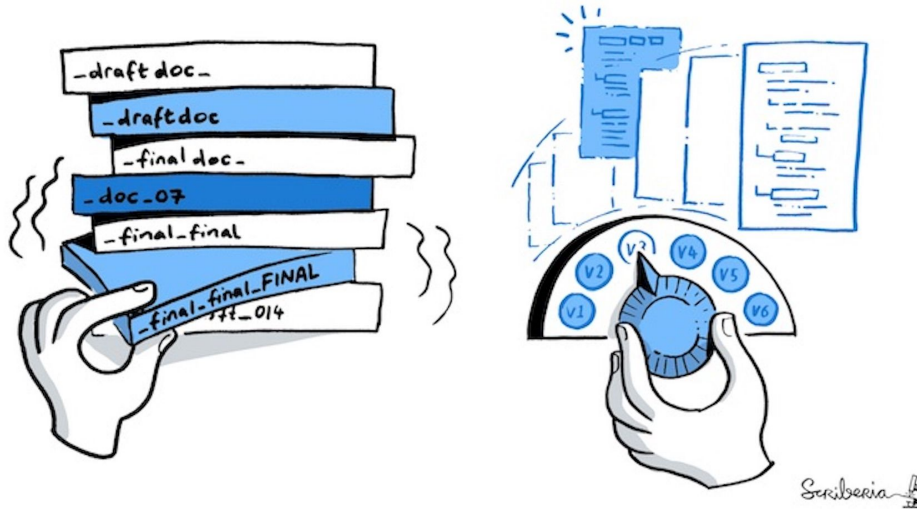


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# TRACK PROJECT HISTORY



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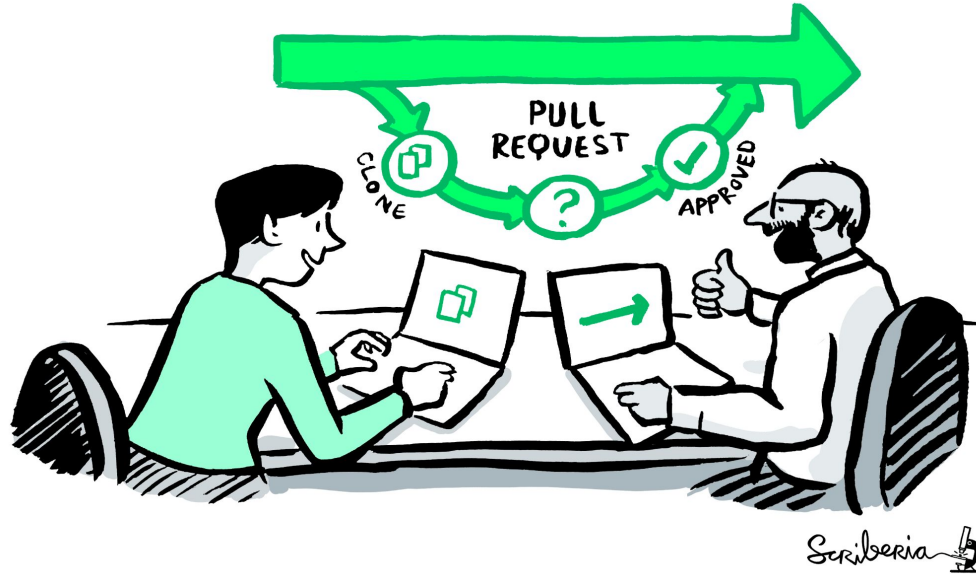


**Git** is one of the most widely used version control systems in the world. It is a free, open source tool

**GitHub** on the other hand is a popular website for hosting and sharing Git repositories remotely. It offers a web interface!



# جيت هوب هو ثقافة تعاونية



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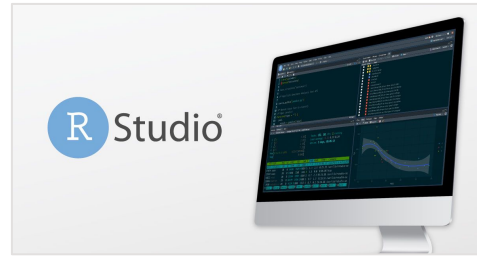
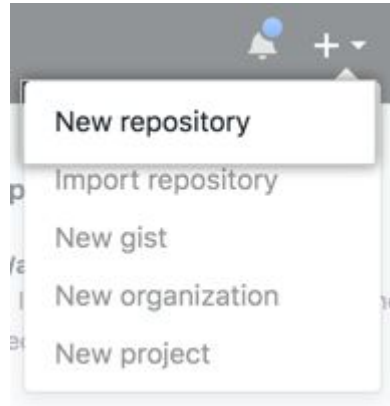


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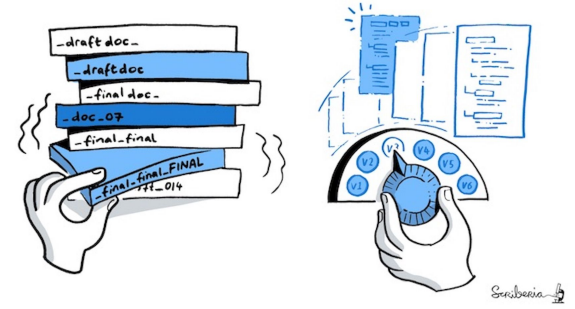


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## TRACK PROJECT HISTORY



نكون Repo لكي يحتفظ بملفات  
المشروع ونتعاون فيه مع آخرين

ننقل Repo للـ RStudio

نغير فيه ونعكس  
التغييرات في GitHub



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# التمارين العملية



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مبروك أنت الآن مُتمكّن من جيت هوب

You created your first repo.

# Repo كيفية تكوين

## Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)


---

**Repository template**  
Start your repository with a template repository's contents.

[No template](#)

---

**Owner \*** **Repository name \***

 BatoolMM /

Great repository names are short and memorable. Need inspiration? How about [ideal-garbanzo?](#)

**Description (optional)**

---

☒ **Public**  
Anyone on the internet can see this repository. You choose who can commit.

☐ **Private**  
You choose who can see and commit to this repository.

---

**Initialize this repository with:**  
Skip this step if you're importing an existing repository.

☐ **Add a README file**  
This is where you can write a long description for your project. [Learn more.](#)



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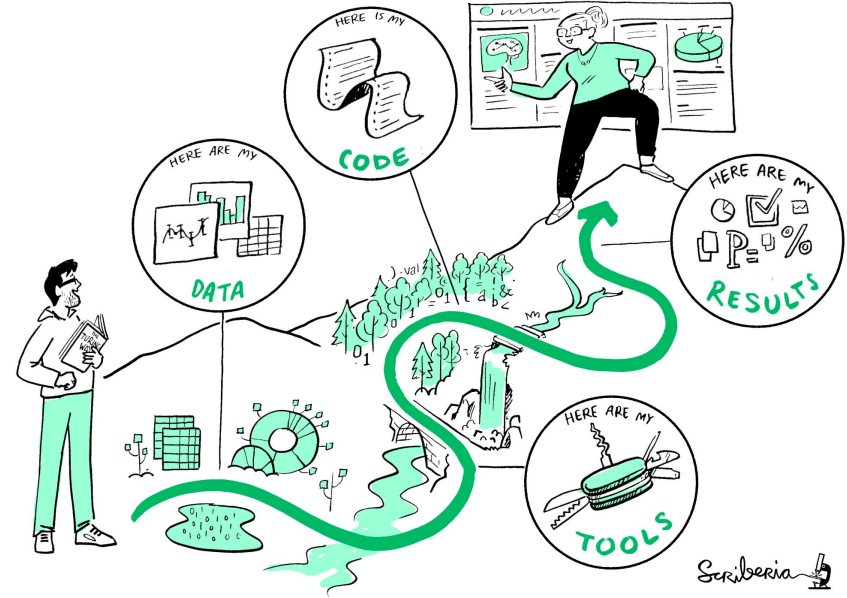
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# ملاحظات مهمة عند إنشاء Repo

- Repo يجمع كل ملفات المشروع من إكواد ونتائج و بيانات.
- Repo يجب أن يحتوي على الملفات التالية أيضا (إذا كان مفتوح المصدر):
  - README.md
  - LICENSE.md رخصة مفتوحة
  - CONTRIBUTING.md
  - CONDUCT.md



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about.qmd	revise about	5 months ago
favicon.png	add favicon and improve nav menu and sidebar layout	6 months ago
inc.html	regen	4 days ago
include.html	regen	4 days ago
index.css	Improved accessibility	18 days ago
index.qmd	regen	10 days ago
js.html	visual editing docs	11 months ago
license.qmd	fix trademark link	last month
quarto-docs.Rproj	visual editor prefs in markdown file	5 months ago
quarto-web.code-workspace	use renv managed python	3 months ago
quarto.png	re-gen	10 months ago
references.bib	docs revisions	14 months ago
renv.lock	update renv.lock and requirements.txt	last month
requirements.txt	update renv.lock and requirements.txt	last month
search-by-algolia.png	Add search attribution	9 months ago
styles.css	Improved accessibility	18 days ago
theme-dark.scss	Update dark theme	5 months ago
theme.scss	Improved accessibility	18 days ago
trademark.qmd	update about page	7 months ago

Help people interested in this repository understand your project by adding a README.

