ULB UNIVERSITÉ LIBRE DE BRUXELLES

MLG

Digital Twin for Plant Health Monitoring

Rayan Contuliano Bravo

Université Libre de Bruxelles
Supervisors : Pr. Gianluca Bontempi, Pascal Tribel

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ULB Faculty of Sciences

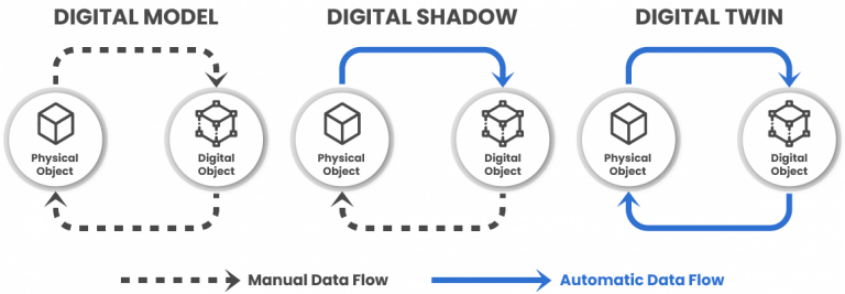
Outline

1. Context

2. Goals

What is a Digital Twin?

- Flow between a **Physical Object** and a **Digital Object**
- Digital Object = **replica**
- Digital Object can **control** the Physical Object



Levels of Digital twinning

Pros in Plant Health

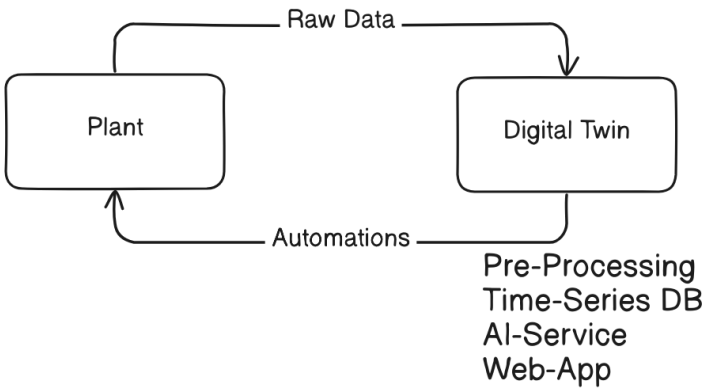
- Optimization of ressources (light, temperature, water)
- Anomaly Detection and Predictive Maintenance
- Simulated Testing and Experimentation
- Remote monitoring
- Smart control

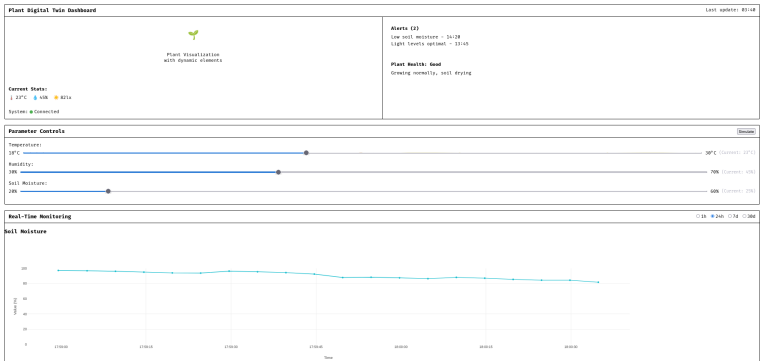
Outline

1. Context

2. Goals

Digital Twin system





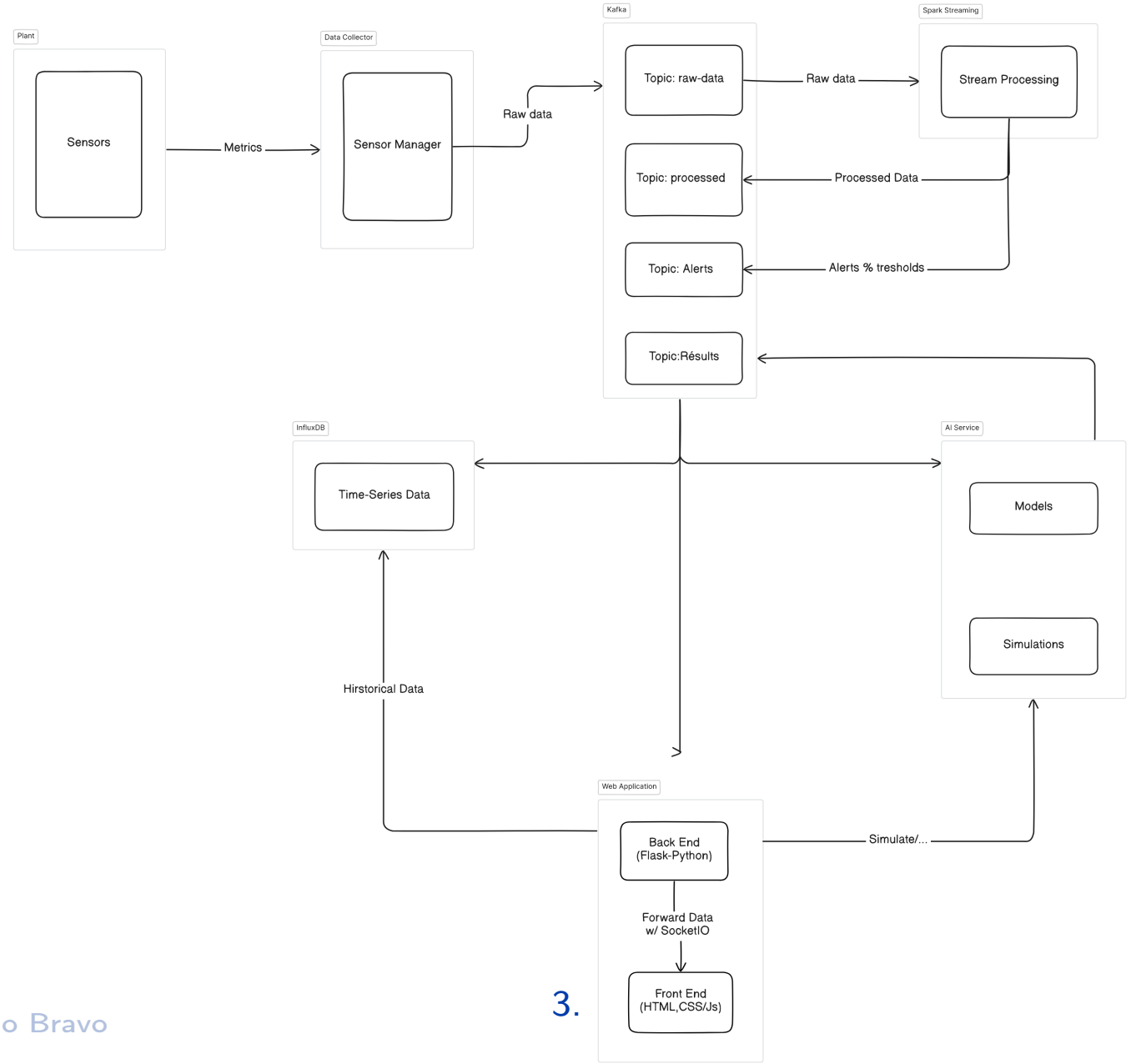
Futur work

- Improve design
- Replace mock-ups with real sensors' data
- Explore different models (online & offline)

Thanks slide

Thank you for your attention!

Architecture



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