# **Research and Development Individual Worklog**

This document provides a detailed log of activities, grouped by project week.

### S1 - Week 1 (March 3 - March 9, 2025)

- Workshop: Week 1 Workshop
  - o Type: Workshop
  - o Date: March 6, 2025
  - o Time: 2:00 PM 4:00 PM
  - O Duration: 2h 0m
    - Week 1 Workshop Notes.docx
- Total Hours for S1 Week 1: 2h 0m

## S1 - Week 2 (March 10 - March 16, 2025)

- Offsite: Working out timetables
  - Type: Offsite
  - o Date: March 10, 2025
  - o Time: 12:00 PM 1:00 PM
  - O Duration: 1h 0m
    - Timetables.xlsx
    - <u>Timetables</u> (Folder with screenshots of our timetables)
- Offsite: Stakeholder Register
  - Type: Offsite
  - o Date: March 11, 2025
  - o Time: 12:00 PM 12:30 PM
  - o **Duration**: 0h 30m
    - 02. Stakeholder Register.docx
- Offsite: Worked on paperwork / Met the team
  - Offsite
  - o Date: March 13, 2025
  - Time: 12:30 PM 2:00 PM
  - Duration: 1h 30m
- Meeting: Client / Mentor Meeting Cancelled
  - Type: Meeting
  - o Date: March 13, 2025
  - o Time: 2:00 PM (Cancelled)
  - O Duration: 0h 0m
    - Due to the meeting clashing with the lecture it was cancelled

#### Research & Development Individual Log Workbook

Workshop: Week 2 - Workshop

Type: Workshop

Date: March 13, 2025

O Time: 2:00 PM - 4:00 PM

O Duration: 2h 0m

Week 2 - Workshop Notes.docx

• Offsite: Filling out paperwork

Type: Offsite

o Date: March 15, 2025

o Time: 11:00 AM - 12:40 PM

O Duration: 1h 40m

• Total Hours for S1 - Week 2: 6h 40m

## S1 - Week 3 (March 17 - March 23, 2025)

Meeting: Online Meeting

o Type: Meeting

Date: March 17, 2025Time: 1:30 PM - 3:00 PM

Duration: 1h 30m

Unofficial meeting with only some of the members to try to get to know each other, but most couldn't make
 it

Meeting: Online Meeting - Kick off

o Type: Meeting

o Date: March 18, 2025

o **Time**: 7:00 PM - 8:30 PM

O Duration: 1h 30m

Meeting Minutes 18-03-2025 (Team Kick-off).docx

• Offsite: Filling out assigned paperwork

Type: Offsite

Date: March 19, 2025

O Time: 2:00 PM - 4:00 PM

O Duration: 2h 0m

Was assigned to work on the stakeholder register and management plan.

02. Stakeholder Register.docx

04. Stakeholder Management Plan.docx

Meeting: Meeting - Client / Mentor

Type: Meeting

o Date: March 20, 2025

o Time: 10:00 AM - 11:00 AM

Duration: 1h 0m

Meeting Minutes 20-03-2025 (Client Kick-off).docx

- New member to team, Kylie. Discussed setting up the project's physical environment, which includes four computers two configured as routers and three networks for sender-to-receiver communication, utilizing Fedora, Ubuntu, and Kali Linux. Testing will begin with IPv4 (TCP and UDP) Win, Zafar, and Thomas, followed by IPv6 testing by Larissa, Kylie, Nathan, and Charmi, with all results, including a log file and Excel findings, to be submitted. Major part to the project is establishing a project methodology first, requiring a comparison of three approaches, justification for the chosen one (possibly drawing from SDLC), and realistic cost estimations with references. Regular mentor/client meetings are scheduled—weekly until the Project Proposal submission on April 4th (with a 10-page limit and subsequent presentation), then fortnightly. The AUT IT tech team to be added to Teams for hardware specification and equipment access.
- Meeting: Meeting After Client / Mentor Meeting

Type: Meeting

o Date: March 20, 2025

Time: 11:00 AM - 2:00 PM

Duration: 3h 0m

Meeting Minutes 20-03-2025 (Team).docx

- The team was considering a hybrid approach for the project methodology, specifically combining Agile with SDLC principles. Planed to create a comparison table outlining the advantages and challenges of three different methodologies before selecting the ideal one and defining its phases. The Project Proposal is established as the first milestone, with a target completion date of March 31st to allow ample time for review, editing, and compilation before its April 4th deadline. To ensure active participation, each task will be assigned to at least two team members. The team intends to work on the presentation PowerPoint slides once the proposal is complete.
- Workshop: Week 3 Workshop