[Add a README](#)



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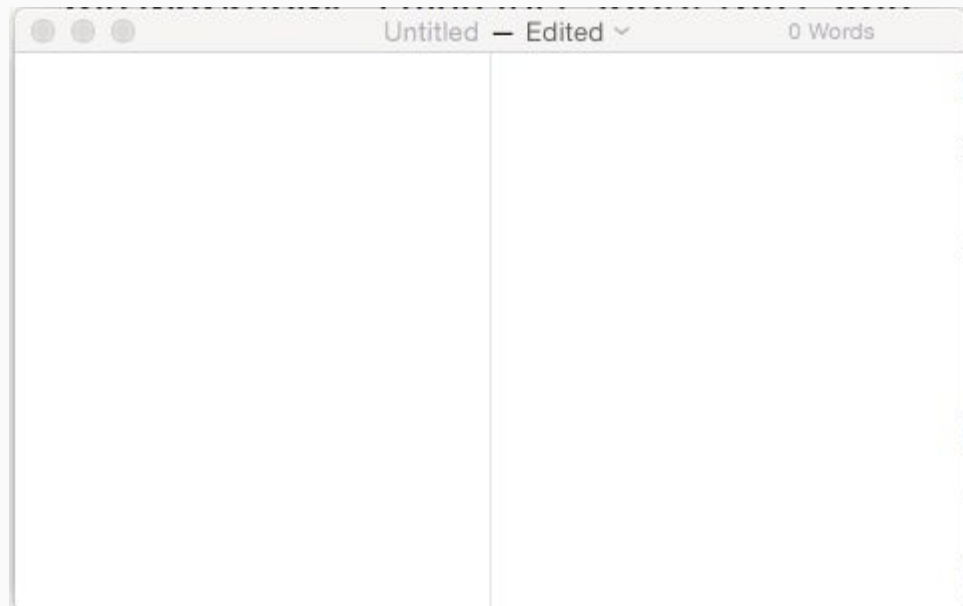
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# Markdown (.md)



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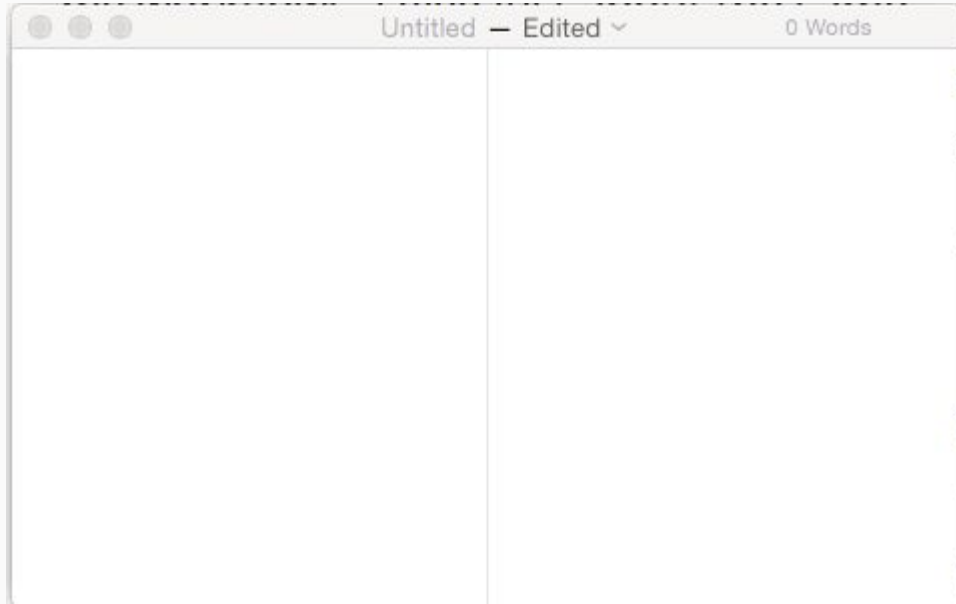


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# Markdown (.md)



Element	Syntax
Headings	# Level 1 Heading ## Level 2 Heading ### Level 3 Heading
Italic	*text* or _text_
Bold	**text** or __text__
Blockquote	> or >>
Links	[Site Name](Site URL)
Email address	<email address>
Images	![Alt Text](Path to Image)
Ordered list	1. Item 1 2. Item 2 3. Item 3
Unordered list	Use *, - or + * Item 1 * Item 2 * Item 3
Sublist	Use indentation 1. Item 1 1. Sub-Item 1 2. Sub-Item 2 2. Item 2 3. Item 3
Inline Code	`code`
Code block	``` code here ```
Horizontal rules	--- or ***



# README.md

Open-Science-Community-Saudi-Arabia / Open-Science-Community-in-SaudiPublic

<> CodeIssuesPull requestsDiscussionsActionsProjects2WikiSecurityInsightsSettings


main1 branch0 tagsGo to fileAdd fileCode

BatoolMM add CoC2ceea29 on 4 Apr 202122 commits

bin	Create bin	16 months ago
docs	Create docs	16 months ago
imgs	add logo	16 months ago
.gitignore	Initial commit	16 months ago
CITATION.md	add CITATION	16 months ago
CODE_OF_CONDUCT.md	add CoC	15 months ago
CONTRIBUTING.md	Create CONTRIBUTING.md	16 months ago
LICENSE	add the complete text of the LICENSE	16 months ago
Open Science Community SA-01.png	add logo	16 months ago
README.md	Update README.md	15 months ago

README.md

License: CC BY 4.0



**OSC SA**  
Open Science Community Saudi Arabia

This is the repository where the all projects and activities of the Open Science Community in Saudi Arabia is documented and planned

About

This is the repository where all the activities/Programmes for the Open Science Community in Saudi Arabia are added

ReadmeCC-BY-4.0 licenseCode of conductCite this repository0 stars3 watching2 forks

Releases

No releases published  
[Create a new release](#)

Packages

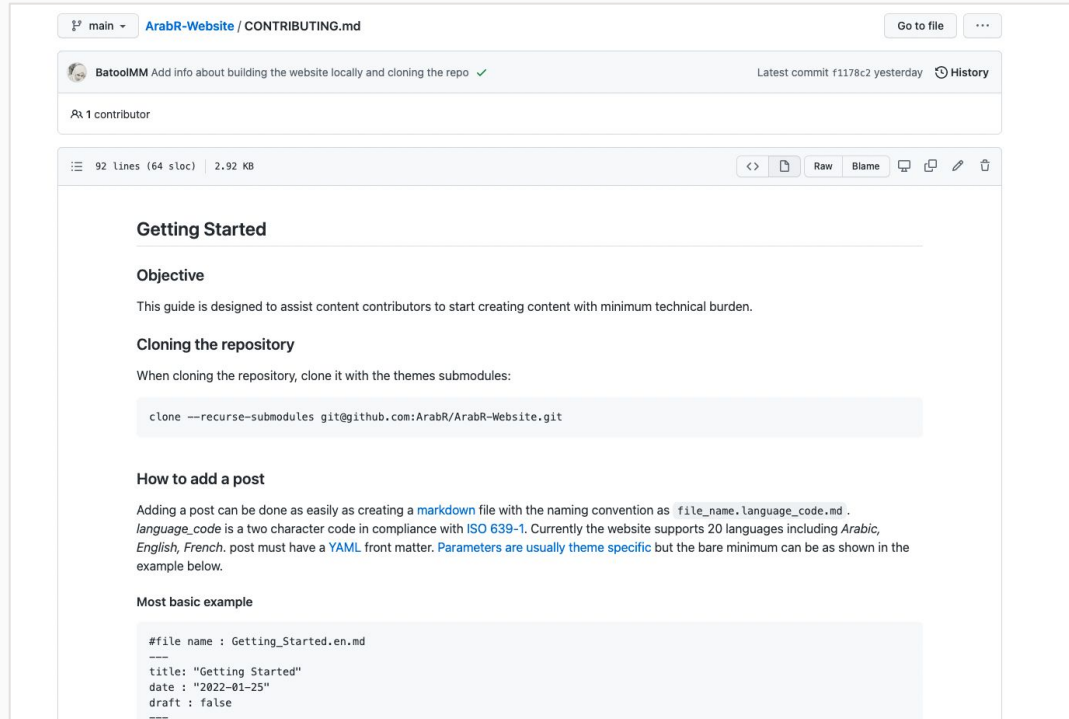
No packages published  
[Publish your first package](#)

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# CONTRIBUTING.md



main ArabR-Website / CONTRIBUTING.md Go to file

BatoolMM Add info about building the website locally and cloning the repo ✓ Latest commit f1178c2 yesterday History

1 contributor

92 lines (64 sloc) 2.92 KB

## Getting Started

### Objective

This guide is designed to assist content contributors to start creating content with minimum technical burden.

