Commit to Learning
Upskilling our Team with GitHub

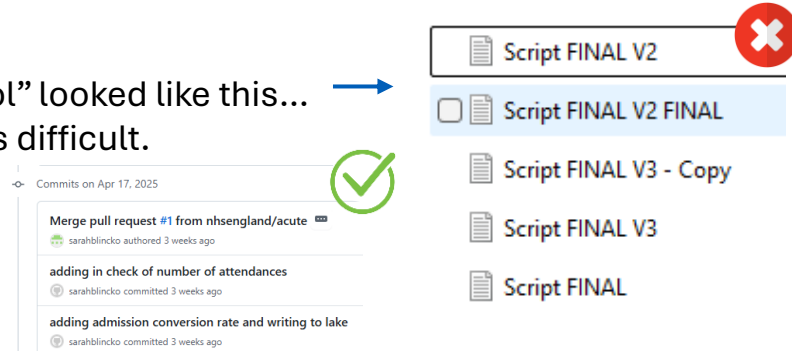HEALTH AND CARE ANALYTICS
Conference 2025

NHS England South East

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1 Introduction

In the South East Data & Analytics team, our code "version control" looked like this... This made quality assurance, collaboration, and tracking changes difficult.

We wanted to improve our ways of working by **incorporating GitHub**, which would transform our version control to this...

This approach would align with RAP principles and improve the shareability of our code.

Script FINAL V2
Script FINAL V2 FINAL
Script FINAL V3 - Copy
Script FINAL V3
Script FINAL

Commits on Apr 17, 2025
Merge pull request #1 from nhsengland/acute
sarahblincko authored 3 weeks ago
adding in check of number of attendances
sarahblincko committed 3 weeks ago
adding admission conversion rate and writing to lake
sarahblincko committed 3 weeks ago

Aim: Upskill the team and have all new pieces of code on GitHub by Q3 25/26
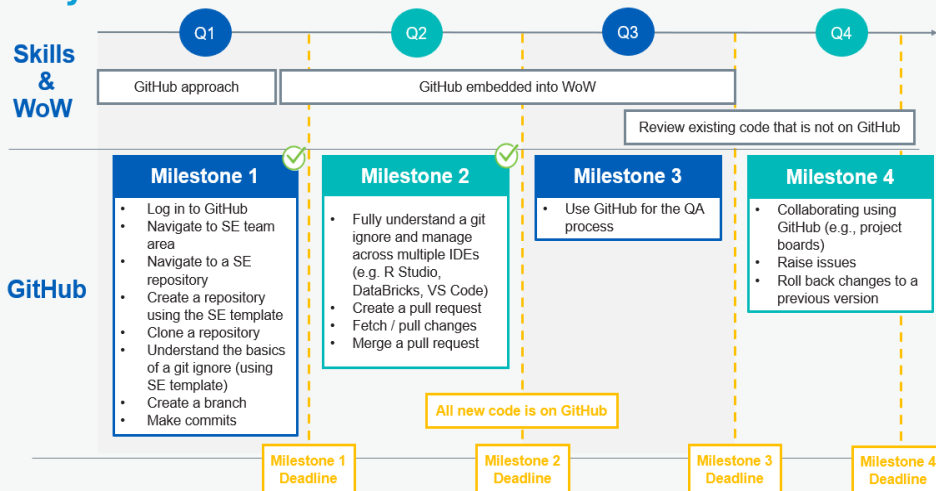
2 Developing our approach