Type: Workshop

Date: March 20, 2025

Time: 2:00 PM - 4:00 PM

O Duration: 2h 0m

Week 3 - Workshop Notes.docx

• Total Hours for S1 - Week 3: 11h 0m

#### S1 - Week 4 (March 24 - March 30, 2025)

Offsite: Updating Proposal Paperwork

Type: Offsite

Date: March 25, 2025

Time: 12:00 PM - 2:00 PM

**Duration**: 2h 0m

Updated Stakeholder Register

Researched a bit around what D-ITG is, and how to install on linux.

Added more information to the proposal document

• Offsite: More Proposal paperwork

Type: Offsite

Date: March 26, 2025

Time: 12:00 PM - 2:00 PM

o **Duration**: 2h 0m

Added more to the proposal document

Offsite: Converting Logbook into a word doc

Type: Offsite

Date: March 27, 2025

Time: 11:00 AM - 1:00 PM

Duration: 2h 0m

Meeting: Mentor meeting

Type: Meeting

Date: March 27, 2025

o **Time**: 1:00 PM - 2:00 PM

Duration: 1h 0m

■ Meeting Minutes 27-03-2025 (Supervisor).docx

The team is busy refining the Project Proposal, which needs a version control table and Table of Contents, with all sections requiring concise paragraphs and consistent formatting. The Terms of Reference will outline the problem, purpose, and opportunity, while the Objectives and Scope will copy objectives directly from the brief, detail functional and non-functional requirements, and clarify deliverables, with further scope details and out-of-scope items relegated to an appendix. A Skills Analysis matrix (summarized in the main document with a full version in the appendix) and an upskilling plan are also mandatory. The team must prepare the Client Contract for signature, identify roles based on their chosen Project Management Methodology (which all members must understand), present the Team Schedule in a table, and compare IPERF and DITG. The Cost Breakdown in the proposal will be a summary table with detailed references in the appendices. Daniel has suggested completing the first draft by Sunday for review and feedback, and he'll schedule a meeting for Thursday, April 3rd, 2025, at 1 PM, for a proposal review and mock presentation. Finally, the team needs to contact the IT technician about required hardware and equipment for performance testing.

Workshop: Week 4 - Workshop

Type: Workshop

Date: March 27, 2025

Time: 2:00 PM - 4:00 PM

O Duration: 2h 0m

Week 4 - Workshop Notes.docx

Offsite: Working on the proposal

Type: Offsite

Date: March 28, 2025

o Time: 11:00 AM - 2:00 PM

O Duration: 3h 0m

Created a network typology image showing how the typology will work and explaining it.

Meeting: Online Meeting

Type: Meeting

o **Date**: March 28, 2025

O Time: 6:00 PM - 8:00 PM

O Duration: 2h 0m

WBS 2.docx

- The team got in an online call to complete more of the proposal together as we can ask questions easier and get answers faster. Once of the focuses was working on the WBS and trying to complete it as then we could work on the Gantt Chart.
- Offsite: More work on proposal

O Type: Offsite

Date: March 29, 2025

Time: 11:00 AM - 6:00 PM

**Duration**: 7h 0m

Worked on adding additional information to the proposal document

Offsite: Worked on Gantt Chart

Type: Offsite

o Date: March 30, 2025

o **Time**: 12:00 AM - 4:00 AM

O Duration: 4h 0m

Worked on the scheduling of the project.