### Cloning the repository

When cloning the repository, clone it with the themes submodules:

```
clone --recurse-submodules git@github.com:ArabR/ArabR-Website.git
```

### How to add a post

Adding a post can be done as easily as creating a [markdown](#) file with the naming convention as `file_name.language_code.md`. `language_code` is a two character code in compliance with [ISO 639-1](#). Currently the website supports 20 languages including *Arabic*, *English*, *French*. post must have a [YAML](#) front matter. [Parameters are usually theme specific](#) but the bare minimum can be as shown in the example below.

### Most basic example

```
#file name : Getting_Started.en.md
---
title: "Getting Started"
date : "2022-01-25"
draft : false
---
```



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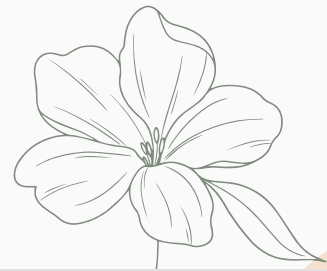
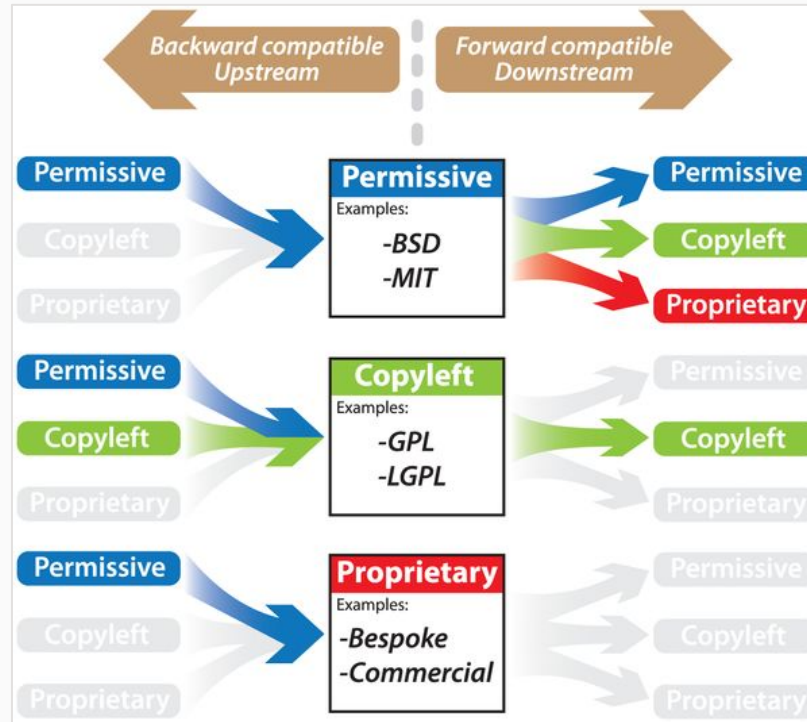


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# LICENSE.md



# CONDUCT.md

 bebatut Add accent on my name :)

Latest commit 9a24f2f on 21 Oct 2019 [History](#)

  2 contributors

101 lines (80 sloc) 5.34 KB

[<>](#) [Raw](#) [Blame](#) [Copy](#) [Edit](#) [Delete](#)

As a community we welcome everyone, and encourage a friendly and positive environment.

This code of conduct outlines our expectations for participants within the community, as well as steps to reporting unacceptable behavior. We are committed to providing a welcoming and inspiring community for all and expect our code of conduct to be honored. Anyone who violates this code of conduct may be banned from the community.

Our open source community strives to:

- **Be friendly and patient.**
- **Be welcoming:** We strive to be a community that welcomes and supports people of all backgrounds and identities. This includes, but is not limited to members of any race, ethnicity, culture, national origin, colour, immigration status, social and economic class, educational level, sex, sexual orientation, gender identity and expression, age, size, family status, political belief, religion, and mental and physical ability.
- **Be considerate:** Your work will be used by other people, and you in turn will depend on the work of others. Any decision you take will affect users and colleagues, and you should take those consequences into account when making decisions. Remember that we're a world-wide community, so you might not be communicating in someone else's primary language.
- **Be respectful:** Not all of us will agree all the time, but disagreement is no excuse for poor behavior and poor manners. We might all experience some frustration now and then, but we cannot allow that frustration to turn into a personal attack. It's important to remember that a community where people feel uncomfortable or threatened is not a productive one.
- **Be careful in the words that we choose:** We are a community of professionals, and we conduct ourselves professionally. Be kind to others. Do not insult or put down other participants. Harassment and other exclusionary behavior aren't acceptable. This includes, but is not limited to: Violent threats or language directed against another person, Discriminatory jokes and language, Posting sexually explicit or violent material, Posting (or threatening to post) other people's personally identifying information ("doxing"), Personal insults, especially those using racist or sexist terms, Unwelcome sexual attention, Advocating for, or encouraging, any of the above behavior, Repeated harassment of others. In general, if someone asks you to stop, then stop.

Open Life Science



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Repo **يُفضل** أن يحتوي على الملفات التالية أيضا (إذا كان مفتوح المصدر):

- README.md
- رخصة مفتوحة LICENSE.md
- CONTRIBUTING.md
- CONDUCT.md



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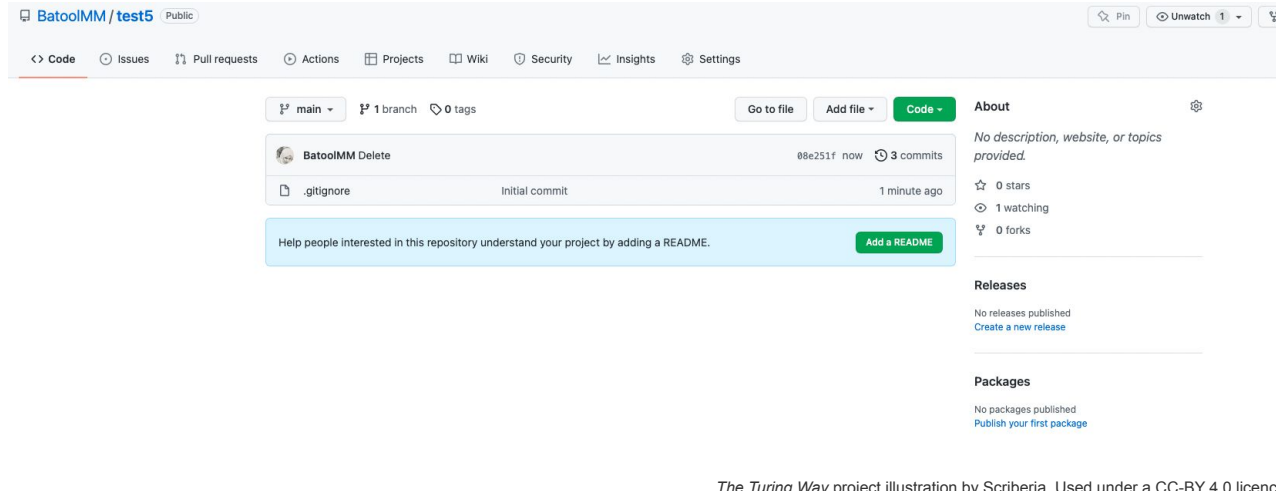
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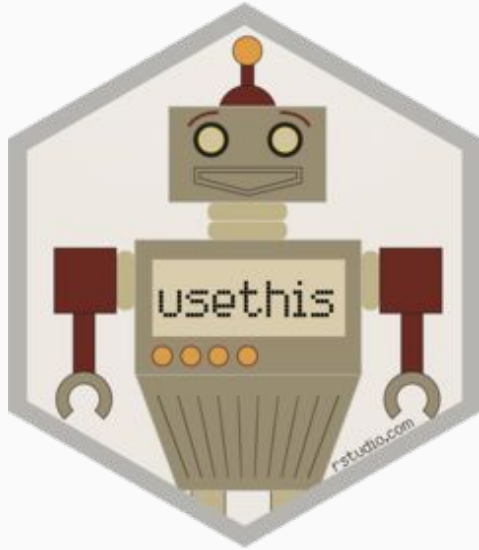
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## كيف أعرّف username مالي في جيت هوب لل RStudio

```
Console Terminal x Jobs x
R 4.2.0 · /cloud/project/
> usethis::use_git_config(user.name = "BatoolMM", user.email="batool@liverpool.ac.uk")
```

