



Agile Data Science

Master in Foundations in Data Science

FALL 2021

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Basic Information



DATES:

- Thursday: 14h-16h
- Friday: 14h-16h



LOCATION:

- T1 classroom



MAIL:

- epuertas@ub.edu

Prerequisites

programming experience in **PYTHON**.

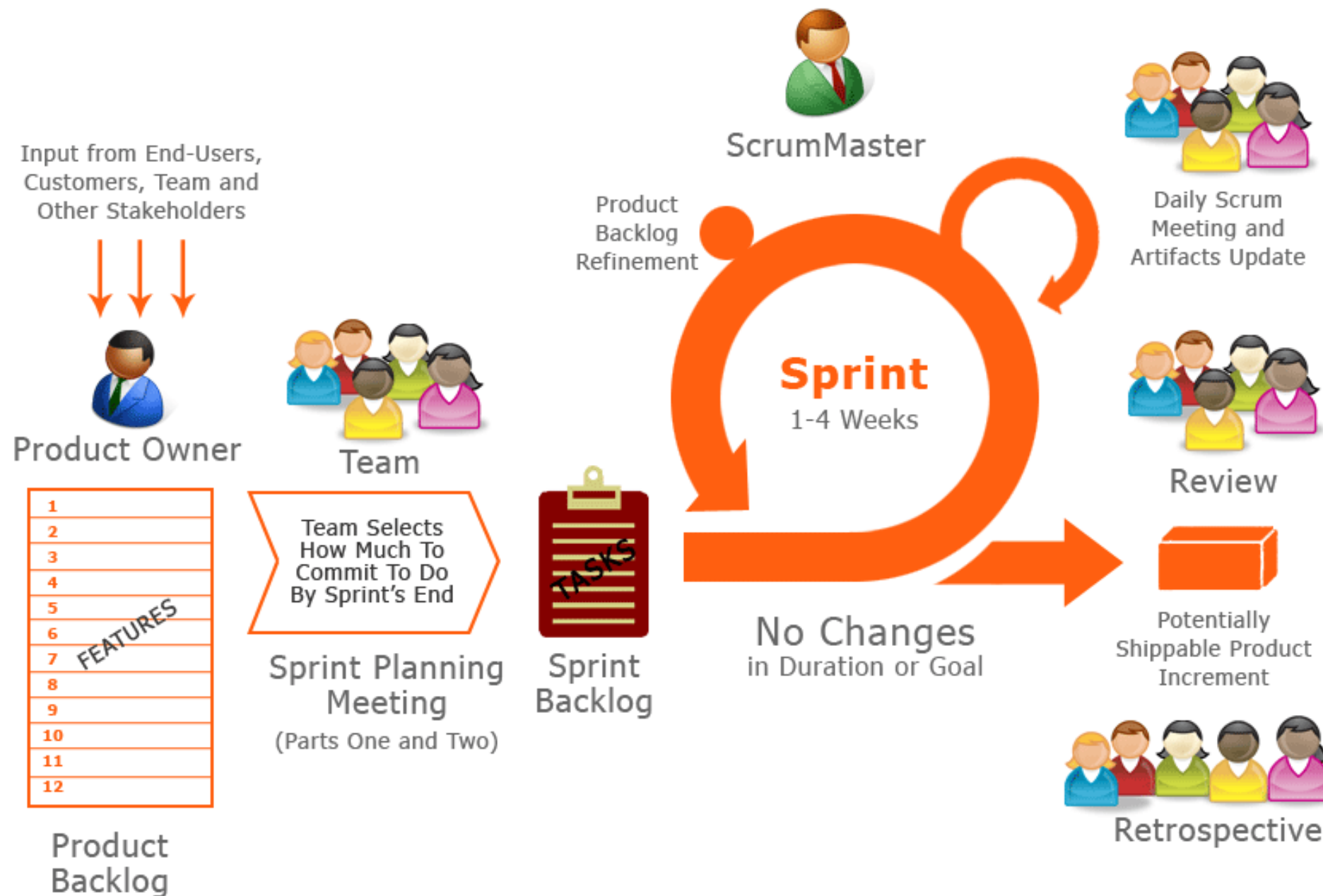


Goals



1. Practice agile methodologies for Data Science applications.

Agile Methodologies

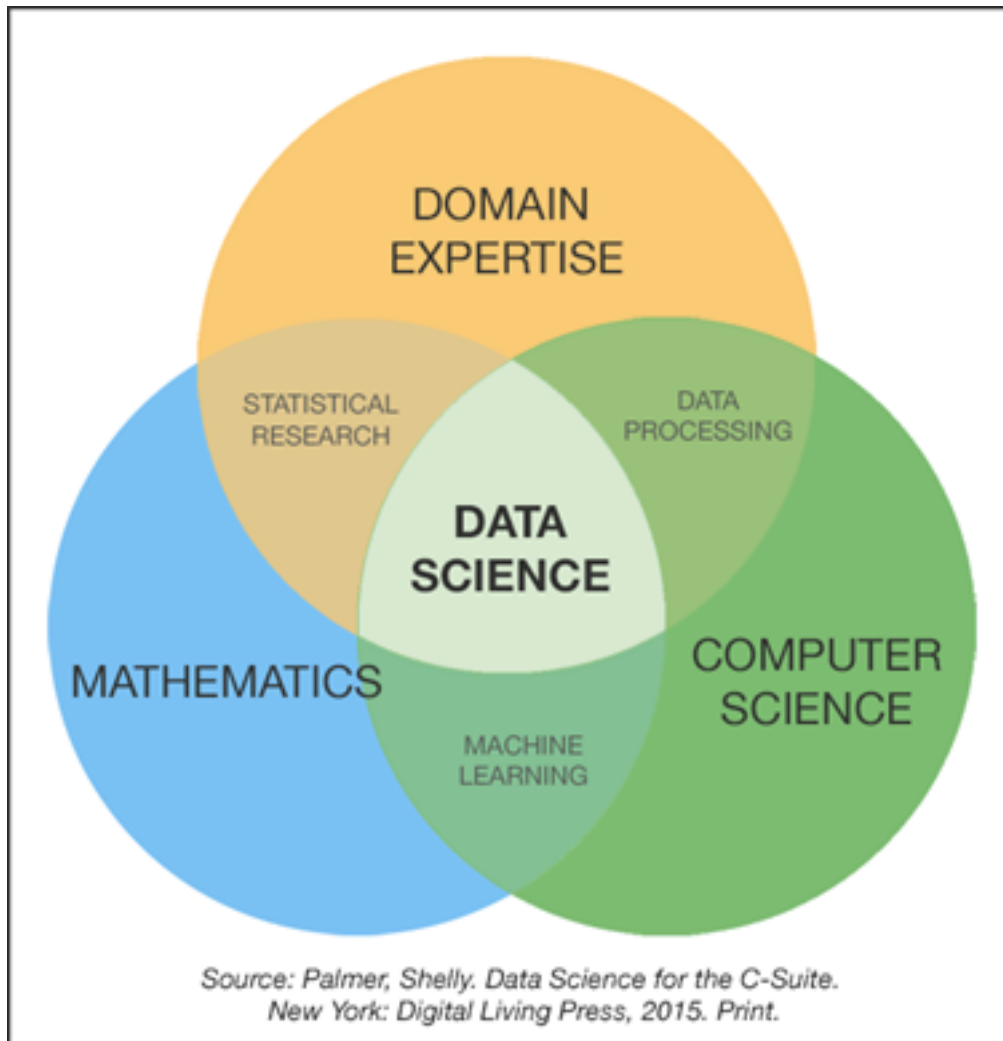


Goals



1. Practice agile methodologies for Data Science applications.
2. Learn about what it's like to be in a Data Science team.

