

Should Software Engineering Projects be the Backbone or the Tail of Computing Curricula?

Conference on Software Engineering Education and Training

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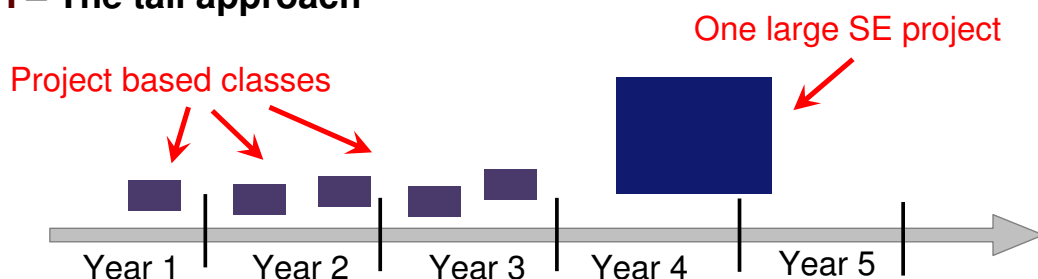
Linköpings universitet

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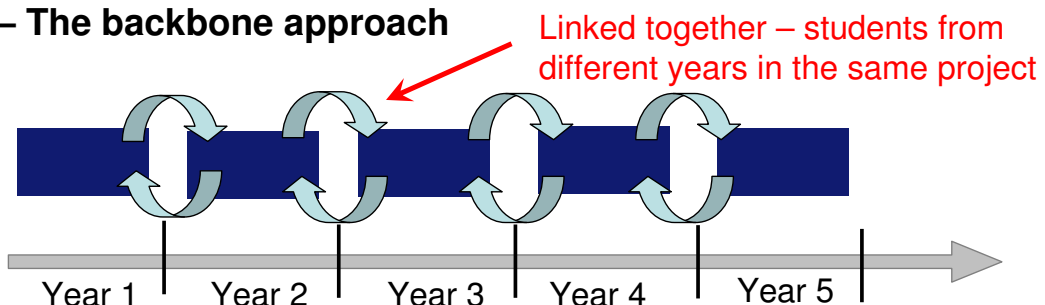
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Introduction and agenda

