Ducking Off

Implementing Minesweeper in Haskell

Kriti Chaturvedi Mariam Eqbal Ritigya Gupta

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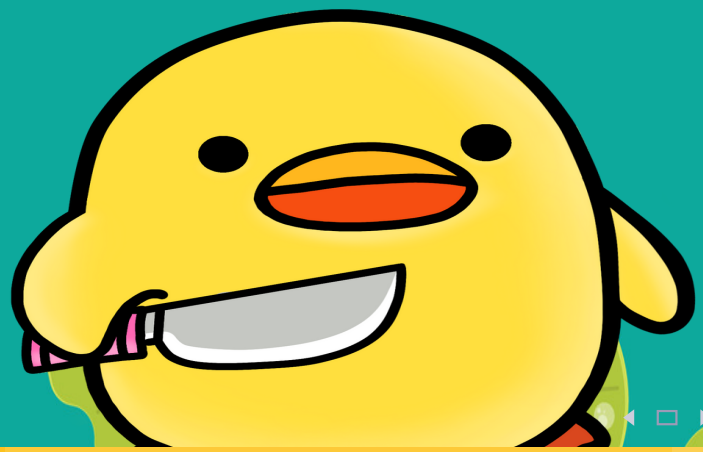

Objective

1. To learn and establish a basic proficiency in Haskell.
2. To familiarize ourselves with GUI libraries in Haskell.
3. To develop an attitude to learn things in limited time constraints.

Some fun modifications

1. Unopened tiles will be respresented by lilypads.
2. Numbered tiles will be represented by water.
3. Mines will be represented by sharks.
4. Safe areas will be represented by ducks.
5. Flags will be represented by lilies.

Why Haskell?

1. We just want to learn it
2. High level abstractions
3. Lazy Evaluation
4. Purely functional language

Implementation

1. Using System.Random module for placing the mines (sharks) randomly for board generation.
2. Numbering the tiles on the basis of the sharks around it.
3. Use Gtk2Hs for making a GUI in Haskell.

Division of work

1. Mariam - Basic logic of the Minesweeper board and implementation in the terminal (without GUI)
2. Ritigya - Making an attractive Haskell GUI
3. Kriti - Testing and debugging

Timeline

1. WEEK 1:
   - Make test cases (3 boards for testing at different stages)
   - Make the board from scratch
   - Build GUI
   - Integrate all components
2. WEEK 2:
   - Days 1 - 3: Finalising the code, structuring, ordering and completing code.
   - Days 4 - 7: Final testing and debugging

Potential Challenges

1. Coordination across regions.
2. Creating a UI in Haskell can be difficult, especially a graphical UI.

This is Team Project Puff Girls signing off,
We're open to questions if any.