

Material and some slide content from:


- Emerson Murphy-Hill
- Software Architecture: Foundations, Theory, and Practice
- Essential Software Architecture

# SE2: Introduction to Software Architecture

Reid Holmes

Wednesday, January 9 2013.





# INFORMATION SESSION ON GRADUATE STUDIES IN THE FACULTY OF MATHEMATICS FOR 2<sup>ND</sup>, 3<sup>RD</sup> AND 4<sup>TH</sup> YEAR UNDERGRADUATES

**THURSDAY, JANUARY 17<sup>TH</sup>, 2013**

**4:30 – 6:00 PM**

**MC 2066**

For those who need to know what  
Graduate Studies is all about in the  
Faculty of Math

- *Talk to Department Representatives*
- *Ask important questions*

*Refreshments / Snacks will be served*

We will have an overview of what Graduate  
Studies is all about including a brief  
description from each unit:

- **Applied Mathematics**
- **Combinatorics & Optimization**
- **Computational Mathematics**
- **Computer Science**
- **Pure Mathematics**
- **Statistics & Actuarial Science**

# Deliverable 0 Discussion

- ▶ MVC, MVVM
- ▶ ‘Sparse architecture documentation’
- ▶ Readability, maintainability, performance
- ▶ UI design vs system design
- ▶ DevOps
- ▶ Scrum, Github, and version control

# Group Organization





# Project Proposal

- ▶ Due January 20 @ 0800 to [rth.se2@gmail](mailto:rth.se2@gmail.com)
  - ▶ Max 3 slides (+title slide) in PDF format for pitch
- ▶ Due January 21 @ 0800 to [rth.se2@gmail](mailto:rth.se2@gmail.com)
  - ▶ Project description
  - ▶ Two usage scenarios
  - ▶ Functional / non-functional requirements
- ▶ Project pitches in class on January 21

# Project Grading

- ▶ Projects will have a difficulty scale applied to them
  - ▶  $(\text{project} + \text{bonus}) * \text{scale} = \text{final}$
  - ▶ Scale will range between 0.75 and 1.0
    - ▶ 5: completeness (compared to proposal)
    - ▶ 5: utility
    - ▶ 5: polish
    - ▶ 10: difficulty
- ▶ Bonus (2% each)
  - ▶ best pitch, best demo, multi-platform demo, accepted to app store (by exam date)





# Past Project Proposals

Interesting projects from other years

# CS Advisor Appointment System

## Team Legendary Apps





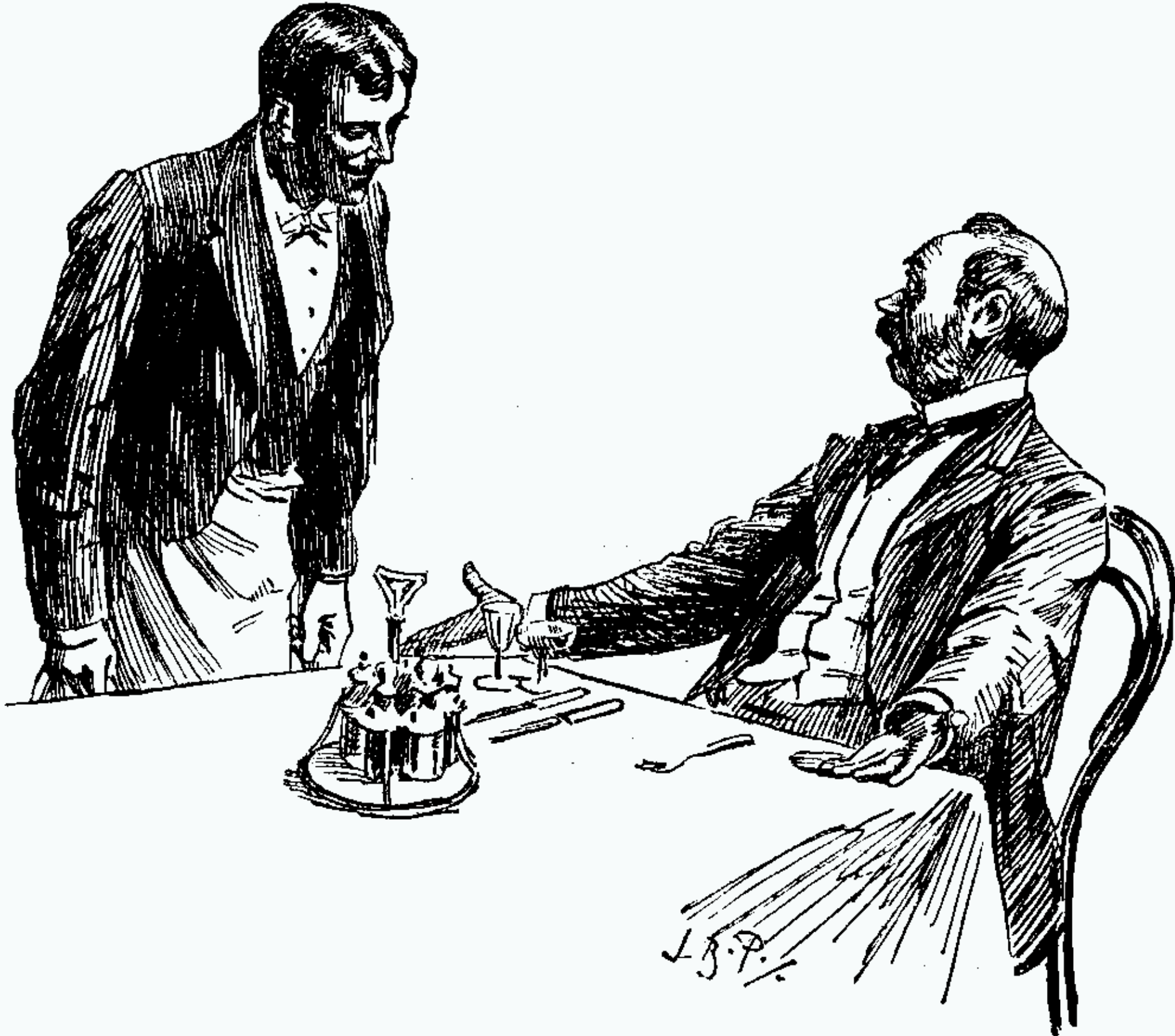


# CS446 – PROJECT WORMHOLE

Developers:  
David  
Andy  
Dennis  
Kuen



# *Connoisseur*







**Always Fresh**  
TimHortons.com



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# Road Trip

# Kitchen Design Activity

- ▶ Architect a kitchen
  - ▶ In your groups, come up with a floor plan for a kitchen.
  - ▶ Include any elements you think a kitchen should have.
- ▶ 10 minutes to design your kitchen
- ▶ 10 minutes to discuss your design with a neighbouring group
- ▶ 15 minutes for class discussion



# Kitchen Requirements

- ▶ What are the high-level requirements?
- ▶ What systems are involved?
  - ▶ What properties do the systems have?
    - ▶ How do they interact?
    - ▶ How is the kitchen used?

# Kitchen Architecture Discussion

- ▶ What are the components?
- ▶ What are their properties?
- ▶ What are their relationships?

# Upcoming Deadlines

Project proposal.

Pass/fail.

0800 Friday January 18.

Email [rth.se2@gmail](mailto:rth.se2@gmail.com)

Full description on course web page.