Part I – The tail approach



Part II – The backbone approach



Part I
The tail approach

Part II
The backbone approach



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Part I

The tail approach

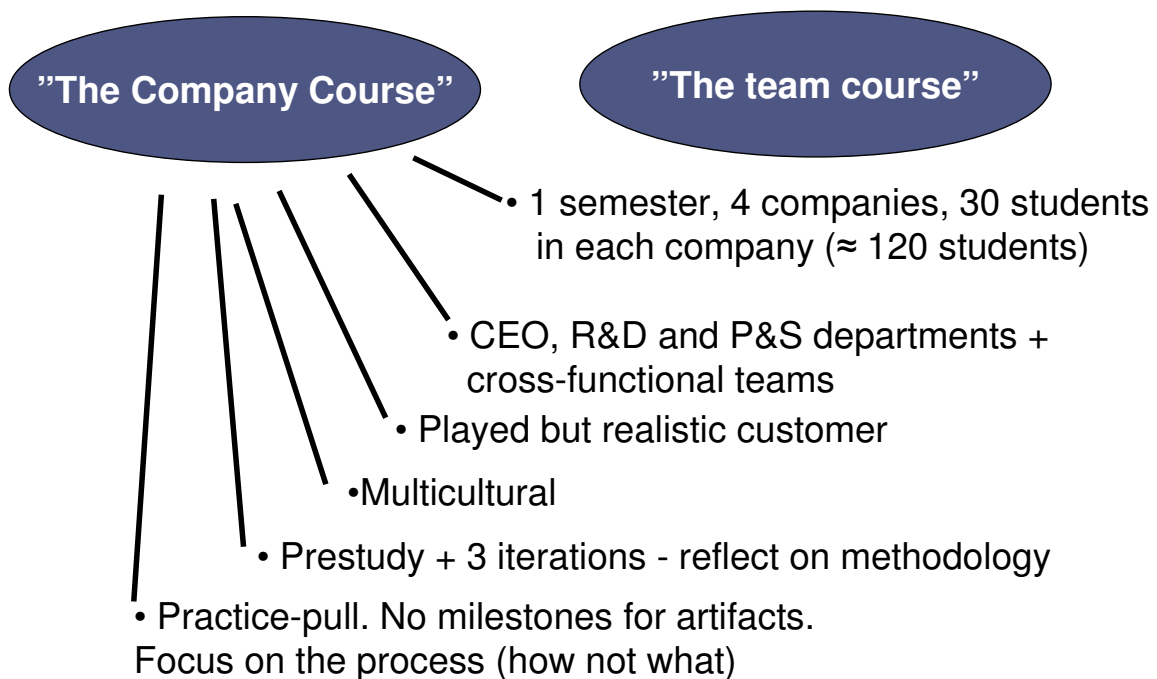


Part I
The tail approach

Part II
The backbone approach



SE Project at LiU, Sweden



Part I
The tail approach

Part II
The backbone approach



SE Project at LiU, Sweden

"The Company Course"

- 1 semester, \approx 10 projects, 8 students in each team/project (\approx 80 students in total)

- Coaching each group weekly

- Technically challenging project

- Fixed process framework - OpenUP

- Real customer from industry – student selects the project

"The team course"



