# CSE 403 Software Engineering

**Course Introduction** 

Autumn 2023

## Today's Outline

- The CSE 403 staff
- Course overview
- Logistics and resources
- Assignment 1 Project proposals

### CSE 403 Au23 Instructor





### CSE 403 Au23 TAs

Ritesh Boddipalli



Melanie Kneitmix



Saket Gollapudi



UW CSE 403 Au23

Vinay Reddy Varadha Pally



Sahil Verma



### CSE 403 Students

Let's hear about you!

### So just what is Software Engineering?

Consider what you, a software engineer, must do to **deliver** a product/service that **delights your customer** on an ongoing basis

# So just what is Software Engineering?

"An **engineering discipline** concerned with all aspects of **software production** from the early stages of system specification through to maintaining [evolving] the system after it has gone into use." — Ian Sommerville

Software Engineering tasks include:

- Requirements engineering
- Specification writing and documentation
- Architecture and design
- Programming (Just one out of many important tasks! 🐯)
- Testing and debugging
- Deploying, operating, evaluating, refactoring and evolving
- Planning, teamwork and communication

### Software Engineering in Practice (MSFT '19)



CSE intro-level courses focus on the inner loop

Our focus is largely the outer loop

8

### Why is Software Engineering Important?

Software is everywhere -- our lives depend on it



Good software engineering allows us to deliver^2

### Why is CSE 403 Important?

- Be exposed to some of the best software development practices in use today
- Understand how software is produced from conception to continuous development and release
- Develop skills to effectively collaborate with others towards a common delivery goal
- Experience the responsibilities, issues and tradeoffs involved in making decisions as software engineers

Much of the above is grounded by working with a team to incrementally deliver a real software product/service

### General Class Timeline (subject to change)

**Important:** See schedule on class website for current and complete details of topics and assignments



### Logistics – Where is Information?

- Website: <a href="https://courses.cs.washington.edu/courses/cse403/23au/">https://courses.cs.washington.edu/courses/cse403/23au/</a>
- Class discussions and announcements (non-sensitive):
  - <u>https://edstem.org/us/courses/47331/discussion/</u>
- Questions to staff:
  - alverson@cs.washington.edu
  - cse403-staff@cs.washington.edu
- Meeting cadence:
  - Lectures M/W/F
  - Team meetings: T
  - Project meetings with TA (product owner): Th

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### ← → C a courses.cs.washington.edu/courses/cse403/23au/ CSE 403: Software engineering Home Calendar Readings Project Syllabus

#### Welcome to CSE 403!

Software engineering goes beyond software development. It includes processes from defining requires strong technical skills, and also strong teamwork and communication skills. Get read skills, and ship a product!

#### Meetings

- Lectures: Mon/Wed/Fri 12:30pm-1:20pm (BAG 261)
- Team meetings: Tue 1:30pm-2:20pm (CSE2 G01)
- Project meetings: Thu 1:30pm-2:20pm (ECE 105)

#### Staff

- Instructor: Gail Alverson (alverson(at)cs.washington.edu)
  Office hours (OH): Mon/Wed 1:30-2:30pm, Fri 9:30-10:30am CSE204 and by appointment
- TA: Ritesh Sai Boddipalli (riteshsb(at)cs.washington.edu; OH: by appointment)
- TA: Saket Gollapudi (saket312(at)cs.washington.edu; OH: by appointment)
- TA: Melanie Jo Kneitmix (mekne(at)cs.washington.edu; OH: by appointment)
- TA: Vinay Reddy Varadha Pally (vpally(at)uw.edu; OH: by appointment)
  TA: Sahil Verma (vsahil(at)cs.washington.edu; OH: by appointment)

#### Syllabus and Project

- Syllabus course description, format and policies
- Course project overview

# Logistics – How does Grading work?

### **Assignments**

- Individual, small group, project group
- Canvas for turn-in
- Something is due each week watch the schedule closely!
- No mid-term or final exams

### **Grading**

- 60% Group project deliverables
  - Project milestones
- 15% Individual project deliverables
  - Meeting engagement, peer-project review, retrospective
- 15% Reading reflections and initial proposal
- 10% In-class exercises and participation

Class Expectations Participate Engage Take initiative Respectful Responsible Communicate Reflect, improve Deliver

# We're off – Assignment 1 – Project Proposals

- Prepare a product pitch in teams of 2-3
  - Think about a problem you'd like to solve
  - Consider what's already in play and available
  - Pitch a solution and its high-level technical approach
  - Use Thurs section to [form a team and] work together; Identify team via class form by EOD Friday 9/29
- <u>Turn in proposal</u>: EOD Monday 10/2
- <u>Present</u> in-class: Tues-Thurs 10/3-10/5
- Rank your preferences: EOD Thurs 10/5
- Learn your team and project! Mon 10/9

### Some 403 Project Examples

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th Ave S. St.	Patty's Par	ty	
Add an Expense			
Name	Costco		
Amount	\$100	Karecurring?	
Due date	1/2/07	Upload receipt	
		A notify?	
Members		Weight (%)	Amount
You		10	10
Tom		5	5
Joe			
Nancy		85	85
Maria			
Tammy			
George			
Chad			
Mary			
			post expense

App to split roommate costs/payments

All-in-one student todo list (canvas assignments x class websites x calendar)

Universally integrated calendar (uw, google, outlook, ...)

Smart music recommendations leveraging AI

CallHome reminder with topic ideas from calendar, news, etc.

### DuoCode

DuoCode makes learning code more fun and accessible than ever. It caters to a diverse range of skill levels and needs. Start learning today!

#### How-to

Sign up or Sign in to get started! For a detailed user guide, please visit the Help page.

### Log In

Don't have an account yo

DuoCode (inspired by Duolingo) to learn coding



Plugin to view history of variables

### Questions?