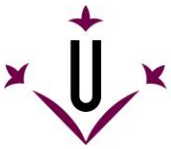
Master 's Degree in Informatics Engineering

2022/23

IT Project Management

Agile Methodology

Prof. Juan Enrique Garrido Navarro
juanenrique.garrido@udl.cat



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AGILE SOFTWARE DEVELOPMENT

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- Rapid software developments processes are designed to produce useful software quickly.
- Agile methods are **incremental** development methods in which the increments are small and typically, new releases of the system are created and made available to customers.
  - *Customers are involved* in the development process to get rapid feedback on changing requirements.

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- ***Individuals and interactions*** *over processes and tools.*
- ***Working software*** *over comprehensive documentation.*
- ***Customer collaboration*** *over contract negotiation.*
- ***Responding to change*** *over following a plan.*

That is, while there is value in the items on the right, we value the items on the left more."

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http://agilemanifesto.org/

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AGILE SOFTWARE DEVELOPMENT

12 Principles

- Customer Satisfaction
- Adaptation
- Frequent Deliveries
- Team Work
- Motivation
- Face to Face Communication

https://agilemanifesto.org/principles.html

12 Principles

- Functional Prototypes
- Constant Work
- Technical Excellence
- Simplicity
- Self-Management
- Quality and Improvement

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Extreme programming (XP)

- Requirements are expressed as scenarios (stories) implemented directly as a series of tasks.
- Programmers work in pairs.
  - Develop tests for each task before writing the code.
  - All test must be successfully executed when new code is integrated into the system.
- There is a short time gap between releases of the system.
- Customers are intimately involved in specifying and prioritizing system requirements.

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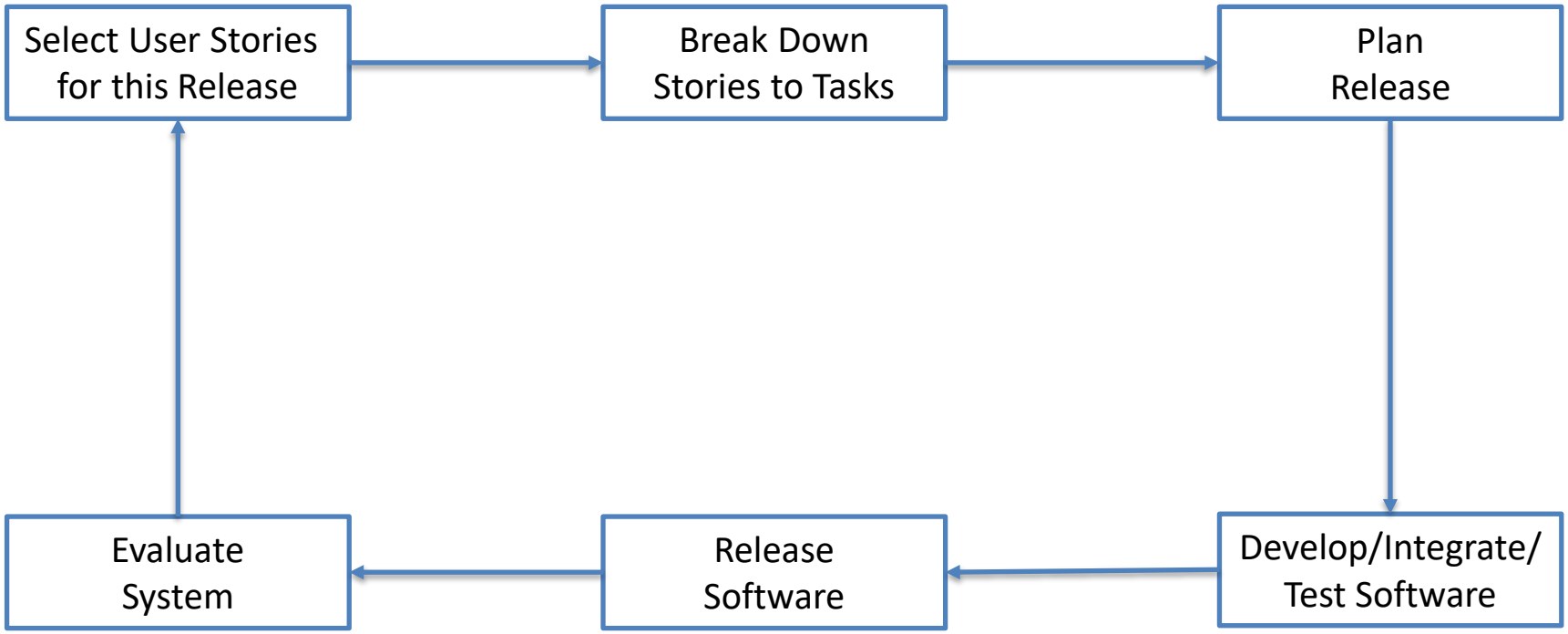

