Incremental Computing in Haskell
CS240H Project Report

Jiyue WANG and Kaixi RUAN

March 17, 2016

1 Introduction

2 Incremental in a nutshell

2.1 Incremental DAG

2.2 Demo

Variable user could create variables which they could later change value

Operation like map/bind/arrayfold/...

Observer use observer to observe some node/make it necessary

Stabilize after building the graph/change the value, use stabilize to ...

Garbage Collection

3 Implementation

3.1 Node

```haskell
-- comment
data Node a = Node {
  _kind     :: Kind a
, _value    :: ValueInfo a
, _edges    :: Edges
}
```

3.2 Kind

3.3 State

3.4 Stabilization

3.5 Observer