

14/01/2020

Missed meeting 13 last week due to illness

Before the meeting:

- First meeting back from Christmas break, not much progress made.
- Struggled to add supervisor code to the project, have experienced many pains with the project resulting from using an already existing research project as its base.

During the Meeting:

- Everyone answered what their project status is at this point in time, and where do they see as the end of the project.
- For me: No working implementation of anything, happy to get anything done for evaluation.
- Steuwer helped me come up with actionable goals that don't rely on pre-existing knowledge of Lift, detailed in the "Actions going forward" section.

Actions going forward:

- Start designing and writing a backtracking search over a scala tree (i.e. Outside of Lift, just pure scala).
- By encoding functions for changing/testing the tree nodes in the same way that Lift does, with  $\text{Strategy}[P] = P \Rightarrow \text{RewriteResult}[P]$  and similarly for RewriteResult trait.
- We can then implement rewrite rules that pattern match against the value of a node in the tree to simulate the behaviour of the AST rewriting in Lift.
- With these tools we should be able to develop a functional backtracking algorithm that can be integrated into Lift.

Sidenote: Lift has been rewritten/reorganised and is a lot nicer now to work with. It has a new name - Rise. I will be referring to the research project as such from now on.