

Learning Web Programming via Haskell

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Where I'm Coming From

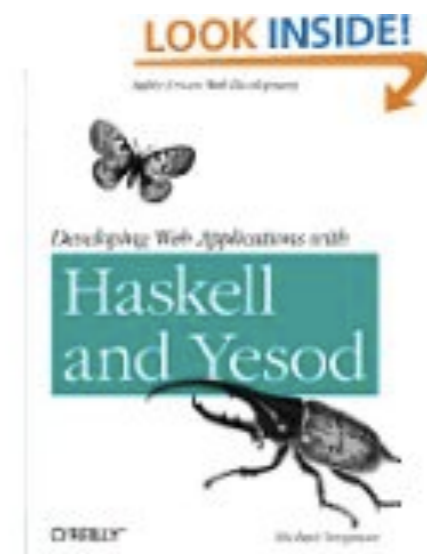
- Mechanical Engineering background
- Developed and managed FORTRAN, C++ mechanical engineering software development

Learning through Play and Work

- Toy programs
- Familiar domain space (laminated composite materials, FEA solver for PDEs)
- Scripts, tools and prototypes for work

Web Programming

- Complete newbie
- Chose Yesod, because it had the best documentation and Michael Snoyman and Greg Weber are active bloggers
- Toy programs from the book



Another Itch

- Project management is a necessary evil.
- MS Project - the standard, super powerful, not fun
- Difficult to make it do what I wanted it to do
- Could I learn web programming and more Haskell by writing an app designed just for me?

Observations of a Newbie

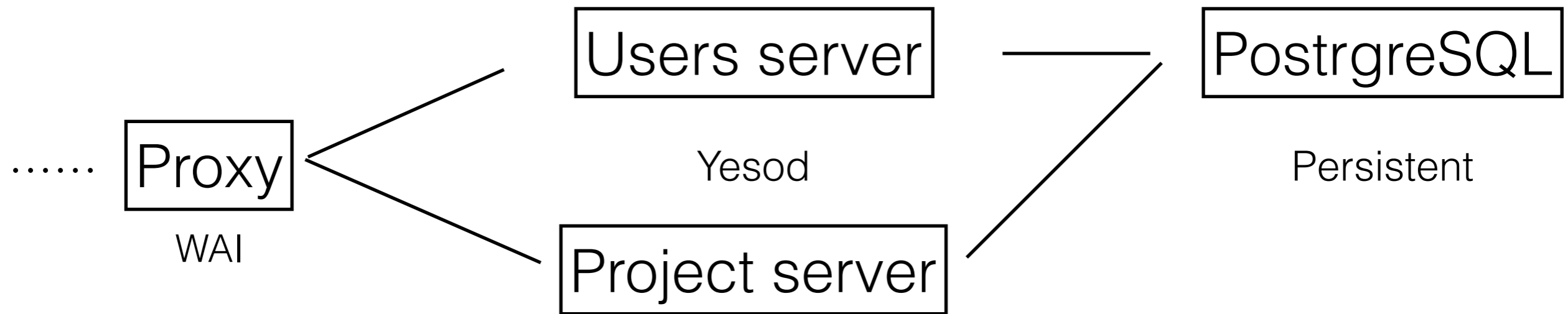
- Steep learning curve
- Yesod and other Haskell libraries are documented assuming the reader has advanced web programming knowledge
- Yesod works very well for the server.
- Broad set of libraries exists
- Super helpful community. Easy to ask stupid questions and get excellent answers. (Yesod Google groups, Stack Overflow, Diagrams Google groups.)
- Have not yet explored Haskell -> JS for client

What's the App For?

- Beyond the To Do list
- Defining, scheduling and tracking tasks
- Small teams needing a simple project management system
- First (or second) level functional managers who need to do some basic project management
- Teams where individual contributors are responsible for their own schedules

Architecture

Design goals: fast, easy to use, collaborative



Running on Amazon Web Services

Libraries Used

- Yesod ecosystem: shakespeare templates / persistent
- stripe (payment system)
- diagrams / blaze-svg (for drawing the Gantt chart)
- aeson
- cereal
- mime-mail (for invitations and status updates)
- Bootstrap, JQuery

Bottom Line: It's Doable

Planit9

User Home

Create ▾

Help

Haskell Meetup Talk Home

planit9 - starts May 1, 2014 [Edit](#)

