CMPT 373
Software Development Methods

Introduction

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  - Research Faculty

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  - OR: just search for "CMPT 373 sumner"

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- Where can you discuss course issues?
  - CourSys

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- Videos!
  - The course schedule will have links to excellent videos + external resources

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  - tools
  - project management
  - writing better code
  - dealing with a (possibly troublesome) customer
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  - project management
  - writing better code
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- Slightly different than many courses
  - Less emphasis on “getting the right answer”
  - More emphasis on being aware of trade offs & using the right skills

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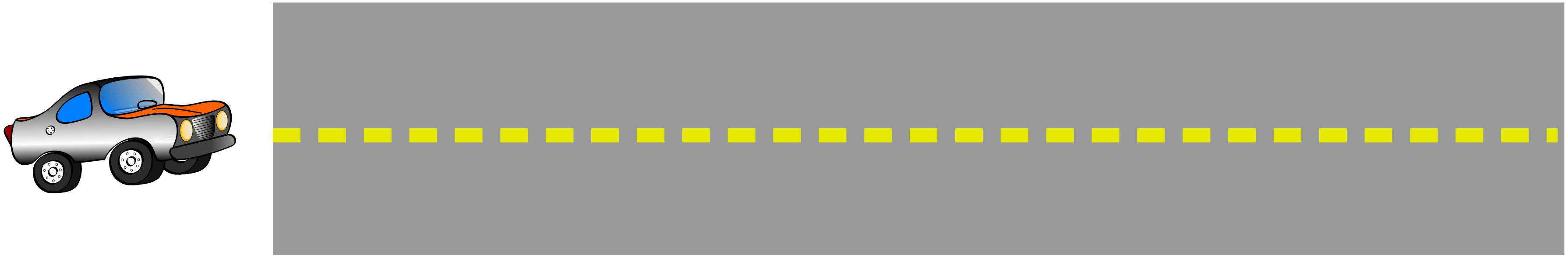

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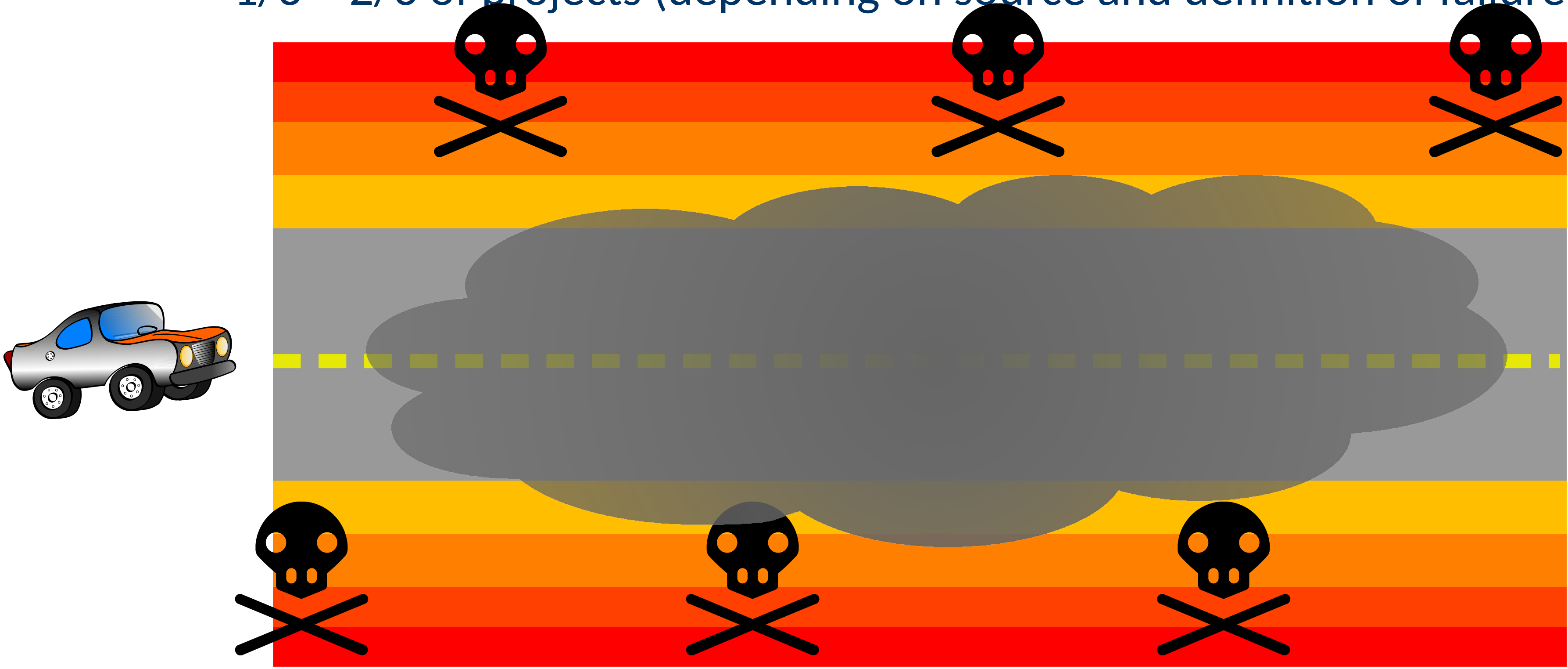