09. Gantt Chart.mpp

• Total Hours for S1 - Week 4: 25h 0m

## S1 - Week 5 (March 31 - April 6, 2025)

Offsite: Worked on Proposal

Type: Offsite

Date: March 30, 2025

Time: 12:00 PM - 3:00 PM

Duration: 3h 0m

Worked on adding additional information to the proposal document

Offsite: Work on Proposal

Type: Offsite

Date: March 31, 2025

Time: 12:00 PM - 3:00 PM

Duration: 3h 0m

Worked on adding additional information to the proposal document

• Meeting: Online Meeting

Type: Meeting

Date: March 31, 2025

Time: 4:00 PM - 6:00 PM

Duration: 2h 0m

Meeting Minutes 31-03-2025 (Team).docx

- For the upcoming presentation, Charmi and Kylie were tasked to create the PowerPoint slideshow, with a team practice session planned before Thursday's mock-up. The team has finalized a hybrid Waterfall-Scrum approach for the project methodology, utilizing Waterfall for the first two phases and Scrum for the remaining two phases, each broken into three sprints corresponding to a Linux OS; there's ongoing discussion about whether STLC is a methodology or a framework, given the client's initial emphasis on SDLC. The Project Proposal document requires careful version control (including comments on changes), a Milestone Report in the Appendix, and a detailed Team Schedule; the Terms of Reference section specifically needs to be a single paragraph with headers removed, and the team should prioritize using "Evaluation" over "Testing" throughout the document. All meeting minutes and agendas will be appended to the Team Schedule, and the Labour Breakdown Table will be summarized in a short paragraph within the proposal, with full details in the Appendix, ensuring all APA 7th references are alphabetized. The proposal document is slated for submission on Friday, following a final team review and feedback incorporation from the supervisor on Thursday, with the Team Leader handling the submission. Finally, the Client Contract and Project Charter need to be signed off, and the team is organizing their portfolio's Gantt Chart files, ideally consolidating them into one.
- Offsite: Took notes for Week 5 Workshop from slides

Type: Offsite

Date: April 3, 2025

Time: 2:00 PM - 3:00 PM

Duration: 1h 0m

Week 5 - Workshop Notes.docx

• Sick Week: From 1st to 4th April

O Duration: 0h 0m

Was not feeling well for the week, so stayed home to recover.

Total Hours for S1 - Week 5: 9h 0m

#### S1 - Week 6 (April 7 - April 13, 2025)

- Meeting: Final Finish ups of Proposal
  - Type: Meeting
  - o **Date**: April 6, 2025
  - o Time: 10:00 PM April 7, 2025 12:00 AM
  - O Duration: 2h 0m
    - The team joined an online call and worked on the finalizing of the proposal till the deadline to make sure that it was going to be completed to the best of our ability.
- Meeting: Online Presentation Practice
  - Type: Offsite
  - Date: April 7, 2025
  - Time: 7:00 PM 8:30 PM
  - Duration: 1h 30m
    - All practiced what we were going to say in the presentation in an online call so that we were prepared for the day
- Meeting: Pre-presentation meeting
  - Type: Meeting
  - Date: April 10, 2025
  - Time: 9:30 AM 11:00 AM
  - O Duration: 1h 30m
    - All practiced what we were going to say in the presentation in person so that we were prepared for what to say in the presentation.
- Meeting: Proposal Presentation
  - Type: Meeting
  - Date: April 10, 2025
  - o Time: 11:00 AM 12:00 PM
  - O Duration: 1h 0m
    - Official presentation of our proposal in front of Supervisor, Client, and Marker.
- R&D Lab: Trying to configure hardware
  - Type: R&D Lab
  - Date: April 10, 2025
  - Time: 12:00 PM 4:00 PM
  - o **Duration**: 4h 0m
    - After the presentation we started configuring all the routers / PCs
- Total Hours for S1 Week 6: 9h 0m

## S1 - Mid-Sem Break (April 14 - April 27, 2025)

• Offsite: Upskilling - Environment Setup

Type: Offsite

o Date: April 14, 2025

Time: 12:00 PM - 4:00 PM

Duration: 4h 0m

Downloaded Virtual Box - To set up virtual machines

Downloaded the OS ISOs

Setup Ubuntu Server on 4 VMs

Meeting: Team Meeting

Type: Meeting

o Date: April 15, 2025

O Time: 2:00 PM - 4:00 PM

Duration: 2h 0m

Meeting Minutes 15-04-2025 (Team).docx

- The team reviewed their two-week upskilling plan, confirming the current project stage. This week, the focus is on Linux fundamentals and environment setup, followed by Linux routing and network testing in Week 2. A progress check-in is scheduled for the next weekly team meeting on April 22nd. Thomas has offered to provide informal support on Discord to address any skill discrepancies among members. The team will also familiarize themselves with D-ITG, the sole evaluation tool, by watching YouTube videos and reviewing the online manual.
- Offsite: Upskilling Linux Fundamentals

