Incremental Computing in Haskell CS240H Project Report

Kaixi Ruan

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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

 ${\bf Operation} \ \ {\rm like \ map/bind/arrayfold/...}$

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

```
-- 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