Timeline

Tasks

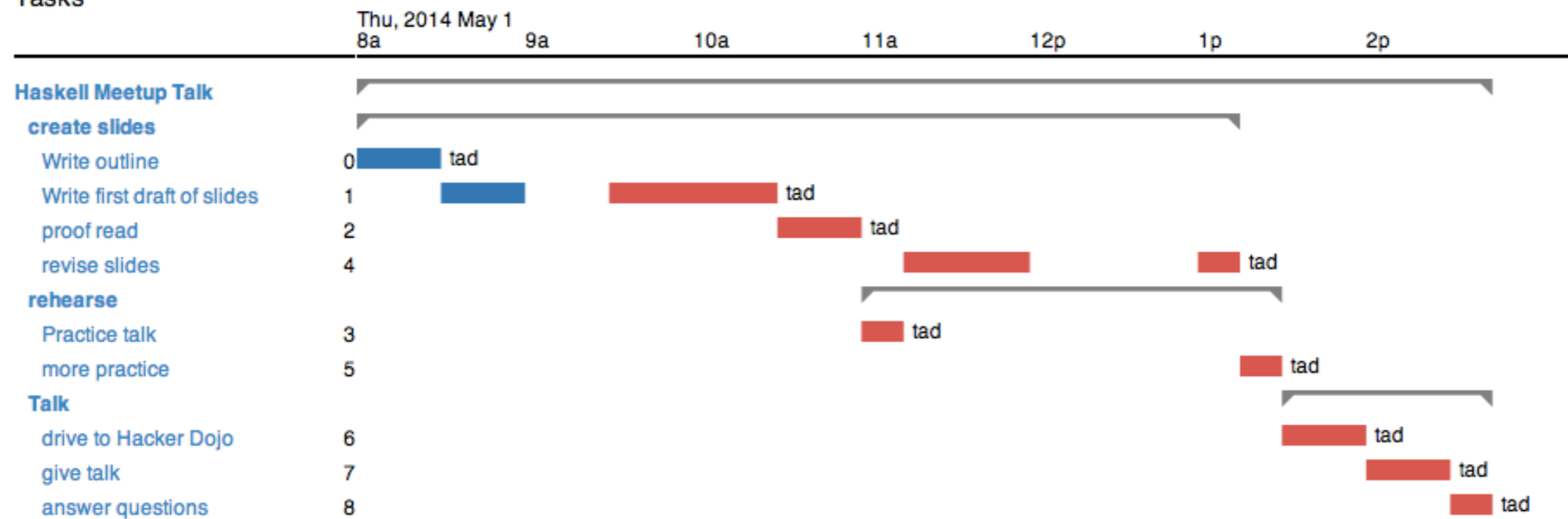
Progress Reports

Calendars

Day Schedules

Workers

Tasks



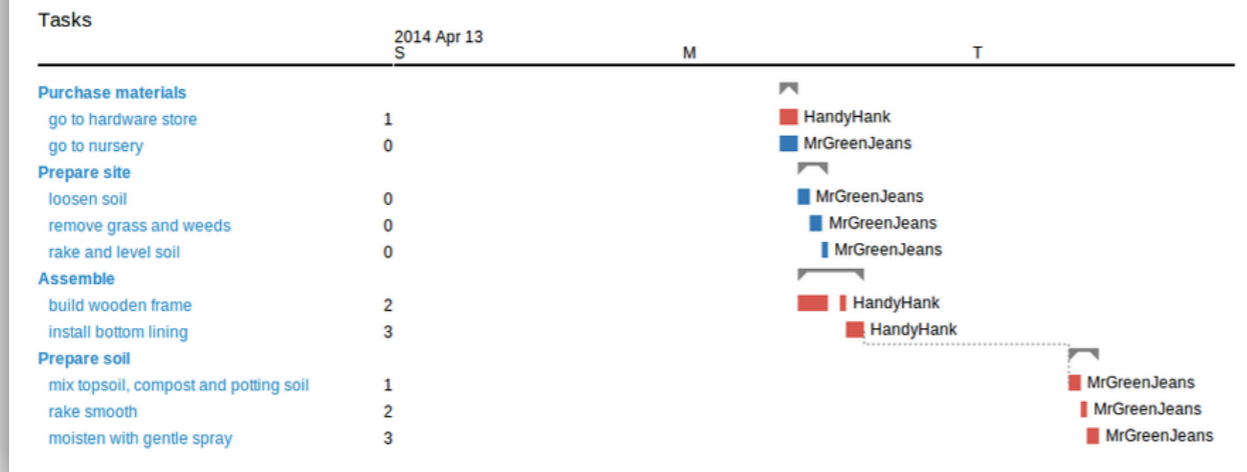
New Task

New Summary Task



Demo

Live Timeline



New Task

Name

Assigned To

Work Time (hours)

Priority

Subtask Of

Depends On

OK

Quick and Detailed Progress Reports

Time Period

Start

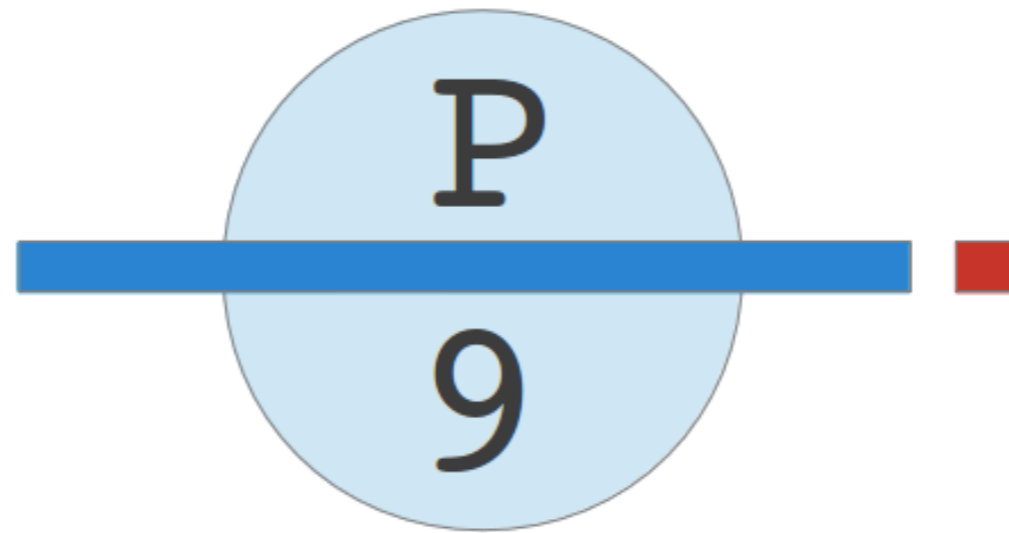
End

Tasks

Task	Work Completed (hr)	Work Remaining (hr)
go to nursery	1.5	0.0
loosen soil	1.0	0.0
remove grass and weeds	1.0	0.0
rake and level soil	0.5	0.0
<None>		

OK

Looking for Beta Users



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