Type: Offsite

o **Date**: April 16, 2025

O Time: 12:00 PM - 4:00 PM

Duration: 4h 0m

Linux Journey: <a href="https://linuxjourney.com/">https://linuxjourney.com/</a>

LinuxCommand org: <a href="https://linuxcommand.org/">https://linuxcommand.org/</a>

Command Line for Beginners: <a href="https://www.freecodecamp.org/news/command-line-for-beginners/">https://www.freecodecamp.org/news/command-line-for-beginners/</a>

Explored these sites outlined in our upskilling document

Offsite: Upskilling - Linux Fundamentals

Type: Offsite

Date: April 17, 2025

o Time: 10:00 AM - 2:00 PM

Duration: 4h 0m

Linux Journey: <a href="https://linuxjourney.com/">https://linuxjourney.com/</a>

LinuxCommand org: <a href="https://linuxcommand.org/">https://linuxcommand.org/</a>

Command Line for Beginners: <a href="https://www.freecodecamp.org/news/command-line-for-beginners/">https://www.freecodecamp.org/news/command-line-for-beginners/</a>

Explored these sites outlined in our upskilling document more as there was a lot of information

- Offsite: Upskilling Networking Revision
  - Type: Offsite
  - o Date: April 18, 2025
  - o Time: 10:00 AM 4:00 PM
  - O Duration: 6h 0m
    - https://www.freecodecamp.org/news/computer-networking-how-applications-talk-over-the-internet/
    - https://www.freecodecamp.org/news/linux-networking-commands-for-beginners/
    - https://www.freecodecamp.org/news/osi-model-networking-layers-explained-in-plain-english/
    - Upskilling Networking Basics Revision.docx Took notes from the above sites
- Offsite: Upskilling Linux as Router
  - Type: Offsite
  - o Date: April 21, 2025
  - O Time: 10:00 AM 4:00 PM
  - o **Duration**: 6h 0m
    - https://fedoramagazine.org/use-fedora-server-create-router-gateway/
    - https://www.ibm.com/docs/en/linux-on-systems?topic=3-linux-as-router
    - https://www.computernetworkingnotes.com/linux-tutorials/how-to-configure-and-use-linux-as-a-router.html
    - https://www.baeldung.com/linux/server-router-configure
    - https://medium.com/@lfoster49203/setting-up-ubuntu-as-a-router-with-advanced-routing-features-4511abc5e1eb
    - https://www.tecmint.com/setup-linux-as-router/
    - https://wiki.archlinux.org/title/Router
    - Used info from these sites to configure ubuntu as a router on the VMs. [IPv4 / IPv6]
    - Using NetPlan
- Offsite: Upskilling D-ITG
  - Type: Offsite
  - o Date: April 22, 2025
  - o **Time**: 12:00 AM 2:00 PM
  - O Duration: 2h 0m
    - D-ITG: <a href="https://github.com/jbucar/ditg">https://github.com/jbucar/ditg</a>
    - D-ITG-2.8.1-manual.pdf
    - Gained somewhat of an understanding of D-ITG
    - Testing it on the 4 VMs

Meeting: Team Meeting

Type: Meeting

Date: April 22, 2025

O Time: 6:00 PM - 8:30 PM

Duration: 2h 0m

Meeting Minutes 22-04-2025 (Team).docx

- This week, the team reviewed their progress on Week 1 upskilling, with each member discussing their achievements. While everyone successfully upskilled in Linux fundamentals, some struggled to find information about D-ITG and understand its manual. The team also discussed beginning test runs for the IPv4 team.
- Total Hours for S1 Mid-Sem Break: 30h 30m

#### S1 - Week 7 (April 28 - May 4, 2025)

Meeting: Quick Meeting Catchup

Type: Meeting

Date: April 30, 2025

Time: 7:00 PM - 8:00 PM

Duration: 1h 0m

- Quick catchup with the group before the 1<sup>st</sup> week back after mid-semester break
- R&D Lab: Configuration of Receiver