Part I
The tail approach

Part II
The backbone approach



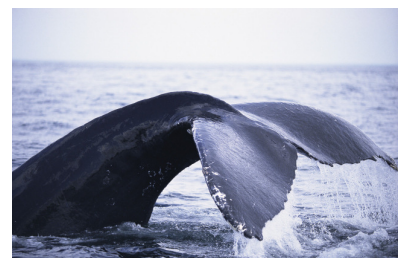
Problems with the tail approach

Breadth of skills

Limited resources
for supervision

**Tail approach
problems**

SE projects
require maturity
of students



Part I
The tail approach

Part II
The backbone approach



Part II

The backbone approach

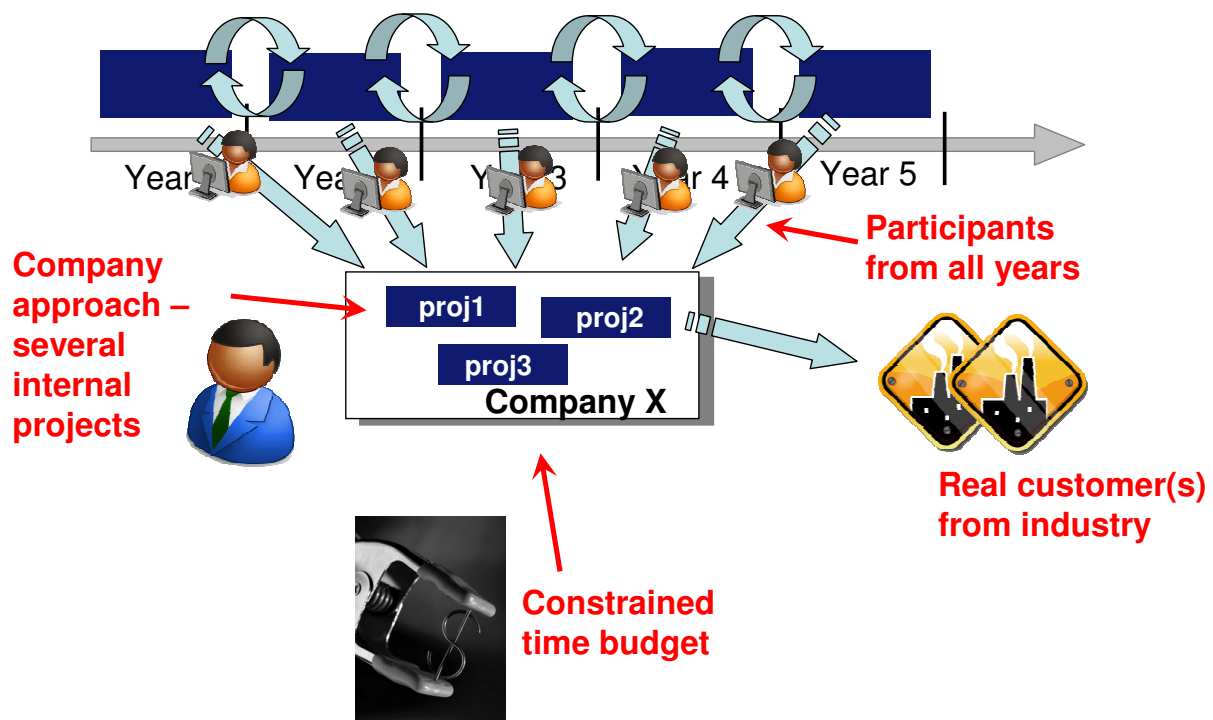


Part I
The tail approach

 **Part II**
The backbone approach



Backbone approach – the basic idea

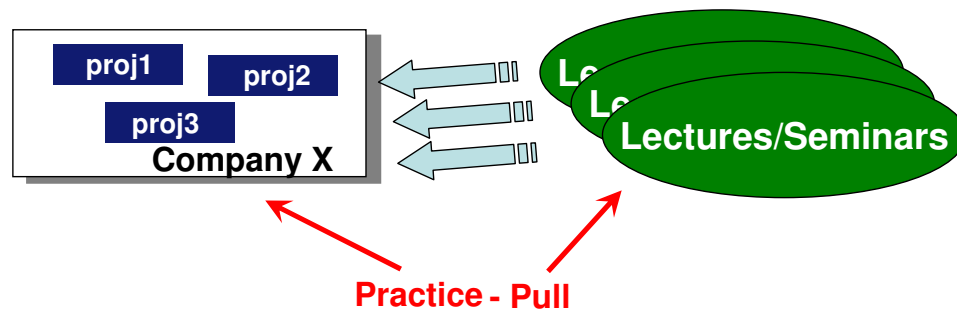


Part I
The tail approach

 **Part II**
The backbone approach



How does this affect other courses?



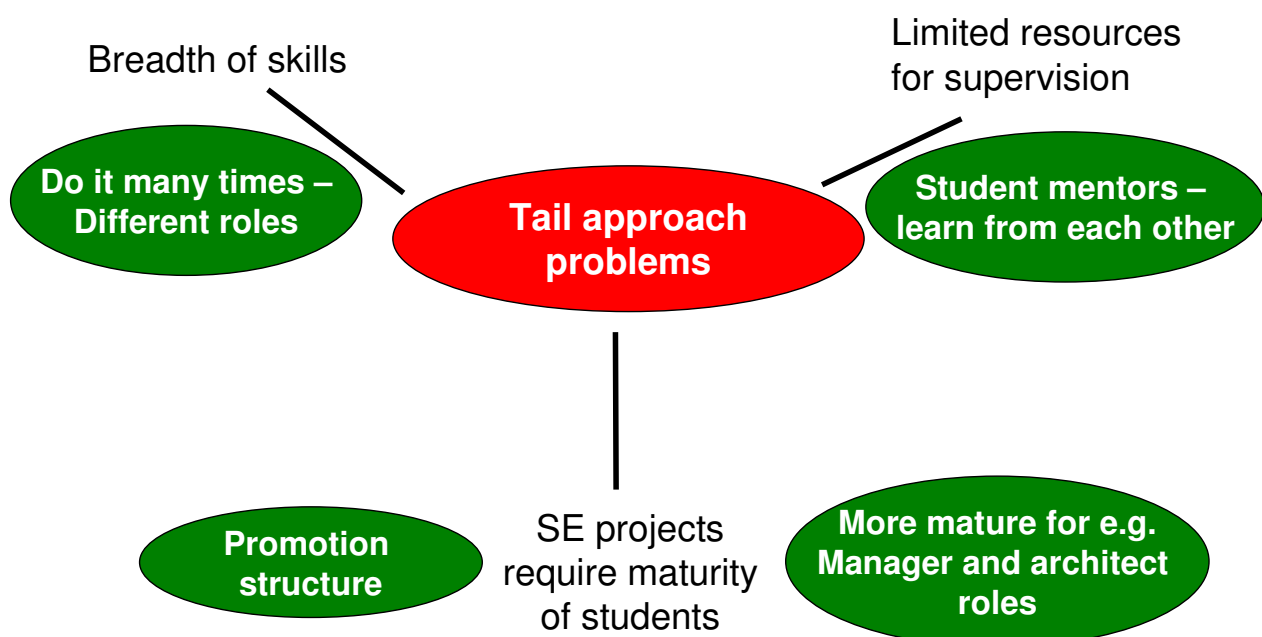
Part I
The tail approach



Part II
The backbone approach



What problems are we solving?



Part I
The tail approach



Part II
The backbone approach



Conclusions

Iterative learning

Practice-pull

**Should Software Engineering Projects be the
Backbone or the Tail of Computing Curricula?**

Active learning in a context

Thanks for listening!



Part I
The tail approach



Part II
The backbone approach