Package name



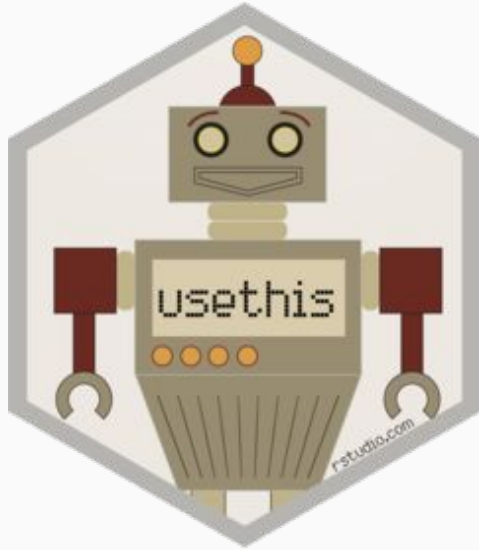
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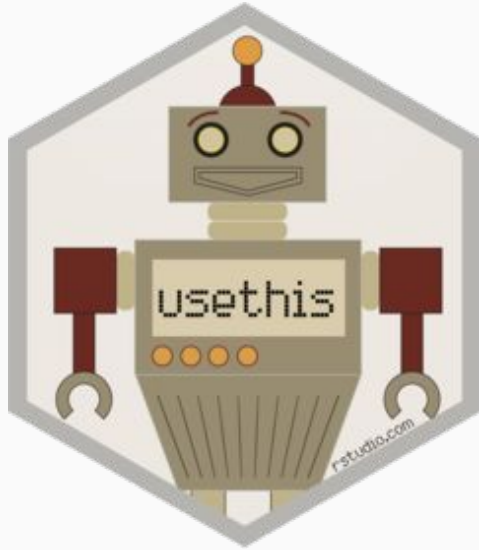


batool@liverpool.ac.uk



```
Console Terminal x Jobs x
R 4.2.0 · /cloud/project/
> usethis:use_git_config(user.name = "BatoolMM", user.email="batool@liverpool.ac.uk")
function
```

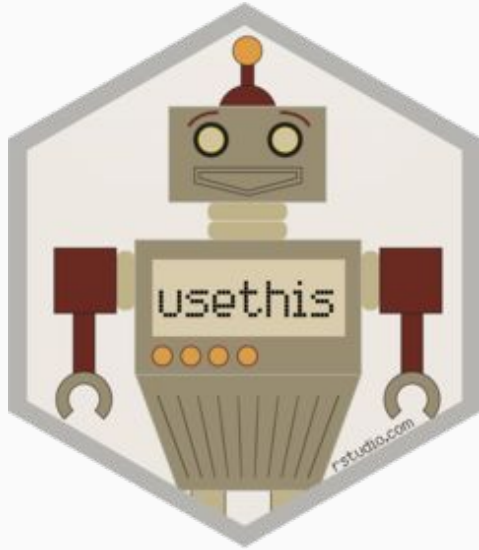




```
Console Terminal x Jobs x
R 4.2.0 · /cloud/project/
> usethis::use_git_config(user.name = "BatoolMM", user.email="batool@liverpool.ac.uk")
```

**username**





```
Console Terminal x Jobs x
R 4.2.0 · /cloud/project/
> usethis::use_git_config(user.name = "BatoolMM", user.email="batool@liverpool.ac.uk")
```

Email (GH)



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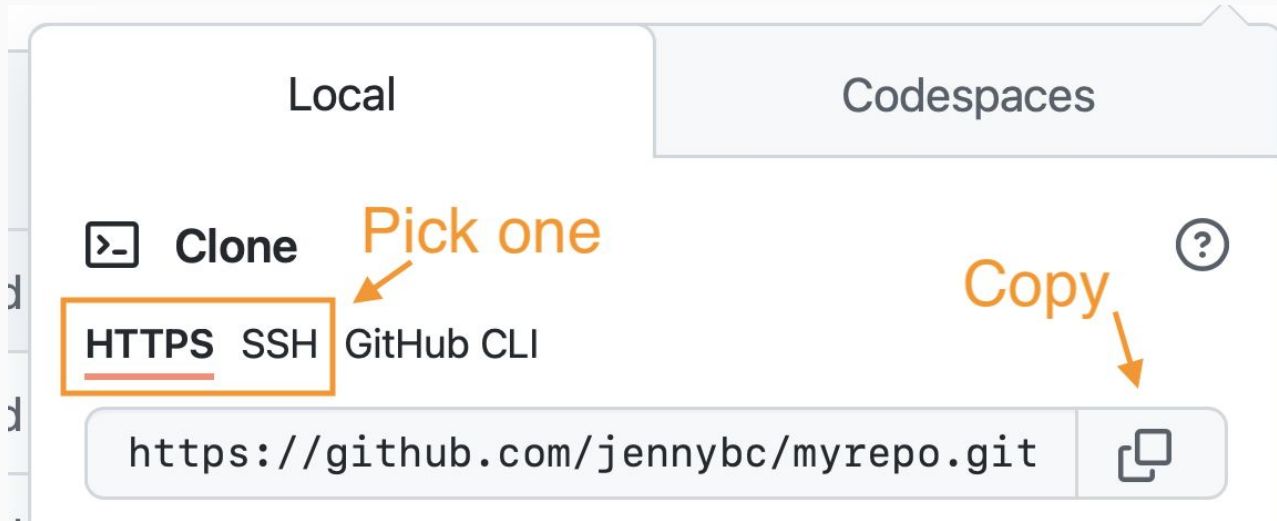


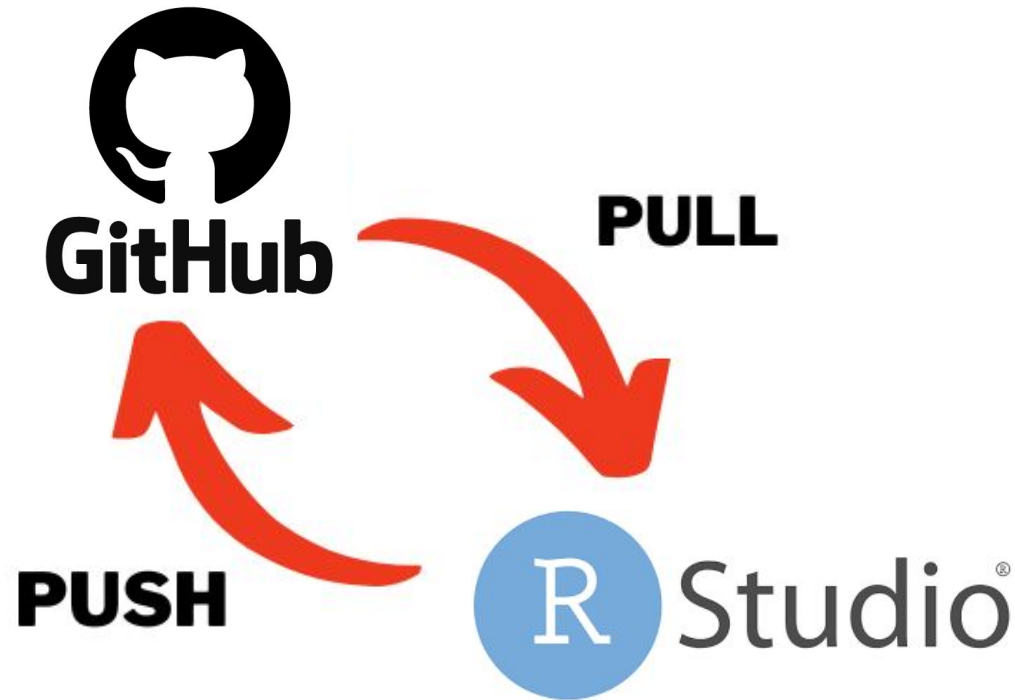
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# “How do I start working with Open Source and GitHub?”

