THE DATA MINE:
ACADEMIC PARTNER WORKSHOPS

Workshop #4: March 8, 2023

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Agenda

January 25	Intro | Stakeholders | Students
February 8	Students | Seminar | Technical Support & Research Computing
February 22	Business Partnerships & Recruiting Industry Sponsored Projects
March 8	**Corporate Partners Course**
March 22	Legal | CRP (cont.) | Putting this into Practice (Q&A)

Please RENAME yourself in ZOOM:

University | Name   *Purdue | Jessica Jud*

Overview of Corporate Partners Course

- Student experience course with data driven projects from industry
  - Fall: 3 credits
  - Spring: 3 credits

- Agile-based project & course management

- Students work directly with industry mentors each week for 1 hour

- Mentoring by experts in industry and academia

- Full academic year long projects (August – May)

Agile Project Management

applied to The Data Mine

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Waterfall vs Agile

Agile vs Waterfall
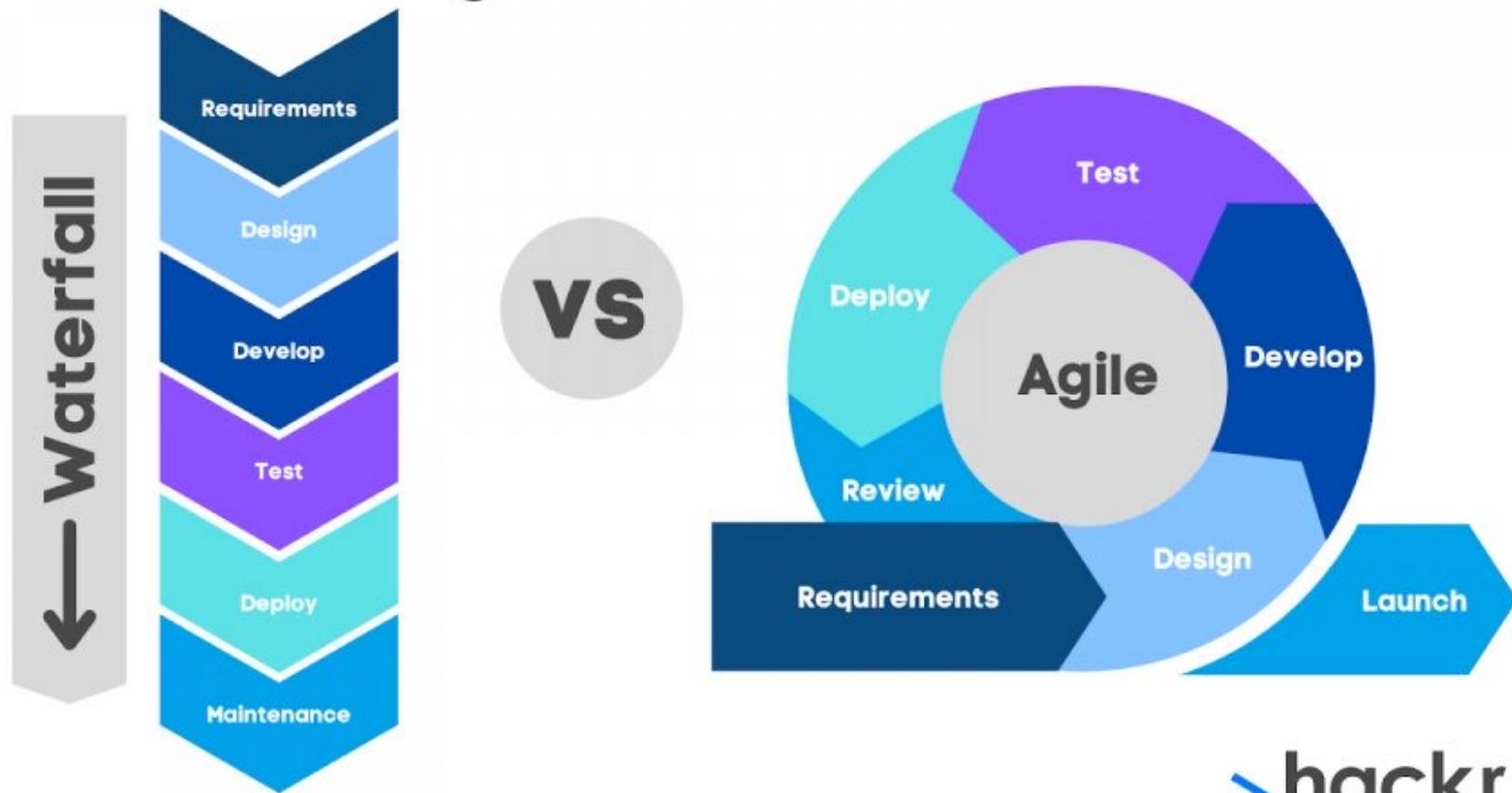
Roles

Corporate Partner Mentors →
Product Owner

TA → Scrum Master

Students → Development team

Faculty → Subject Matter Experts

https://the-examples-book.com/crp/agile/roles
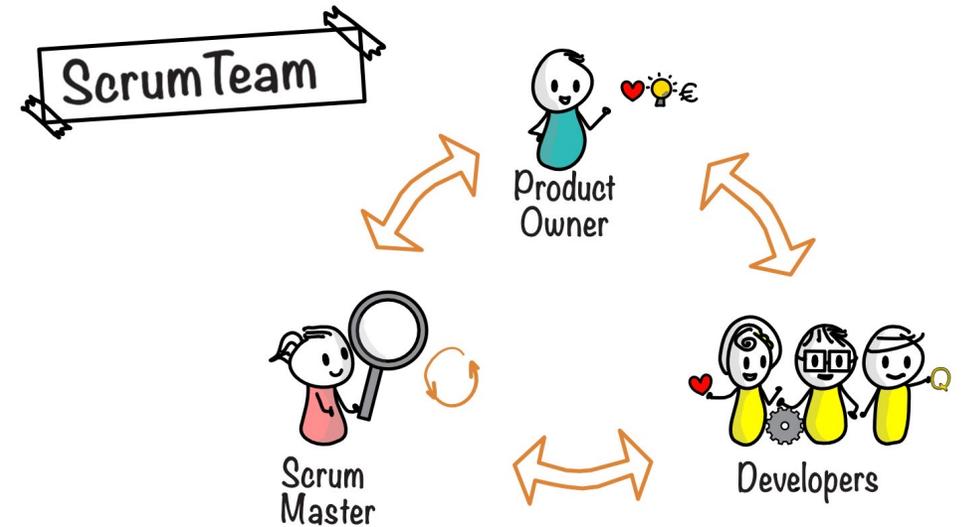
Ceremonies

- Sprint (2 weeks)
- Sprint planning
- Sprint review & retrospective

A Sprint in Agile
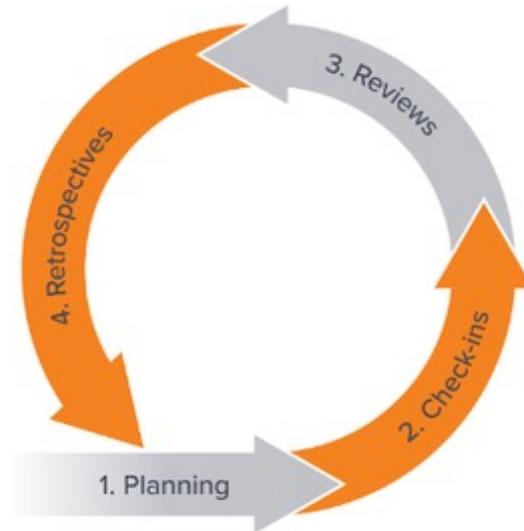
Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
			Meeting (Mon/Tues) then Lab (Thurs/Fri)				
	Lec (50 minutes)			**Lab (1 hr 50 min)**			
1	Sprint Planning			Open Development Time			
2	Sprint Review			Sprint Retrospective and Open Development Time, Complete Retro Sprint Report			
3	Sprint Planning		Sprint 1 Report DUE	Open Development Time			
4	Sprint Review			Sprint Retrospective and Open Development Time, Complete Retro Sprint Report			
5	Sprint Planning		Sprint 2 Report DUE	Open Development Time			
6	Sprint Review			Sprint Retrospective and Open Development Time, Complete Retro Sprint Report			
7	Sprint Planning		Sprint 3 Report DUE	Open Development Time			
8	Sprint Review			Sprint Retrospective and Open Development Time, Complete Retro Sprint Report			
9	Sprint Planning		Sprint 4 Report DUE	Open Development Time			
10	Sprint Review			Sprint Retrospective and Open Development Time, Complete Retro Sprint Report			
11	Sprint Planning		Sprint 5 Report DUE	Open Development Time			
12	Sprint Review			Sprint Retrospective and Open Development Time, Complete Retro Sprint Report			
13	Sprint Planning		Sprint 6 Report DUE	Open Development Time			
14	Check in w/Mentors			Thanksgiving break			
15	Sprint Review			Sprint Retrospective and Open Development Time, Complete Retro Sprint Report			
16			Sprint 7 Report DUE				
			Final Presentations				

