Research Coding Club

Training for sustainable software at York

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Overview

➜ What
➜ Why
➜ When
➜ How

What is Research Coding Club?

Coding Club at the University of York is an informal group for people who work with research software

➜ Broad definition of "Research Software"
➜ Wide inclusivity — Undergrads to Professors

Why Research Coding Club?

➔ At inception, little software development training available

➔ Existing training was focused on intro to programming

➔ Recurring common problems

➔ Desire to pass on hard-learnt lessons

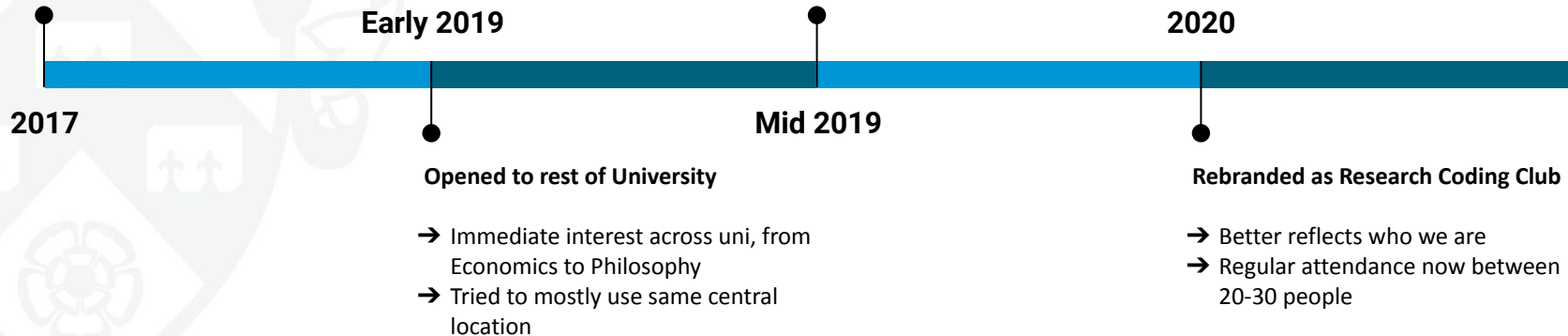➔ Need to be inclusive of all skill-levels and career stages

History of Research Coding Club

Physics Coding Club

- ➔ Tailored to be relevant to specific issues/needs in Department
- ➔ Cycled location between 3 main Physics buildings
- ➔ Weekly seminars/practicals during term time
- ➔ Regular attendance between 7-15 people

Added drop-in Code Clinics

- ➔ Individual help for research software related issues
- ➔ From designing database schema to installing Python packages
- ➔ Also switched to fortnightly sessions

Early 2019

2020

2017

Mid 2019

Opened to rest of University

- ➔ Immediate interest across uni, from Economics to Philosophy
- ➔ Tried to mostly use same central location

Rebranded as Research Coding Club

- ➔ Better reflects who we are
- ➔ Regular attendance now between 20-30 people

What do we do?

➜ Practicals:
- ◆ Version control basics, pull request model
- ◆ Testing (unit tests, test-driven development, testing frameworks)
- ◆ Performance profiling, optimisation, debugging, build systems
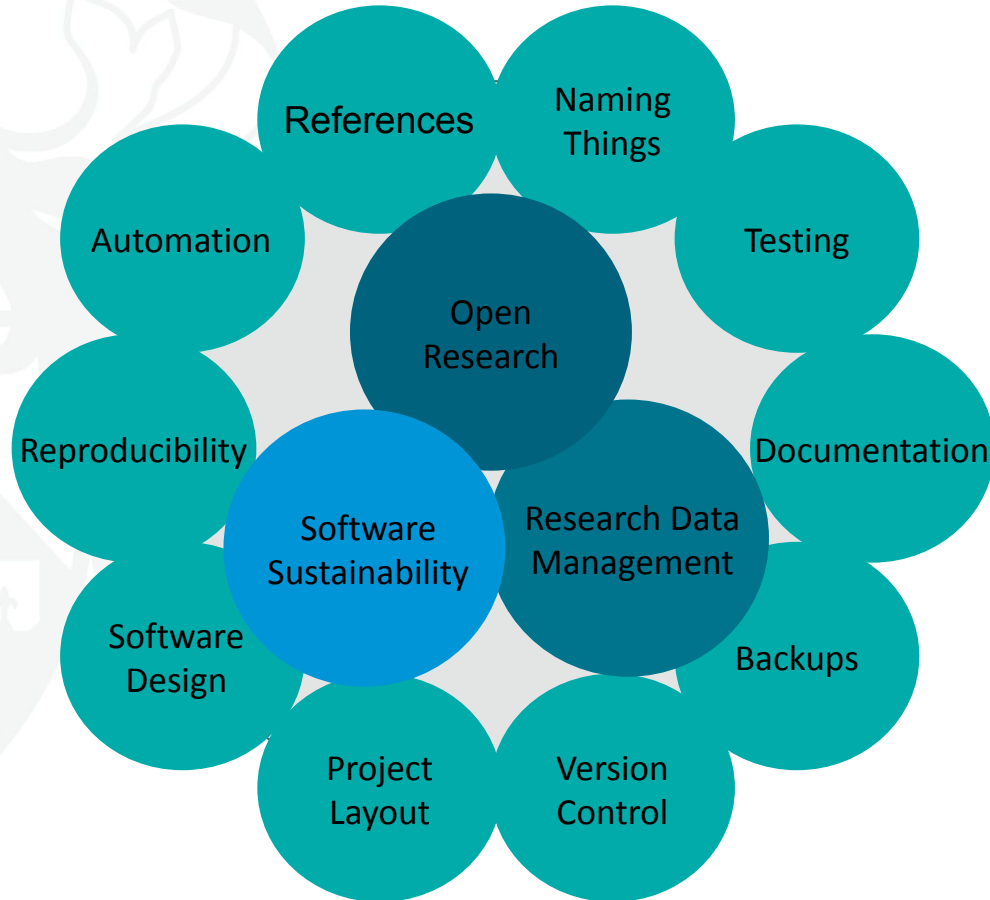- ◆ "Interesting" programming languages (Haskell, Perl6, Common Lisp)

