

#### My Report!

First year review report

#### Zhili Tian

Supervised by Prof. Thorsten Altenkich & Prof. Ulrik Buchholtz

Funtional Programming Lab School of Computer Science University of Nottingham

 $May\ 23,\ 2025$ 

#### Abstract

Giving a short overview of the work in your project. [1]  $\,$ 

## Contents

1	Introduction	<b>2</b>
	1.1 Background and Motivation	2
	1.2 Aims and Objectives	2
	1.3 Overwiew of the Report	2
2	Prerequisites	3
	2.1 Type Theory	3
3	Conducted Research	4
	3.1 Literature review	4
	3.2 Topics Studied	4
	3.2 Topics Studied	4
4	Future Work Plan	5
5	Conclusions	6
6	Appendix	7
$\mathbf{R}$	oferences	7

### Introduction

- 1.1 Background and Motivation
- 1.2 Aims and Objectives
- 1.3 Overwiew of the Report

## Prerequisites

```
module Prerequisites where  \begin{aligned} &\text{open import Relation.Binary.PropositionalEquality} \\ &\text{data } \mathbb{N}: \text{ Set where} \\ &\text{zero}: \mathbb{N} \\ &\text{suc}: \mathbb{N} \to \mathbb{N} \end{aligned}   &\text{proof: zero} \equiv \text{zero} \\ &\text{proof} = \text{refl}
```

#### 2.1 Type Theory

This is type theory

### Conducted Research

- 3.1 Literature review
- 3.2 Topics Studied
- 3.3 Questions

### Future Work Plan

This is future work plan.

## Conclusions

This is conclusions.

# Appendix

This is appendix.

## Bibliography

[1] ABBOTT, M., ALTENKIRCH, T., AND GHANI, N. Containers: Constructing strictly positive types. Theoretical Computer Science 342, 1 (2005), 3–27. Applied Semantics: Selected Topics.