Good Research Data Management practices for Taught Students

Effectively managing the data and code in your research projects will help to save you time and make it easier to share it with your supervisor or collaborators.

Planning

- It is good practice to write a plan at the beginning of your research project explaining how you will collect data, what formats you will use, where you will store your data (considering who needs access, the scale of the data and any security concerns), and whether you will archive, share or delete the data at the end of the project.

- This will help you think through any issues with data management before they arise.

Storage

- When storing data, it is helpful to remember the '3-2-1' rule: keep **3** copies of important files, on **2** different media, with **1** copy stored in a different location.

- It is safest to store data on University storage, such as Google Drive or your departmental drive, which is already backed up.

- Do not rely on USB sticks, hard drives or laptops, and check your backups regularly.

Security

- Data relating to people or containing commercial information requires extra care to be taken including additional security measures such as encryption, anonymisation and storing data in a more secure location.

- Personal data is any information that relates to an identifiable, living individual and requires careful handling under the GDPR legislation.

- Data management should be aligned with ethics applications, and care taken to secure your research data from loss or theft.

Describing and organising your data

- There is no point collecting data you cannot find at a later date, so it is important to organise your data and document it from the beginning.

- Good practices to do this include creating a README, adopting a file naming convention, and creating a clear folder structure.

- When writing code consider using GitHub, GitLab, BitBucket or other version control software.

End of project

- At the end of the project there are 3 options for what to do with your data and code: they can either be shared (publicly or with your supervisors), archived or deleted.

- Sharing data makes it easier for others to reproduce your work and is a requirement of some journals. If you are going to publish your research, it is a good idea to plan data sharing from the beginning so that it can be included in any ethics applications and consent forms.

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Summary

You have reached the end of this resource.

For more information, please visit the Library's Research Data Management webpages.

Why not look at some of our other Information and Digital Literacy resources?

Book onto a webinar: Information and Digital Literacy Webinars.

Take an online tutorial: Information and Digital Literacy Tutorials.

Visit our FAQs: Library FAQs

Get in touch: library@sheffield.ac.uk

Full URLs

Library Research Data Management webpages: https://www.sheffield.ac.uk/library/rdm/

University IT Services – Storage: https://www.sheffield.ac.uk/it-services/storage

University IT Services – Encryption: https://www.sheffield.ac.uk/it-services/encryption/index

UK Anonymisation Network Resources: https://ukanon.net/ukan-resources/

University IT Services – Data Security: https://www.sheffield.ac.uk/library/rdm/security

University IT Services – Information Security: https://www.sheffield.ac.uk/it-services/information-security

Organising data – documenting your data: https://www.sheffield.ac.uk/library/rdm/organising#tab03

Organising data – organising and naming files: https://www.sheffield.ac.uk/library/rdm/organising#tab01

GitHub: https://github.com/

GitLab: https://about.gitlab.com/

BitBucket: https://bitbucket.org/

Preserving data: https://www.sheffield.ac.uk/library/rdm/preserving

Making data discoverable: https://www.sheffield.ac.uk/library/rdm/publish

Information and Digital Literacy Webinars:
https://www.sheffield.ac.uk/library/infoskillsworkshops

Information and Digital Literacy Tutorials: https://www.sheffield.ac.uk/library/idlt

Library FAQs: https://libraryhelp.shef.ac.uk/

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