➜ Seminars:
- ◆ Software design, data management, shell scripting
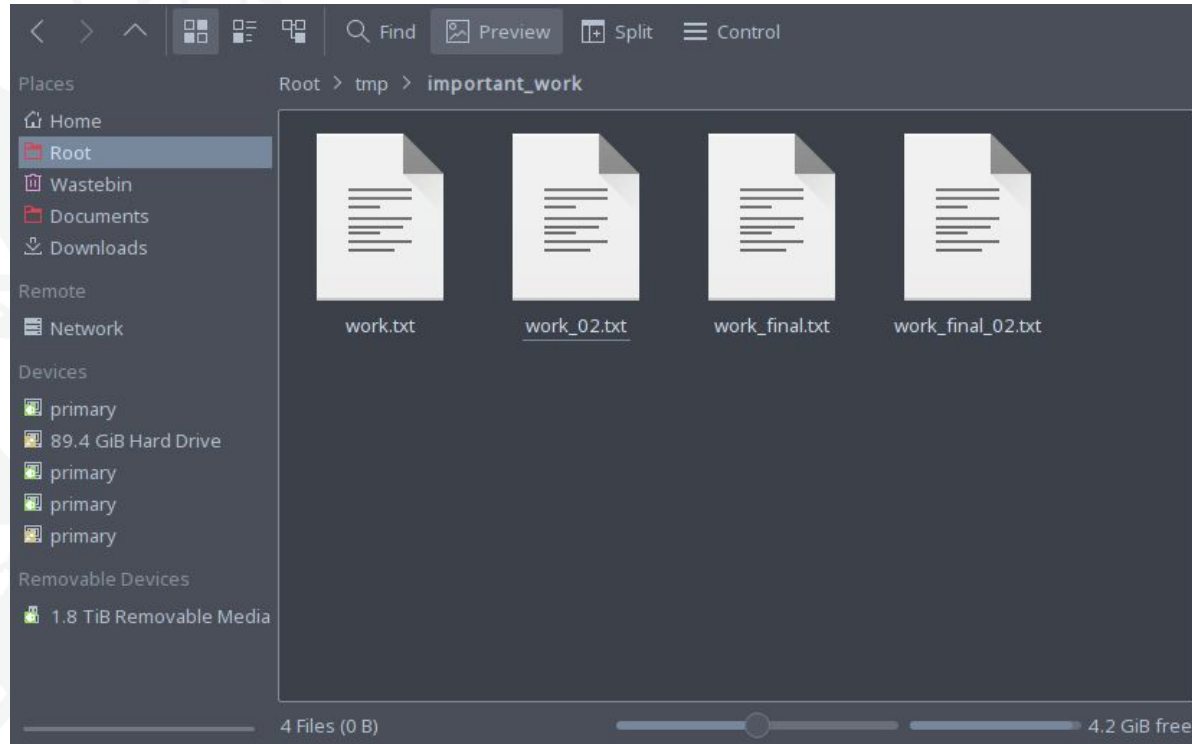- ◆ SSI Fellowships, Quantum computing, CPU bugs