Gary Hockin

@GeeH





Trisha Gee

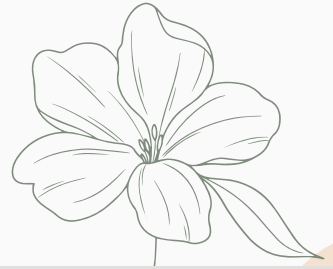
@trisha\_gee



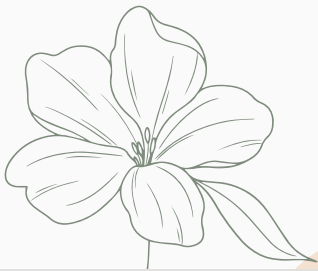

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# مفاهيم أساسية



- Commit 
- Fork 
- Pull request 
- Merge 





# Commit







Commits on Apr 9, 2022

**add quotation marks around tag** Verified  [a6609f2](#) 



 BatoolMM committed 16 days ago 



Commits on Apr 7, 2022

**modify the welcoming message** Verified  [5bf60c1](#) 



 BatoolMM committed 18 days ago 



Commits on Mar 21, 2022



**Add files via upload**  [84760f0](#) 



 MounaBelaïd authored and Hussain-Alsaman committed on 21 Mar 

Commits on Feb 27, 2022



**changing welcoming messege from arabic to english site**  [edb9371](#) 



 Hussain-Alsaman committed on 27 Feb 



**adding build status badge**  [f0c30f5](#) 



 Hussain-Alsaman committed on 27 Feb 

Commits on Feb 24, 2022

**Adding Event section (#13)** Verified  [4d1335e](#) 

 Hussain-Alsaman committed on 24 Feb 

**upstepping hugo version**  [c937fd1](#) 

 Hussain-Alsaman committed on 24 Feb 



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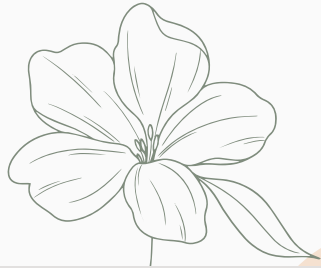


batool@liverpool.ac.uk

# Branch & Fork

- **Fork:** نسخة جديدة من الريبو تحت اسمي الخاص لكي أعدل عليها

 ArabR / ArabR-Website Public



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# Branch & Fork

- **Fork:** نسخة جديدة من الريبو تحت اسمي الخاص لكي أعدل عليها

 ArabR / ArabR-Website Public

 Unpin

 Unwatch 2 ▾

 Fork 1

 Starred 6 ▾



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# Branch & Fork


- **Fork:** نسخة جديدة من الريبو تحت اسمي الخاص لكي أعدل عليها


 ArabR / ArabR-Website Public

 BatoolMM / ArabR-Website Public

forked from ArabR/ArabR-Website

**Fork**

 Unpin

 Unwatch 2 ▾

 Fork 1

 Starred 6 ▾



@OpenSciSaudi, @batool664



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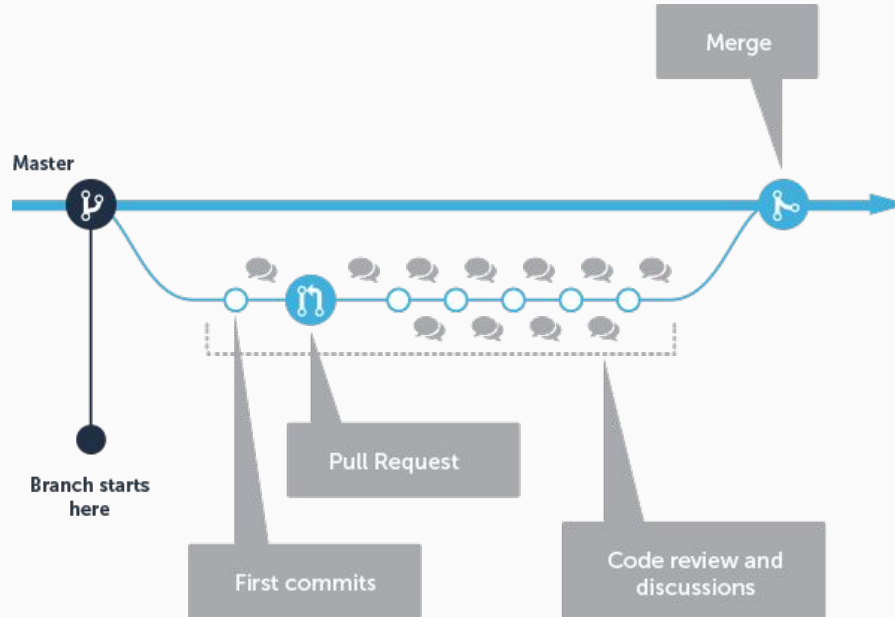


batool@liverpool.ac.uk

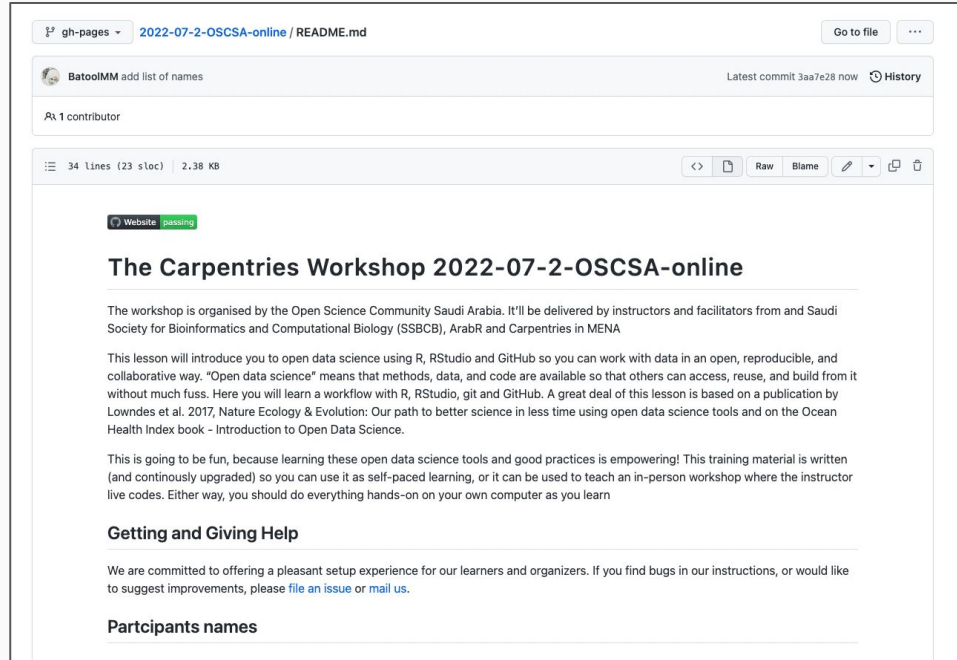


# Pull Request (PR)

- **PR:** طلب أن يتم دمج الفورك بعد مراجعة التغييرات



# دورك الآن



gh-pages 2022-07-2-OSCSA-online / README.md Go to file ...

BatoolMM add list of names Latest commit 3aa7e28 now History

1 contributor

34 Lines (23 sloc) 2.38 KB

Website **passing**

## The Carpentries Workshop 2022-07-2-OSCSA-online

The workshop is organised by the Open Science Community Saudi Arabia. It'll be delivered by instructors and facilitators from and Saudi Society for Bioinformatics and Computational Biology (SSBCB), ArabR and Carpentries in MENA

This lesson will introduce you to open data science using R, RStudio and GitHub so you can work with data in an open, reproducible, and collaborative way. "Open data science" means that methods, data, and code are available so that others can access, reuse, and build from it without much fuss. Here you will learn a workflow with R, RStudio, git and GitHub. A great deal of this lesson is based on a publication by Lowndes et al. 2017, Nature Ecology & Evolution: Our path to better science in less time using open data science tools and on the Ocean Health Index book - Introduction to Open Data Science.

This is going to be fun, because learning these open data science tools and good practices is empowering! This training material is written (and continuously upgraded) so you can use it as self-paced learning, or it can be used to teach an in-person workshop where the instructor live codes. Either way, you should do everything hands-on on your own computer as you learn

### Getting and Giving Help

We are committed to offering a pleasant setup experience for our learners and organizers. If you find bugs in our instructions, or would like to suggest improvements, please [file an issue](#) or [mail us](#).