We ran a **GitHub 'Start, Stop, Continue'** session and our **first team survey** to gauge current skills. From this, we developed our **team principles**, **key milestones** and **roadmap.**
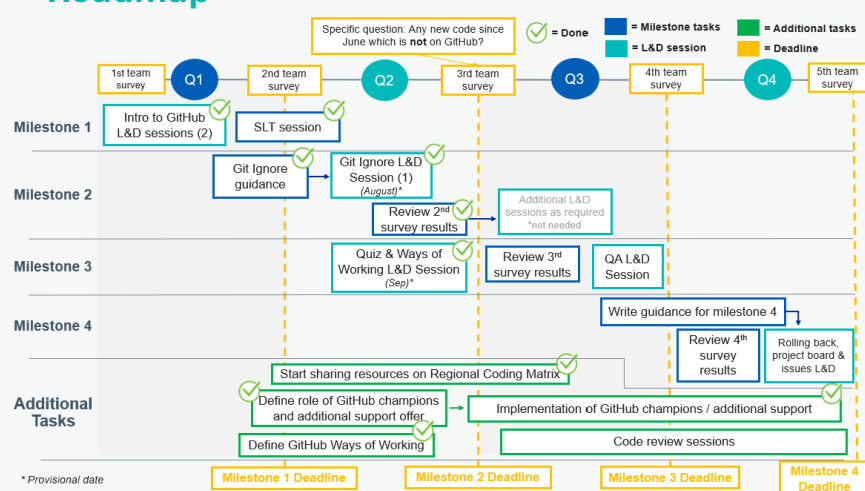
Team Principles
1. We use GitHub as the **main source** for all code
2. We **support** our team to use GitHub
3. We **standardise resources** across the team
4. Our **ways of working align** with the wider NHS
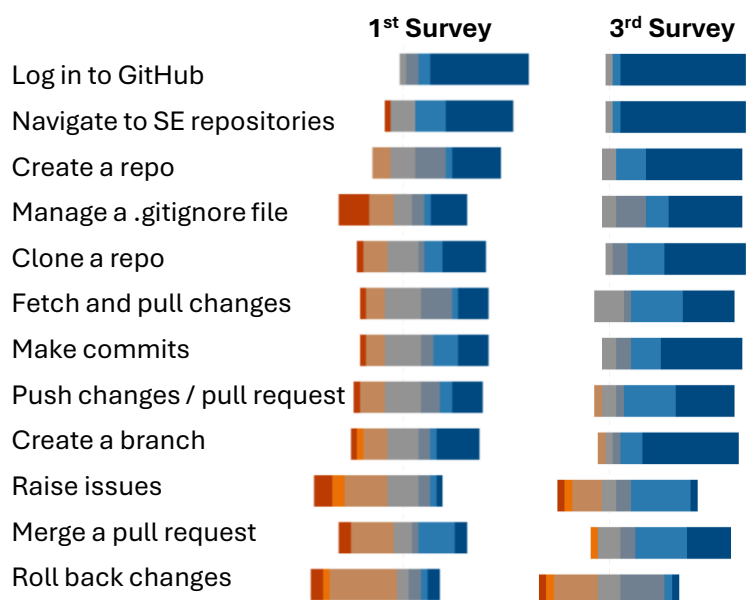
Key Milestones

Skills & WoW — Q1, Q2, Q3, Q4
GitHub approach | GitHub embedded into WoW
Review existing code that is not on GitHub

Milestone 1
- Log in to GitHub
- Navigate to SE team area
- Navigate to a SE repository
- Create a repository using the SE template
- Clone a repository
- Understand the basics of a git ignore (using SE template)
- Create a branch
- Make commits

Milestone 2
- Fully understand a git ignore and manage across multiple IDEs (e.g. R Studio, DataBricks, VS Code)
- Create a pull request
- Fetch / pull changes
- Merge a pull request

All new code is on GitHub

Milestone 3
- Use GitHub for the QA process

Milestone 4
- Collaborating using GitHub (e.g., project boards)
- Raise issues
- Roll back changes to a previous version

Milestone 1 Deadline | Milestone 2 Deadline | Milestone 3 Deadline | Milestone 4 Deadline

Roadmap

Legend: = Done | = Milestone tasks | = L&D session | = Additional tasks | = Deadline

Specific question: Any new code since June which is **not** on GitHub?

1st team survey — Q1 — 2nd team survey — Q2 — 3rd team survey — Q3 — 4th team survey — Q4 — 5th team survey

Milestone 1: Intro to GitHub L&D sessions (2) | SLT session

Milestone 2: Git Ignore guidance | Git Ignore L&D Session (1) *(August)* | Review 2nd survey results | Additional L&D sessions as required *not needed*

Milestone 3: Quiz & Ways of Working L&D Session *(Sep)* | Review 3rd survey results | QA L&D Session

Milestone 4: Write guidance for milestone 4 | Review 4th survey results | Rolling back, project board & issues L&D

Additional Tasks: Start sharing resources on Regional Coding Matrix | Define role of GitHub champions and additional support offer | Implementation of GitHub champions / additional support | Define GitHub Ways of Working | Code review sessions

* Provisional date

Milestone 1 Deadline | Milestone 2 Deadline | Milestone 3 Deadline | Milestone 4 Deadline

We set **milestone deadlines**, prioritising **interactive training sessions**, standardising repositories by introducing a **template** and producing **clear and detailed documentation** for our team to use. After each milestone we ran a **team survey** to understand the team's confidence and areas of improvement for future sessions.

3 Results & Impact

All team members have a GitHub account

Team survey: How would you rank your familiarity with these skills / concepts?

1st Survey | 3rd Survey

Legend:
- I don't know what this is
- I can confidently do this

- Log in to GitHub
- Navigate to SE repositories
- Create a repo
- Manage a .gitignore file
- Clone a repo
- Fetch and pull changes
- Make commits
- Push changes / pull request
- Create a branch
- Raise issues
- Merge a pull request
- Roll back changes

Confidence increased across skills in milestones 1 & 2

"You've all done a great job upskilling the team"

Skills for **future** L&D sessions

Did we meet our aim? We wanted **all new pieces of code on GitHub by Q3 25/26**. We're nearly there, with most relevant responses answering "no" to the question: *Have you written any new code since June which is **not** on GitHub?*

4 Lessons Learnt

We adapted our approach along the way, recognising the broad skills mix of the team. We found **in-person training sessions** were more beneficial than virtual, created **"GitHub Champions"** for further support and offered **one-to-one sessions** where needed. Fun, interactive sessions (e.g., GitPub quiz) boosted morale.

Icons: flaticon.com