Type: R&D Lab

Date: May 1, 2025

O Time: 9:00 AM - 1:00 PM

O Duration: 4h 0m

Setting up IP addresses

Setup static routes between the PCs / Routers

Tested by pinging each other

Meeting: Meeting Supervisor / Client

Type: Meeting

Date: May 1, 2025

o Time: 1:00 PM - 2:00 PM

Duration: 1h 0m

- Meeting Minutes 01-05-2025 (Client).docx
- The Proposal Document needs to include a section on Technical Deliverables, specifically detailing the activities for Phase 1, such as providing test cases. For Functional Requirements, ensure you mention finding the optimal value first and synchronizing all computer clocks for accurate evaluation. When it comes to evaluation, plan to use a managed switch for IP address assignment, (which we decided we didn't need after the meeting) and note that setting up IPv4 and IPv6 concurrently isn't an issue. Start by finding the optimal value, perhaps with a 50,000 packet rate on TCP. For graphing, each graph should display all packet sizes, and you'll only need the receiver logs for the evaluation, which should be conducted one-way. Lastly, during your mid-project progress review, focus on discussing the changes made to the proposal.

#### Research & Development Individual Log Workbook

• R&D Lab: Working on setup

o Type: R&D Lab

Date: May 1, 2025

Time: 2:00 PM - 4:00 PM

Duration: 2h 0m

- Discovered that we had some issues with the PCs freezing
- Spent time troubleshooting
- Discovered that it was a GPU driver issue
- Total Hours for S1 Week 7: 8h 0m

## S1 - Week 8 (May 5 - May 11, 2025)

• R&D Lab: Work on trying to configure R1/R2

o Type: R&D Lab

o Date: May 8, 2025

o **Time**: 9:00 AM - 4:00 PM

Duration: 7h 0m

- Continued troubleshooting Installed older drivers to see if it would fix the issue
- Ended up having to set up SSH into the router PCs, to configure if the drivers break.
- Total Hours for S1 Week 8: 7h 0m

#### S1 - Week 9 (May 12 - May 18, 2025)

• Offsite: Analysing the Data (IPv4 - 128)

Offsite

Date: May 13, 2025

O Time: 9:00 PM - May 14, 2025 2:00 AM

Duration: 5h 0m

- Worked on creating a python script to extract the run data from the .dat files.
- Used excel to make formulas to automatically average the data
- Offsite: Analysing the Data

Type: Offsite

Date: May 14, 2025

Time: 4:00 PM - May 15, 2025 12:00 AM

O Duration: 8h 0m

• Worked on copying the formulas to all the other sheets for Delay, Jitter, Packetloss, and throughput.

Offsite: Analysing rest of the Data

Type: Offsite

o Date: May 15, 2025

O Time: 12:00 PM - 6:00 PM

Duration: 6h 0m

- Finished what I hadn't finished the day before.
- Added all the average data to one sheet to compare the data.
- Noticed some issues with the data, so got the tests re-run
- Offsite: Analysing re-done data

Type: Offsite

Date: May 16, 2025

o Time: 4:00 PM - 11:00 PM

Duration: 7h 0m

- With all the formulas already on the other sheets, I copied the sheets and just pasted the data. It then automatically did all the calculations.
- Total Hours for S1 Week 9: 26h 0m

## S1 - Week 10 (May 19 - May 25, 2025)

• Offsite: Finished Analysing the data IPv4 Ubuntu data

Type: Offsite

Date: May 18, 2025

o Time: 5:00 PM - 8:00 PM

o **Duration**: 3h 0m

- Found an issue where all the Run 5 data was broken for 256 packet size
- Tests was re-run and inserted into the data
- Turned all the data into graphs comparing the data. For IPv4 Ubuntu Server
- Offsite: Analysed new data

Type: Offsite

O Date: May 21, 2025

o Time: 6:00 PM - 8:00 PM

Duration: 2h 0m

Analysed the new re-run data due to the massive outlier

Meeting: Client Meeting

Type: Meeting

Date: May 22, 2025

o **Time**: 1:00 PM - 1:30 PM

Duration: 0h 30m

Meeting Minutes 22-05-2025 (Client) .docx

■ Daniel has provided feedback on the mid-term status report, advising that the milestone section should now be a simplified table reflecting only the current and upcoming tasks, rather than listing all phases. The Gantt chart needs to be moved earlier in the proposal, with a screenshot of current progress and labels referencing future sections, and critically, the entire appendix must be removed to keep the proposal at 7 pages. A new "Skills Adopted" column will replace "Time Spent" to highlight new resources, and a table will confirm the unchanged client-mentor meeting schedule. For IPv4 results, the report needs a clearer picture of completion and future plans like IPv6 testing, with a clear link between test objectives and the test case document, and it's important to note that jitter results shouldn't be linear. Both the status report and IPv4 results presentations should be limited to 6 slides, primarily featuring visuals and tables with minimal text, and a follow-up meeting with Raymond next week is suggested.