### Participants names



@OpenSciSaudi, @batool664



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batool@liverpool.ac.uk

# مبرووووووك



You now know:

*Commit*



*Fork*



*Pull request*



*Merge*



هناك الكثير من ميزات في جيت  
هوب والتي سوف تتعلمها  
بالتدريج



# ReproHack



Methodology article | [Open Access](#) | [Published: 06 September 2019](#)

## Visualization methods for differential expression analysis

[Lindsay Rutter](#) , [Adrienne N. Moran Lauter](#), [Michelle A. Graham](#) & [Dianne Cook](#)

[BMC Bioinformatics](#) **20**, Article number: 458 (2019) | [Cite this article](#)

50k Accesses | 5 Citations | 33 Altmetric | [Metrics](#)

### Steps

- 1- Go to [this repository](#).
- 2- You have to fork it
- 3- Import it to RStudio
- 4- Try to re-run **Figure1.R** script
- 5- Fill in [this form](#)



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jpgmv1998 / reproducible\_paper\_template
Public template

Watch 3
Fork 1
Star 23

Code
Issues 6
Pull requests
Actions
Projects
Wiki
Security
Insights

master
1 branch
0 tags
Go to file
Add file
Code
Use this template

jpgmv1998 added output folder
5b462d4 on 24 May 244 commits

code	adjusted initial setup with groundhog and here +	last month
data	adjusted initial setup with groundhog and here +	last month
output	added output folder	last month
paper	added LaTeX paper template + minor adjustments to README	last month
.gitignore	adjusted .gitignore system to preserve the folders structure, includi...	2 years ago
LICENSE	minor fix	6 months ago
README.html	added output folder	last month
README.md	added output folder	last month
_template_README.md	revised template README, minor fixes project README	16 months ago

README.md

## Reproducible Paper Template (🚧 UNDER CONSTRUCTION 🚧)

Main goal: Create a template repository for starting a new paper project implementing good practices for reproducibility.

Author: João Pedro Vieira

Software: Focused on empirical projects that use mostly R for data manipulation. Tested using R version 4.1.3 and RStudio version 1.4.1103 on Windows.

Disclaimer: This project aims to incorporate reproducible workflows gathered from multiple sources based on the author's personal preferences, needs, and limitations.

### About

Template repository for starting a new empirical paper project implementing good practices for reproducibility using R

template reproducible-research economics empirical-research

Readme  
View license  
23 stars  
3 watching  
1 fork

### Releases

No releases published

### Languages

R 87.8% TeX 12.2%



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lindsayrutter / VisualizationMethods Public

<> Code Issues Pull requests Actions Projects Wiki Security Insights

master 1 branch 0 tags Go to file Add file Code

**lindsayrutter** Update additional figure arrangements 37973cc on 23 Aug 2021 14 commits

AdditionalFiles	Update additional figure arrangements	10 months ago
Figures	Update additional figure arrangements	10 months ago
data	First commit	3 years ago
.Rhistory	First commit	3 years ago
README.md	Update README.md	10 months ago
functions.R	First commit	3 years ago

README.md

### Reproducibility files

The current repository contains data and scripts needed to reproduce all figures in the paper [Visualization methods for differential expression analysis](#).

### Note about citation

If you use these figure-regeneration tools, please kindly cite the current paper:

About

Scripts to reproduce figures in differential expression visualization paper

[doi.org/10.1186/s12859-019-2968-1](https://doi.org/10.1186/s12859-019-2968-1)

Readme

2 stars

1 watching

6 forks

Releases

No releases published

Packages

No packages published

Languages

R 100.0%



Fork and reproduce

Fill ReproHack Form by 10th of July



5

# كيفية توثيق الكود

How to make you code citable?



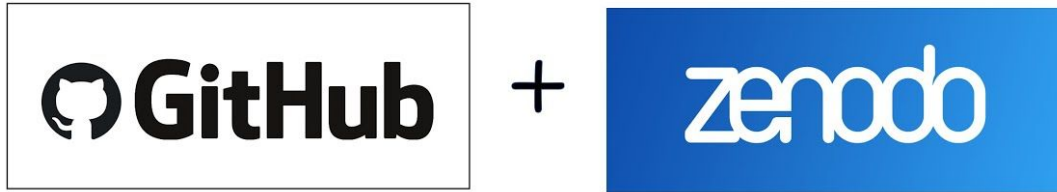
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= Citable Code



@OpenSciSaudi, @batool664

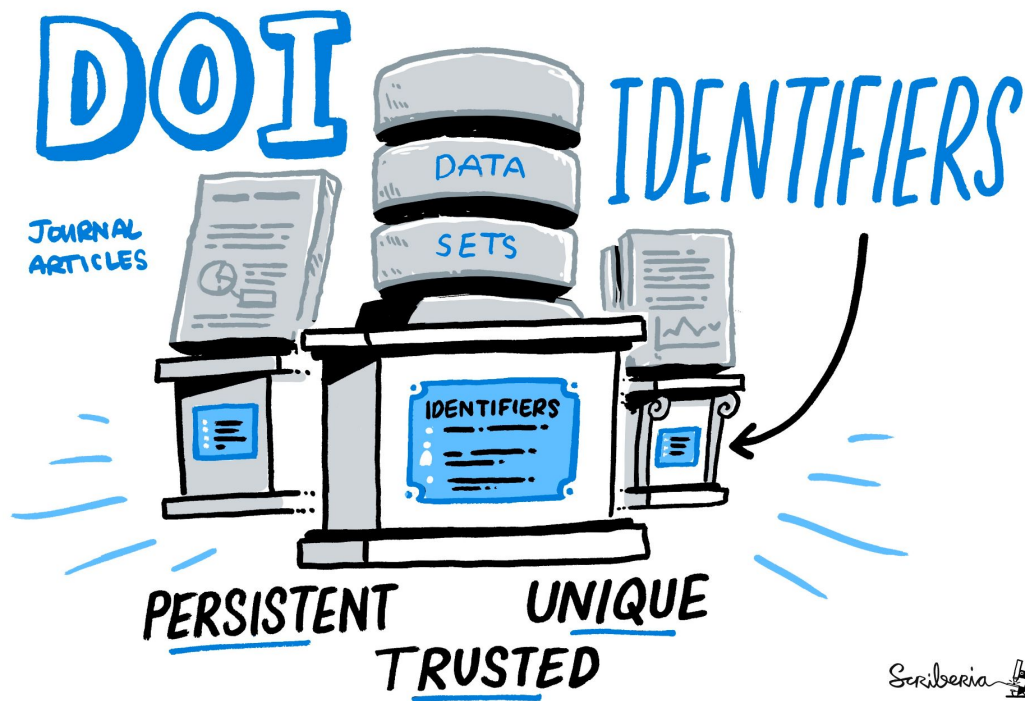


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[batool@liverpool.ac.uk](mailto:batool@liverpool.ac.uk)

March 17, 2022

Presentation Open Access

## Practices to Improves Visibility and Outputs for Postgraduate Students in Saudi UK network!

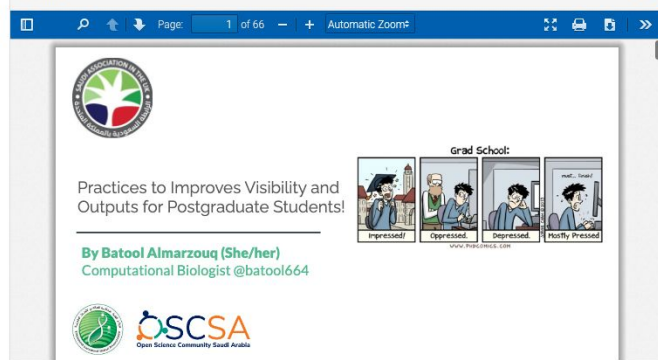
By Batool Almarzouq

This talk was presented for the Saudi UK Network on 17-3-2022 - it can also be also accessed through this [link](#). It introduces open science practices to postgraduate students living in the UK.

You are welcome to join [Open Science Community in Saudi Arabia](#) (OSCSA) through this [link](#). OSCSA welcome everyone regardless of their knowledge on Open Science

The Saudi UK alumni network is a growing network of people who have studied or are still studying at UK universities and higher education institutions. It aims to provide members with a forum for networking and sharing experiences.

Preview



The presentation slide features the logo of the Open Science Community Saudi Arabia (OSCSA) at the top left. The title is "Practices to Improves Visibility and Outputs for Postgraduate Students!". Below the title, it says "By Batool Almarzouq (She/her) Computational Biologist @batool664". At the bottom left is the OSCSA logo. On the right side, there is a cartoon titled "Grad School:" with four panels showing a student's journey: "Impressed!", "Oppressed", "Depressed", and "Mostly Pleased!".

Files (10.6 MB)

Edit

New version

Communities

Open Science Community  
Saudi Arabia

Remove

314

views

133

downloads

[See more details...](#)

Indexed in

OpenAIRE

Publication date:

March 17, 2022

DOI:

DOI: [10.5281/zenodo.6366449](https://doi.org/10.5281/zenodo.6366449)

Keyword(s):

open science CC-BY open source communities  
vision 2030 DOI zenodo

Communities:

[Open Science Community Saudi Arabia](#)

License (for files):

[Creative Commons Attribution 4.0 International](#)

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Cite as

Batool Almarzouq, (2022, March 11). Reflection on Open Science practices and Research Software in the Kingdom in alignment with Saudi Arabia's Vision 2030. Zenodo.  
<https://doi.org/10.5281/zenodo.6345895>

Start typing a citation style...