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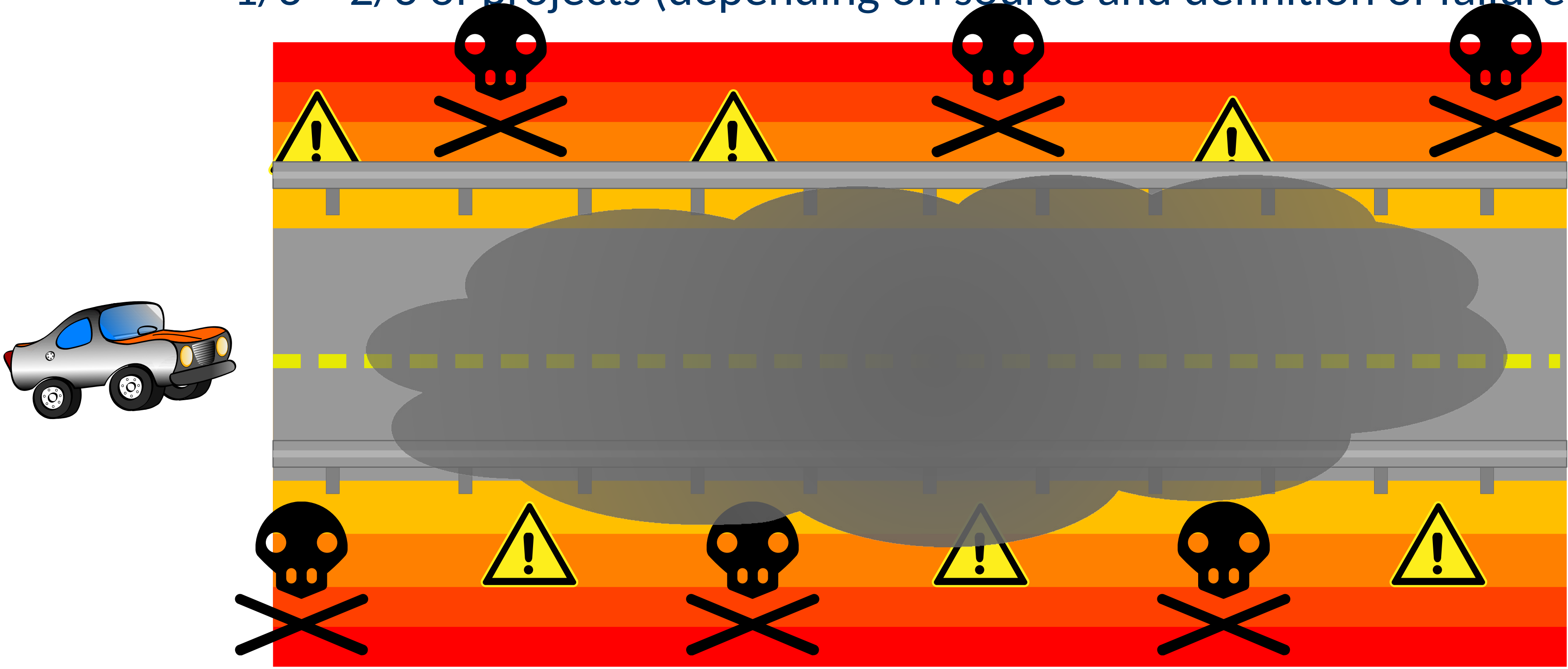

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- Most graduates with a CS degree are not ready
  - Software engineering is about *process* and *awareness*
  - Software development is a *craft* that requires practice
- Hands on experience yields an advantage
  - You can better understand how to create a product that has value both now and in the future.

What will we be doing?

- On your own
  - Reading
  - Exercises (tools, programming techniques, workflows)

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  - Exercises (tools, programming techniques, workflows)
- In groups
  - One development project with unclear requirements
- In class
  - Practice the techniques learned
  - Q&A about lecture material
  - Discussions about the reading, tools, programming, term project
  - Meeting with your adversarial customer

Grading

- Breakdown:
  - (10%) Responses to reading
  - (5%) Class discussions & code reviews
  - (10%) Midterm
  - (25%) Exam
  - (25%) Useful contribution to semester project
  - (25%) Programming exercises

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- Late Policy
  - 3 late days to use throughout the semester
    (on exercises & reading responses)

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  - Often ~100 pages per 1-2 weeks
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- The reading schedule is already posted

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- Your first exercise on prerequisite skills is available now!

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- In class discussions of both code & readings focus thematically on one core issue:

Complexity

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- Different teams may receive different requirements
- You should expect to *personally* contribute >= 1K quality SLOC in order to pass

Project code policy

All code pushed to a project repository may be viewed, analyzed, and critiqued by all students ***in class***
(even in future semesters).

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  - Each team meeting should involve:
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- I will act as both customer & coach

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  - Some teammates will write well from the beginning.
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  - Better designs & process will make the transitions easier.

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- You want to focus on web app development
- You want to focus on learning microservices
  - This last point at least makes sense in this course, but it requires understanding distributed systems and is outside out scope

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  to develop a solution one way versus another

Expectations

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- You understand and are comfortable with the basics of C++ (old or modern)

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  - Your team term project is the only exception.
    If you take it seriously, it can be worth sharing.

So let’s begin the first Q&A!

Q&A

And that’s it for now.

I hope you’re ready for an interesting and collaborative semester.