Data Science Team



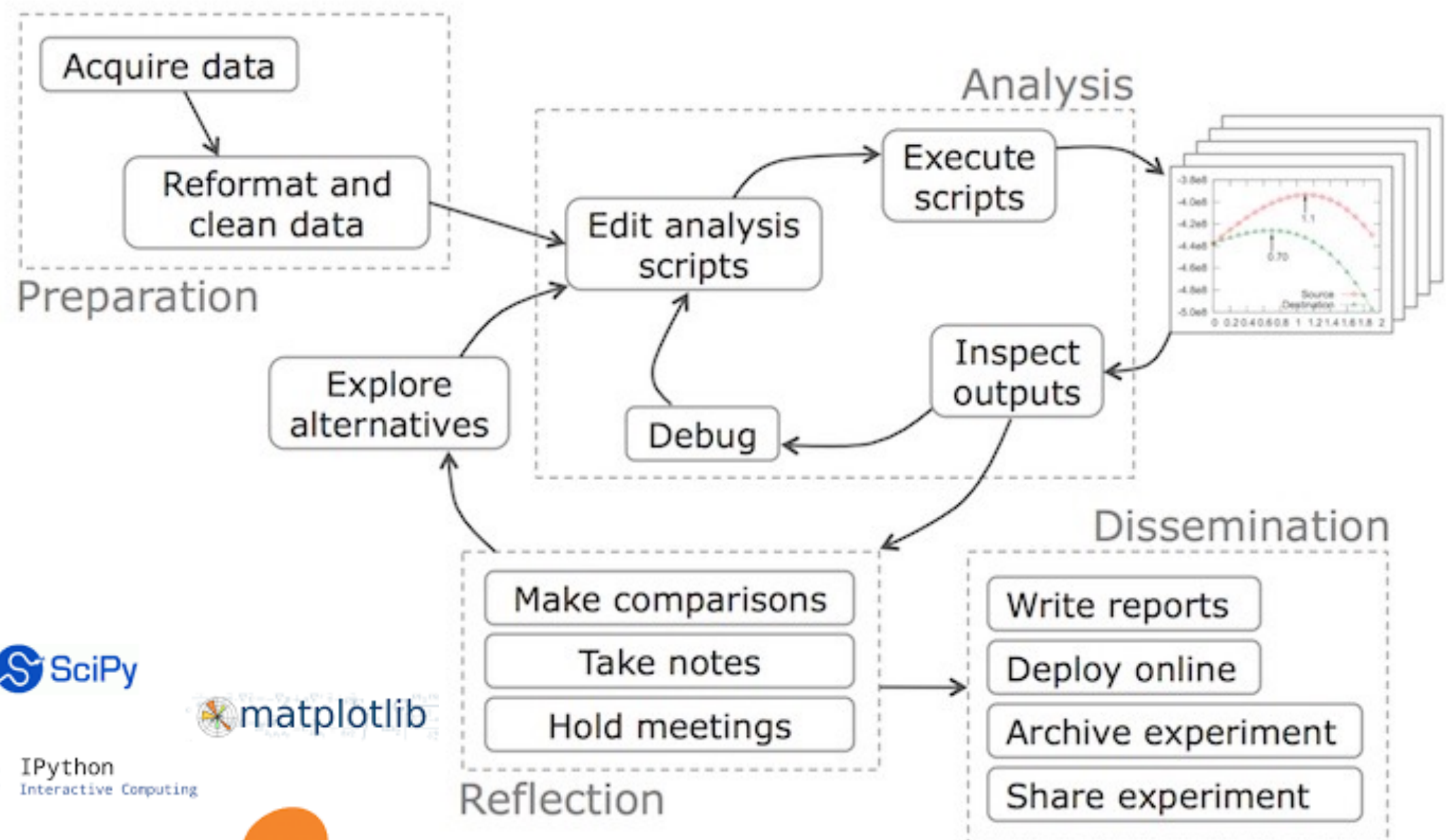
A Data Science Team Can Have All Data Scientist Skills DeZyre

Goals



1. Practice agile methodologies for Data Science applications.
2. Learn about what it's like to be in a Data Science team.
3. Learn about data science workflow

Data Science workflow



IP[y]: IPython
Interactive Computing



Goals



1. Learn about agile methodologies for software developing.
2. Learn about what it's like to be a data scientist.
3. Learn about data science workflow

Course Topics

	Topic
	Introduction to Data Science
	Agile Software Development Methodologies
	<i>Data Science Workflow: Setting up Data Science Infrastructure</i>
	<i>Data Science Workflow: Data Preparation</i>
	<i>Data Science Workflow: Analysis</i>
	<i>Data Science Workflow: Dissemination and Deployment</i>

Course Grading



75%	In Class Project
25%	Exercises

Bibliography

1. **Clean Code: A Handbook of Agile Software Craftsmanship.**
(Prentice Hall) *Robert C. Martin*
2. **Agile Data Science: Building Data Analytics Applications with Hadoop.** (O'Reilly) *Russell Journey*
3. **Data Science from Scratch: First principles with Python.**
(O'Reilly) *Joel Grus*
4. **Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython.** (O'Reilly) *Wes McKinney*
5. **Doing Data Science: Straight Talk from the Frontline.** (O'Reilly)
Cathy O'Neil, Rachel Schutt
6. **Python Data Science Handbook: Tools and Techniques for Developers.** (O'Reilly) *Jake VanderPlas*

Web Site

<https://eloipuertas.github.io/ADS/>