Project Charter

Project specific "syllabus"
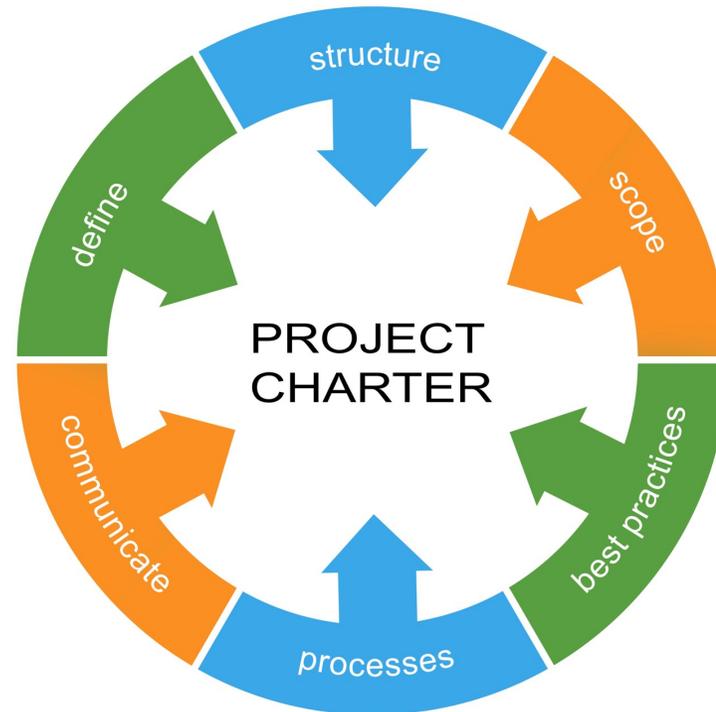
About CRP

About the Company
About the Specific Department/Team
About the Mentor

Project Description

Summary
Objective
About the Data

Tentative Schedule

Getting Started

Goals/Milestones
Fall

Expectations

Team Composition
Teams/Roles

https://the-examples-book.com/crp/mentors/projectcharter

PRE-WORKSHOP "HOMEWORK"

Review the syllabus, specifically, the Student & TA section.

Questions?

https://the-examples-book.com/crp/students/spring2023/introduction

Learning Outcomes

1. Discover and **apply data science tools** to manage data sets from Corporate Partners through researching, cleaning, processing, analyzing, and visualizing data.
2. **Apply Agile project management methodology** to plan task ownership and decision making, collaborate with scrum teams to accomplish the increment during 2-week sprints, review the product backlog, and reflect on areas of success and improvement.
3. **Engage with peers** to identify and overcome complex challenges in the data sciences.
4. **Effectively communicate** findings of technical research through detailed documentation and team presentations.
5. Discover **professional development** opportunities in order to prepare for your career.

Grading

How do we grade a course with so many unique project scopes?

Grade Breakdown

Syllabus Quiz		1%
Read the syllabus and take the quick quiz on Gradescope. You may have the syllabus open while you take the quiz.		
Professional Development		2%
Select one of the professional development opportunities to complete.		
Agile 2-week Sprints		60%
Seven 2-week sprints each worth 10% of your grade. Your single lowest sprint grade will be dropped dropped. You will turn in reports at the end of each sprint to summarize your work and check in.		
Corporate Partners Mentor and TA Evaluation		15%
Mid-Semester Evaluation	5%	
Final Evaluation (cumulative of entire spring 2023 semester)	10%	
Symposium		17%
Drafts (poster, video script)	5%	
Final Poster, Final Video & Presentation at Symposium	12%	
Final Report		5%
End of the academic year report to summarize your experience and provide feedback. Submitted on Qualtrics.		
TOTAL		**100%**

TAs

- **Profile**

  - Typically an undergraduate student

  - Think about who you know already

  - Look for leadership skills and potential

  - Experience leading clubs, sports, internships, etc

  - Does not have to be technically proficient in DS

- **Role**

  - Scrum master/project manager

TAs

- **Responsibilities**
  - Leading 2-hour student lab
  - Grading biweekly sprint reports
  - Liaison between students, CRP Mentors, and TDM staff
  - Scrum master
    - Keeps work on task during sprints
    - Removes roadblocks
    - Finds resources/help as needed

https://the-examples-book.com/crp/TAs/introduction

Symposium

- **Monday, April 24, 2023**
- **Poster Session 4 – 6 PM ET**
- **Purdue Memorial Union – North & South Ballroom**

https://datamine.purdue.edu/symposium

Yearly Rhythms

Summer
- Regular planning sessions with CRP
- TA placements
- Resource development

Fall
- Project Launch with students
- Background/domain learning & ramp up
- Final presentation (internal)

Spring
- Project moving along well
- Poster presentation at (public) Symposium
- Planning for next year starts

LET'S

TALK

PRE-WORKSHOP "HOMEWORK"

1. **Read the Sponsor Acknowledgement**
    https://the-examples-book.com/crp/mentors/legal

2. **Check-in with your University's Legal Office for student projects**

    Ex. Google "Purdue Legal student projects" to find this page:
    https://www.purdue.edu/legalcounsel/resources/Projects.html

WHAT'S NEXT?

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- All post-meeting materials will be posted on The Examples Book

- Questions? Email Jessica Jud at jljud@purdue.edu

THANK YOU

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