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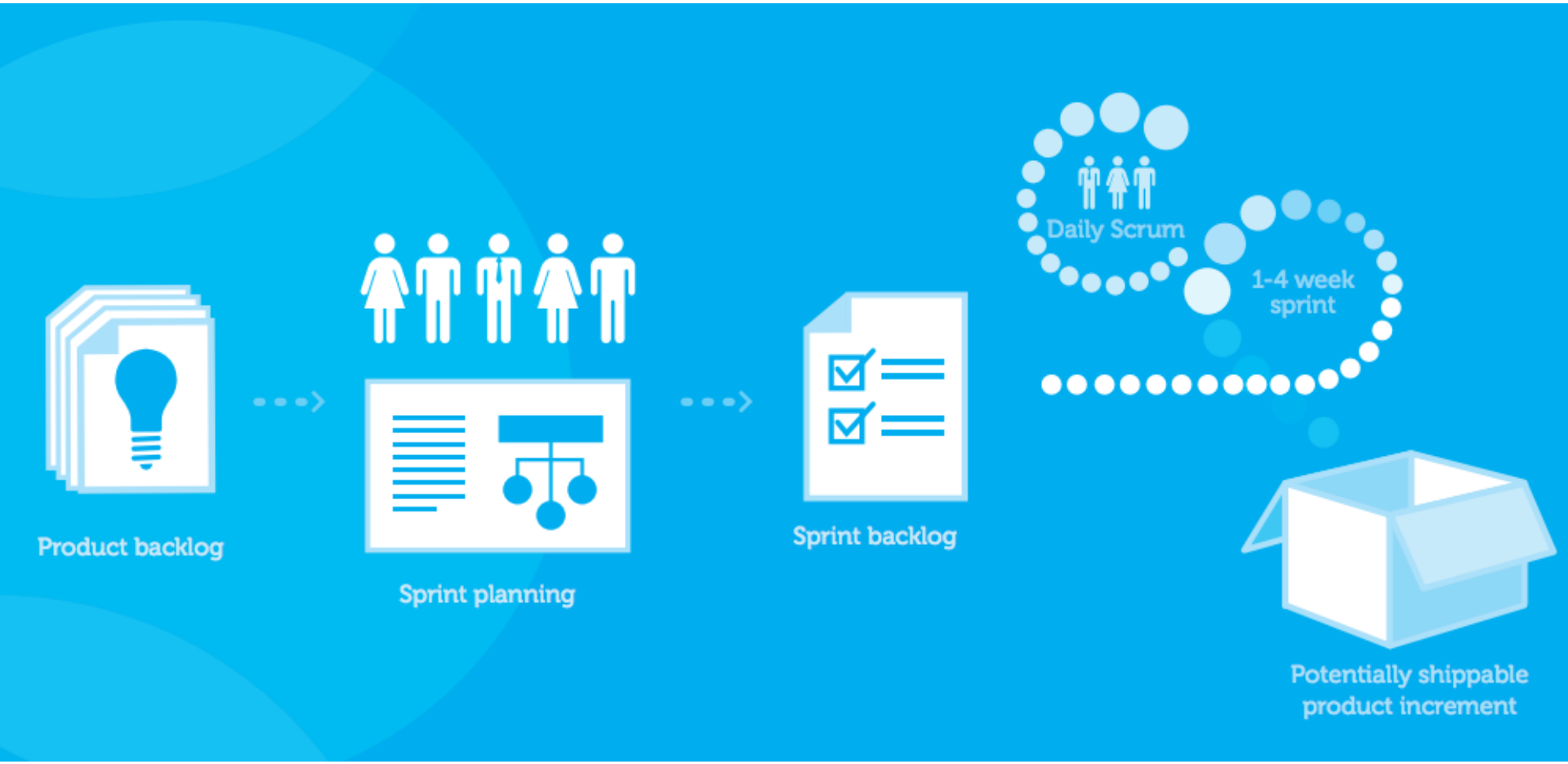
SCRUM



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- Ian Sommerville. Software Engineering. Ninth version. Addison-Wesley, 2011.

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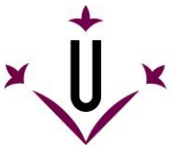

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