Workshop: Week 10 - Workshop

Type: Workshop

o Date: May 22, 2025

Time: 2:00 PM - 4:00 PM

Duration: 2h 0m

Week 10 - Workshop Notes.docx

Total Hours for S1 - Week 10: 7h 30m

### S1 - Week 11 (May 26 - June 1, 2025)

Offsite: Worked on Status Report

Type: Offsite

Date: May 26, 2025

Time: 2:00 PM - 6:00 PM

Duration: 4h 0m

Added to the Team Contribution for myself

Reviewed status report and worked on what was needing to be completed

Offsite: Worked on Status Report

Type: Offsite

o Date: May 27, 2025

O Time: 2:00 PM - 6:00 PM

Duration: 4h 0m

Contributed to re-working the WBS

Contributed to Status Report

Meeting: Team Meeting

Type: Meeting

Date: May 28, 2025

Time: 7:00 PM - 8:30 PM

Duration: 1h 30m

- Meeting Minutes 28-05-2025 (Team).docx
- D-ITG testing is progressing, with the team successfully receiving 10 simultaneous runs, though some finish earlier than others. For the status report, once the proposal errors are corrected, significant portions of the first section, including the executive summary, can be directly copied. The budget will also be refined by removing unnecessary equipment like an extra mouse, monitor, and gigabit adapters. The accompanying presentation will be concise, limited to 5 slides. Key proposal errors needing immediate attention include summarizing the Project Status, Risk, and Project Overview into a single paragraph, re-adding major milestones to the WBS, and correcting all dates within the schedule and milestones. Ultimately, the team needs to finalize the status report and comprehensively edit various proposal sections, including the Project Objective, Schedule, WBS, Gantt chart, Status, Milestones, Contribution, Recommendations, and Executive Summary.
- Offsite: Worked on Status report related docs

Type: Offsite

o **Date**: May 27, 2025

Time: 9:00 AM - 4:00 PM

Duration: 7h 0m

- Double checked the WBS to then start work on the new version of the Gantt Chart
- Started the revised Gantt Chart based on the new WBS timeline
- 09. Gantt Chart v2.mpp
- Total Hours for S1 Week 11: 16h 30m

#### S1 - Week 11 (June 2 - June 8, 2025)

R&D Lab: Worked on preparing graphs for Client Meeting

Type: R&D Lab

o Date: June 5, 2025

O Time: 9:00 AM - 12:00 PM

Duration: 3h 0m

Prepared graphs from the IPv4 data that we had run to try and find the optimal value

Meeting: Team Meeting

**Type:** Meeting

Date: June 5, 2025

Time: 12:00 PM - 12:30 PM

Duration: 0h 30m

- Meeting Minutes 05-06-2025 (Client).docx
- Short meeting with Raymond. Going through the data we collected around the different amount for packets per second. Raymond said to use 120k packets per second as the graph looked correct. Talked about the

## Research & Development Individual Log Workbook

confidence interval and he said that we can change it from the 95% interval in the brief and we need to calculate the confidence interval backwards from the data we have.

R&D Lab: More runs of evaluations

Type: R&D Lab

Date: June 5, 2025 0

Time: 12:30 PM - 6:00 PM

Duration: 5h 30m

- With the optimal value of 120,000 packets per second now established, we re-ran our evaluations for TCP and UDP IPv4, and the results were sent to Raymond, who provided positive feedback. Following this, we moved on to IPv6 testing, which was also sent to Raymond for review and similarly received approval.
- Total Hours for S1 Week 12: 9h 0m

#### S1 - Week 11 (June 9 - June 15, 2025)

Offsite: Finalizing status report

Type: Offsite

Date: June 14, 2025

Time: 11:00 PM - June 15 2025 3:00 AM

Duration: 4h 0m

- Looked over all the changes making sure it was all done in the status report
- Finalized the Gantt chart
- 09. Gantt Chart v2.mpp
- Total Hours for S1 Week 13: 4h 0m

Total Hours to Date: 152 hours