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[batool@liverpool.ac.uk](mailto:batool@liverpool.ac.uk)

# Get started

## 1 Flip the switch

Select the repository you want to preserve, and toggle the switch below to turn on automatic preservation of your software.

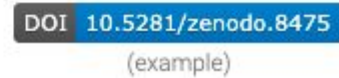


## 2 Create a release

Go to GitHub and [create a release](#). Zenodo will automatically download a .zip-ball of each new release and register a DOI.

## 3 Get the badge

After your first release, a DOI badge that you can include in GitHub README will appear next to your repository below.



1

ماهي العلوم المفتوحة؟

What is Open Science?



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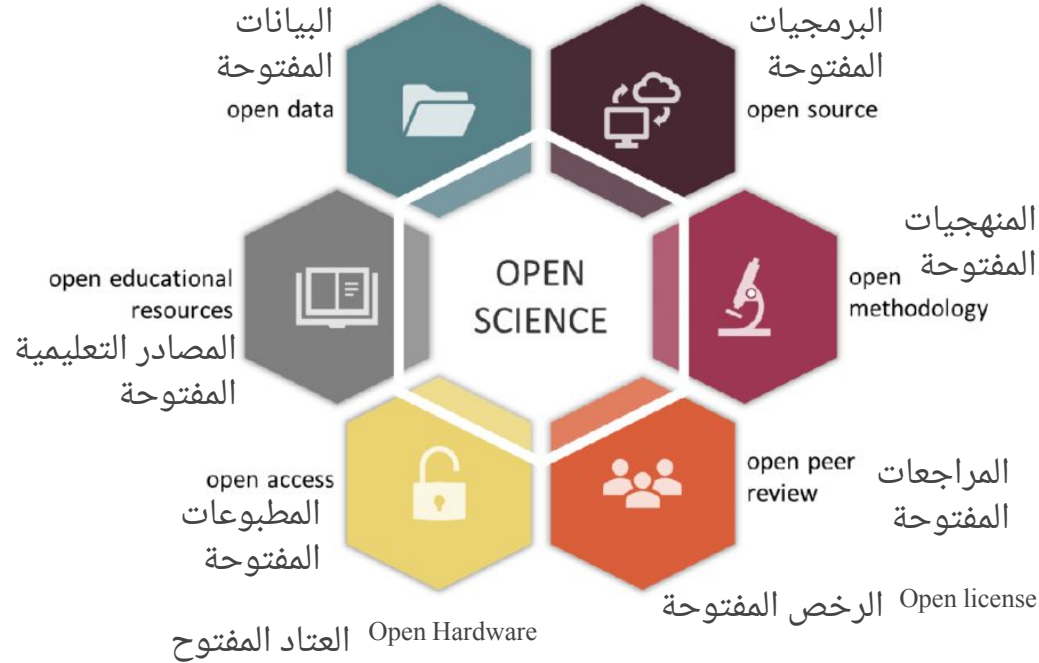


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# معنى العلوم المفتوحة



Credit: [10.32942/osf.io/kac45](https://doi.org/10.32942/osf.io/kac45)



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# مفاهيم خاطئة عن العلوم المفتوحة



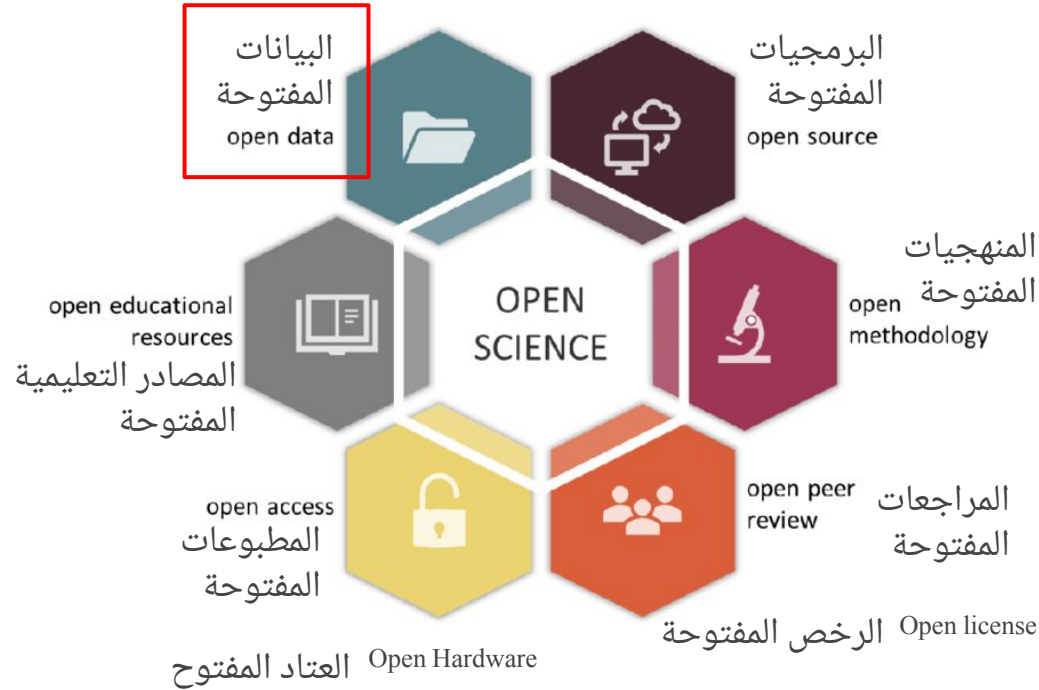
العلوم المفتوحة  $\neq$  فقدان الملكية الفكرية

العلوم المفتوحة  $\neq$  مفتوح بدون **رخصة** مفتوحة

العلوم المفتوحة  $\neq$  فقط مجاني



# معنى العلوم المفتوحة



Credit: [10.32942/osf.io/kac45](https://doi.org/10.32942/osf.io/kac45)



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# البيانات المفتوحة

## مبادئ الفير (FAIR Principles)

هل سيعرف أي شخص آخر أن بياناتك موجودة؟

ضعها في مستودع رقمي ، أو على الأقل وصف للبيانات. احصل على معرف رقمي (DOI).

بمجرد أن يعرف شخص ما أن البيانات موجودة ، هل يمكنه الحصول عليها؟

عادة ما يتم حلها من خلال التواجد في المستودع ، ولكن بالنسبة للبيانات غير المفتوحة ، قد تتطلب المزيد من الإجراءات.

هل بياناتك بتنسيق يمكن للآخرين استخدامه ، مثل csv بدلا من xlsx؟

هل هناك ترخيص يسمح للآخرين بإعادة الاستخدام؟



The Turing Way project illustration by Scriberia. Used under a CC-BY 4.0 licence. DOI: [10.5281/zenodo.3332807](https://doi.org/10.5281/zenodo.3332807)



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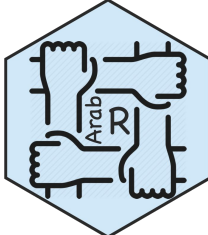
[batool@liverpool.ac.uk](mailto:batool@liverpool.ac.uk)



