Real World Idris

Project Progress Presentation

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- Idris-Malfunction, recent work to solve the performance gap

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  - successfully call simple functions like *val floor* : *float* → *float*

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- ▶ so we need to implement the *FFI_Export* type in Idris
- ▶ successfully export functions like *not* : *Bool* $\rightarrow$ *Bool* to OCaml header (.mli) files that can then be called

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- Getting familiar with Mirage

Evaluation

- ▶ write Idris code that calls OCaml routines and Services and test for correct behaviour (vice-versa too)
- ▶ compile programs with the 2 compilers and if they are semantically equivalent then the behaviour should be the same
- ▶ test early during Development
- ▶ upon completion of the advanced deliverable, the Idris networking application will be validated for correctness

Overall project plan

- week 12 — 14 Jan - 20 Jan, week 13 — 21 Jan - 27 Jan
  Implement basic deliverable and start writing the report
- week 14 — 28 Jan - 03 Feb, week 15 — 04 Feb - 10 Feb
  Implement the intermediate deliverable and report Testing
- week 16 — 11 Feb - 17 Feb, week 17 — 18 Feb - 24 Feb,
  week 18 — 25 Feb - 03 Mar
  Attempting the advanced deliverable, Report Testing, **Mirage**
- week 19 — 04 Mar - 10 Mar, week 20 — 11 Mar - 17 Mar
  **week 21 — 18 Mar - 24 Mar — Need to be ready by
  now**
  Validation, Verification, Proofread
  Refactor, Finish Writing up, Prepare Demo
- **week 22 — 25 Mar - 27 Mar — Submission Monday 25,
  12:00 Demo is on Wednesday 27**
  Hooray!