➜ Code clinic:
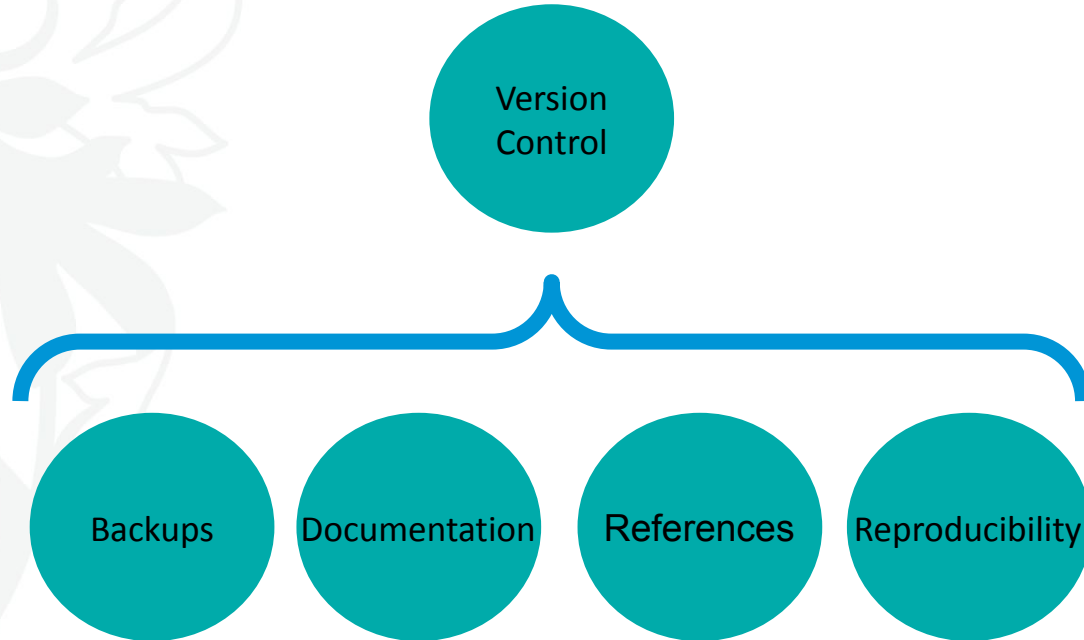- ◆ Individual help with research software problems

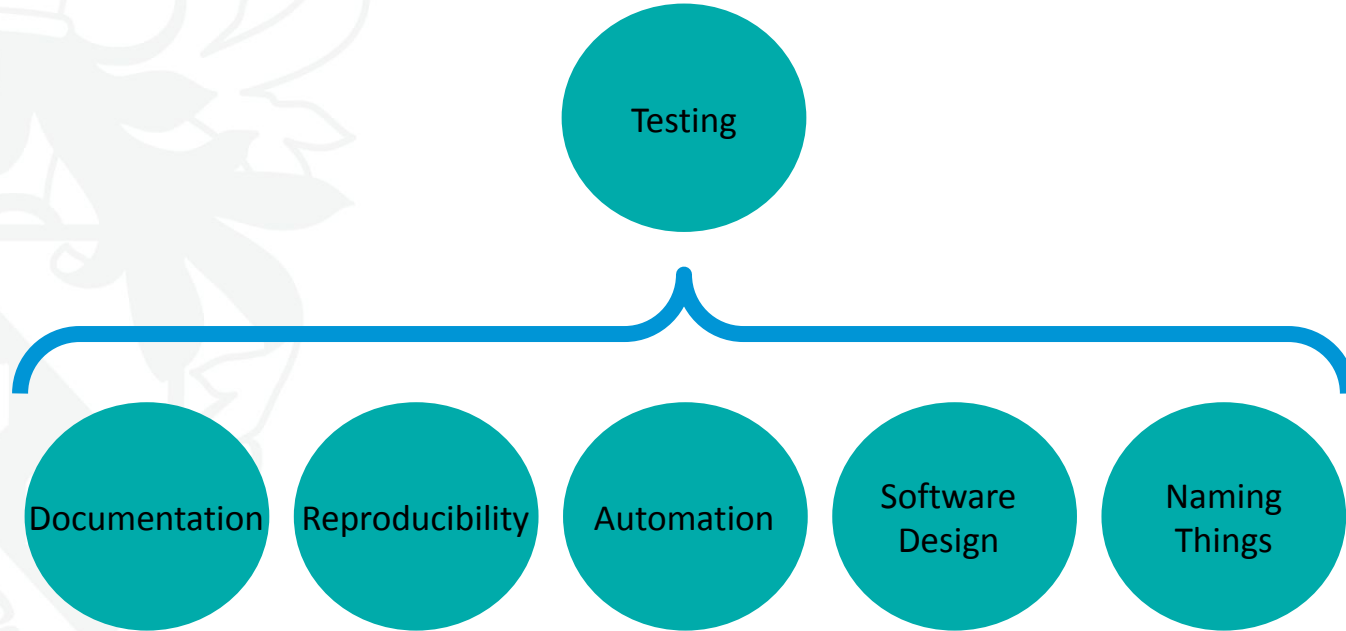# Concretising the Abstract

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A simple form of version control

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Research Coding Club

- It's good
- You should come along (and give a talk?)
- Every other Wednesday at 2pm
  - Next session: Drop-in Code Clinic on the 28th
- https://researchcodingclub.github.io
- http://bit.ly/YorkCodingClub