# لغة الآر (R)



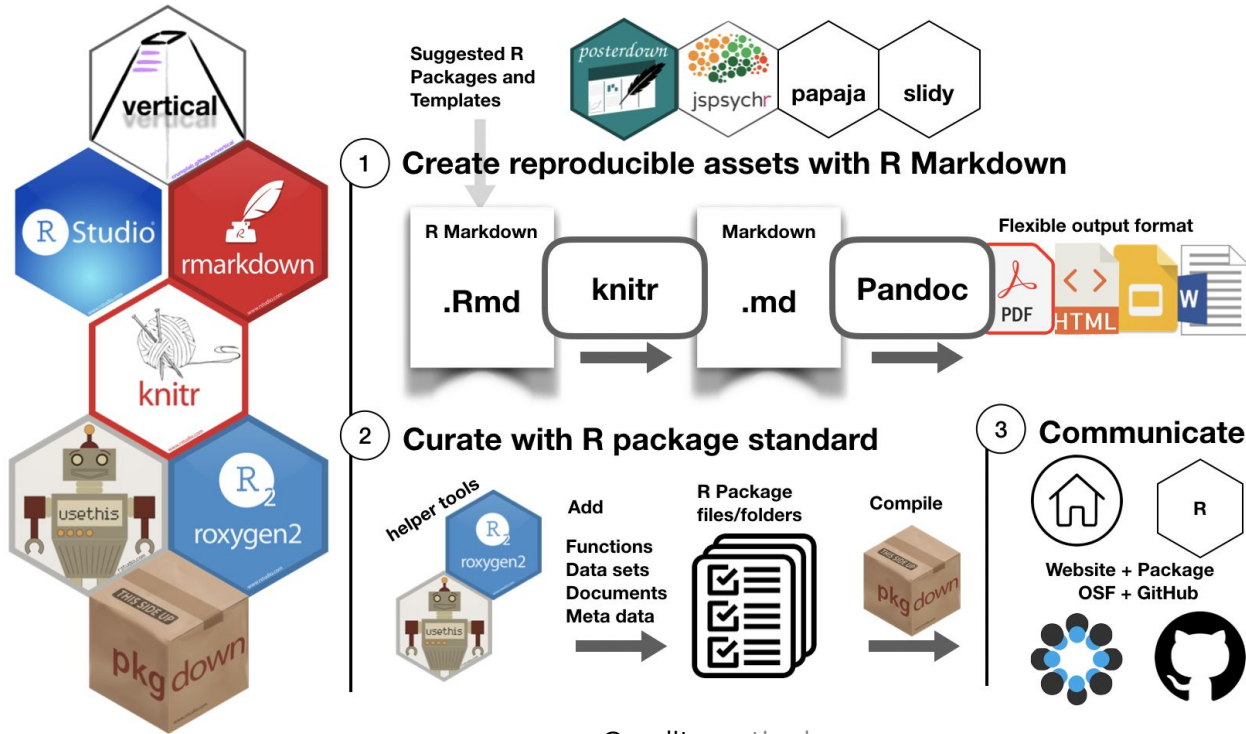
جمعيات



Reproducibility Tool

أداة تُسهل إعادة الإنتاج

# لغة الآر (R)



Credit: [vertical](#)



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# Rmarkdown

TEXT. CODE. OUTPUT.  
(GET IT TOGETHER, PEOPLE.)



Allison Horst illustration



# لغة الآر (R)



Scriberia

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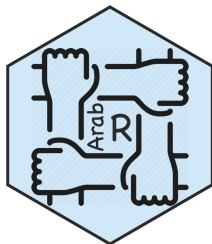
# لغة الآر (R)



جميعيات



OpenSci



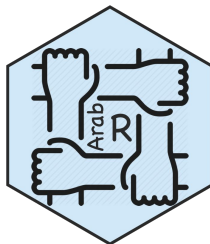
Reproducibility Tool

أداة تُسهل إعادة الإنتاج

# لغة الآر (R)



جميعيات



Reproducibility Tool

أداة تُسهل إعادة الإنتاج

# جماعات الممارسة (R)



Alice Data @alice\_data · May 26, 2017

Open conversation about the importance of communities - thanks @Shannon\_E\_Ellis for hosting #runconf17



1 2 2



Alice Data @alice\_data

Replying to @alice\_data and @Shannon\_E\_Ellis

"The community is one of #rstats biggest asset"  
@revodavid #runconf17

11:22 PM · May 26, 2017 · Twitter for iPhone



Credit: David Smith



@OpenSciSaudi, @batool664



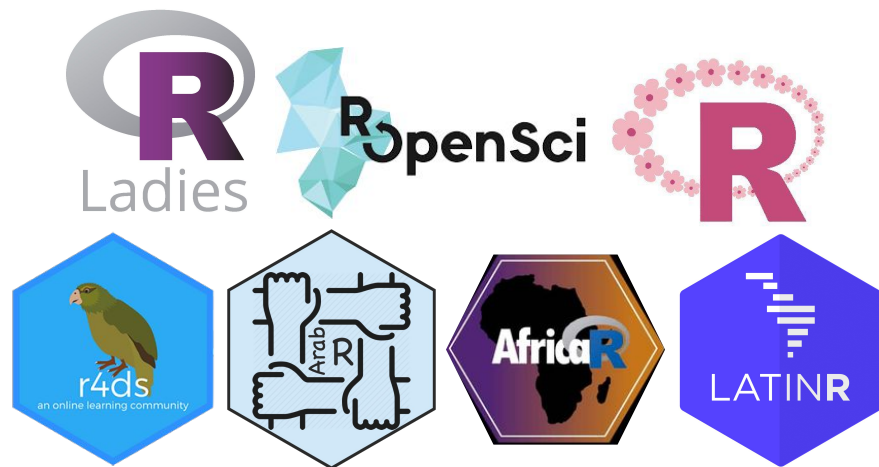
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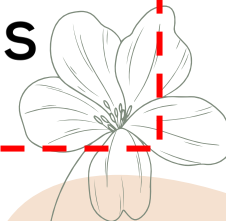
batool@liverpool.ac.uk



# جماعات الممارسة



THE  
CARPENTRIES



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# جماعات الممارسة



R-Ladies Community | Meetup.com

**216**

Chapters



**100267**

Members



**61**

Countries

R-Ladies Chapters Worldwide



@OpenSciSaudi, @batool664



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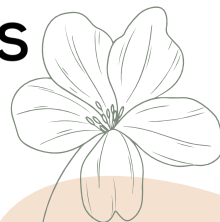
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# R-Ladies



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# R-Ladies



Image taken from  
R-Ladies Muscat



Credit: Iman Al-Hasani



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# R-Girls



Worldwide network to **promote the use of R** in **secondary schools for girls.**

مناهج مفتوحة لتعليم لغة الآر في مدارس البنات الثانوية



@OpenSciSaudi, @batool664



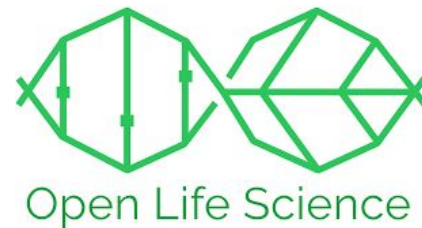
[www.osc-ksa.com](http://www.osc-ksa.com)



[batool@liverpool.ac.uk](mailto:batool@liverpool.ac.uk)

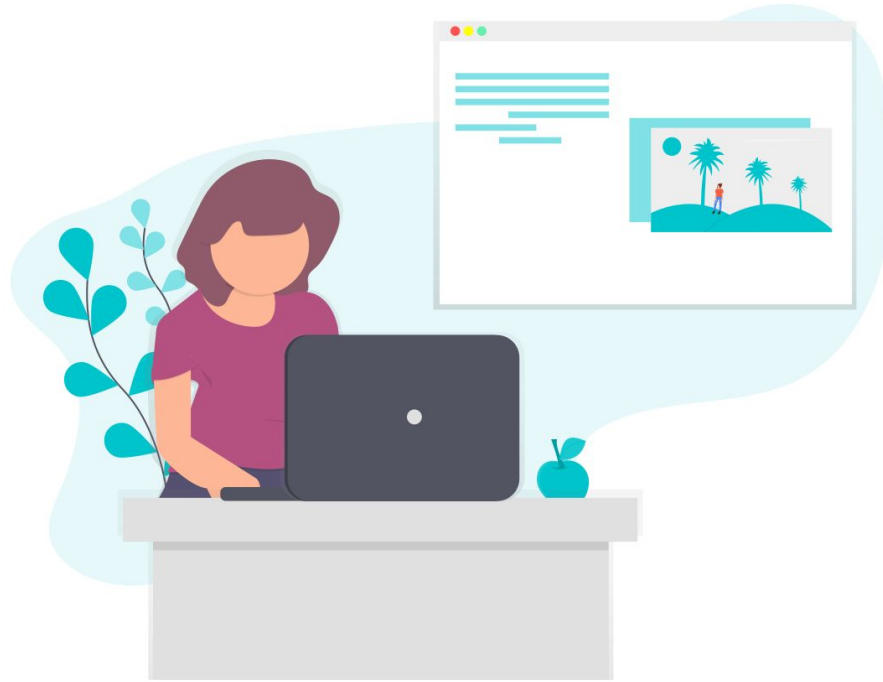
## We work with various communities/institutions:

- Open Life Science
- Turing Way
- R-Ladies
- Code for Science and Society
- Outreachy



# Blog Post about your educational Journey in OSCSA Website

---





[The program](#) ✓ [OLS-6](#) ✓ [Previous OLS](#) ✓ [About](#) ✓ [Stories](#)



# Open Life Science

Sharing - Connecting - Empowering

## A mentoring & training program for Open Science ambassadors

The Open Life Science (OLS) program helps **individuals and stakeholders in research** to become **Open Science ambassadors**.

### About

This is a **16-week long personal mentorship and cohort-based training**, where participants (organisers, hosts, mentors and project leads/mentees) of this program will:

- share their expertise and gain knowledge essential to create, lead, and sustain an Open Science project
- connect with members across different projects, communities, backgrounds, and identities
- empower each other to become effective Open Science ambassadors in their communities



@batool664, @OpenSciSaudi







# Feedback

You are welcome to share Blog post and we'll share it in our website!

