

A Topics Course in Empirical Software Engineering: Bridging Research and Practice

Your class will start soon!
Make sure you have Slack open!



University
of Victoria

EMSE UVic
Week 5
October 9th, 2020

Recap from last week

Theories

Theoretical frameworks

Conceptual frameworks

Subjective inductive knowledge

Objective deductive knowledge

Elise Paradis



Activity reflection: questions -> methods -> theories

Great work!

Questions could have been improved

Security: ethnography/mixed methods

Test driven development: Data mining, experiments...
what does quality mean

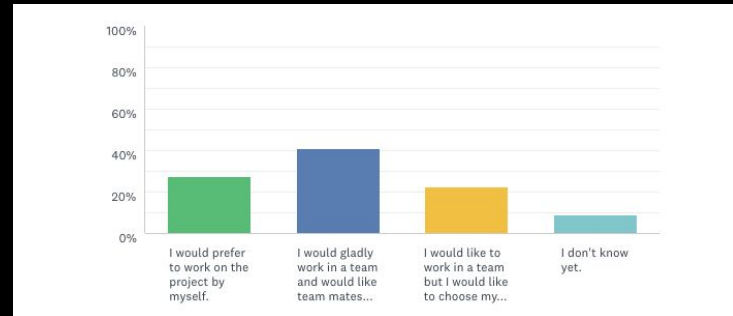
Good insights on theories!

Administrivia

Activities so far (marks posted on Connex)

Workshops, blog posts...

Project #2 you can work in groups or individually (start thinking about it now!)



Today's lecture

Literature reviews in software engineering

Who, What, How Framework

Project #1

First workshop next week!

Continuous software engineering

4 guests!

See the agenda page

Blogpost (details on our webpage)

Project #1

A review of papers from ICSE 2020

Who-What-How Framework (++)

Undergrads: 7 papers each

Grads: 11 papers each

Interim milestones

Milestones

Date	Grads	Undergrads
Oct 14, 6pm	3 papers	2 papers
Oct 21, 6pm	3 papers	2 papers
Oct 28, 6pm	3 papers	2 papers
Nov 3, 6pm	2 papers	1 papers
Nov 6, due by 6pm	Prepare for/do alignment	Prepare for/do alignment

Basic Procedure for submitting responses

For papers assigned to you, you will need to:

- Fill out a survey (choose paper title from pulldown)
- But do a few first (on paper) ... you will adapt your approach!

Questions 3 and 4, 5

Beneficiary (see WWH paper) always one?

Question 4 (optional based on answer to Q3, see Lenberg paper from today)

Question 5 (a quote copied from the paper, or justification in your own words).

Question 6 and 7 (Bonus 8 and 9)

WWH framework paper (but see Design Science paper and theory papers for the bonus)

Bonus: provide a technological rule... or what kind of descriptive contribution.... This is HARD!!!! A+++

Questions 10 and 11

WWH frameworks: methods

See also McGrath paper.

You may want to include some quotes.

Question 11 is bonus based on Creswell. See today's slides!

Question 12-16

McGrath criteria... this part is challenging but you can do it!

Bonus question is very challenging...

E.g., survey with poor sampling strategy what else?

Questions 17-20 (see Design Science paper)

Rigor: How do the authors convince the reader that their research is conducted in a rigorous manner?

Bonus: Do you have any additional comments about the rigor of the methods used?

Relevance: How do the authors describe the relevance of this research?

Novelty: How do the authors describe the novelty of this research?

Questions 21-26

Refer to the Lenberg paper and Swebok for Q24 (Try not to choose too many options... goal is to distinguish the areas...)

Some tips!

Do this for a few papers before you enter your responses.

You don't have to understand every detail in the paper to answer these questions (but it helps... especially for the bonus questions)

Print out the background materials and have them on hand! You will need to refer to them often. (I added these to the project1 description)

Do this alone, you will gain other perspectives in the alignment phase.

Expect mismatches... ! (but too many may indicate you did not understand the concepts)