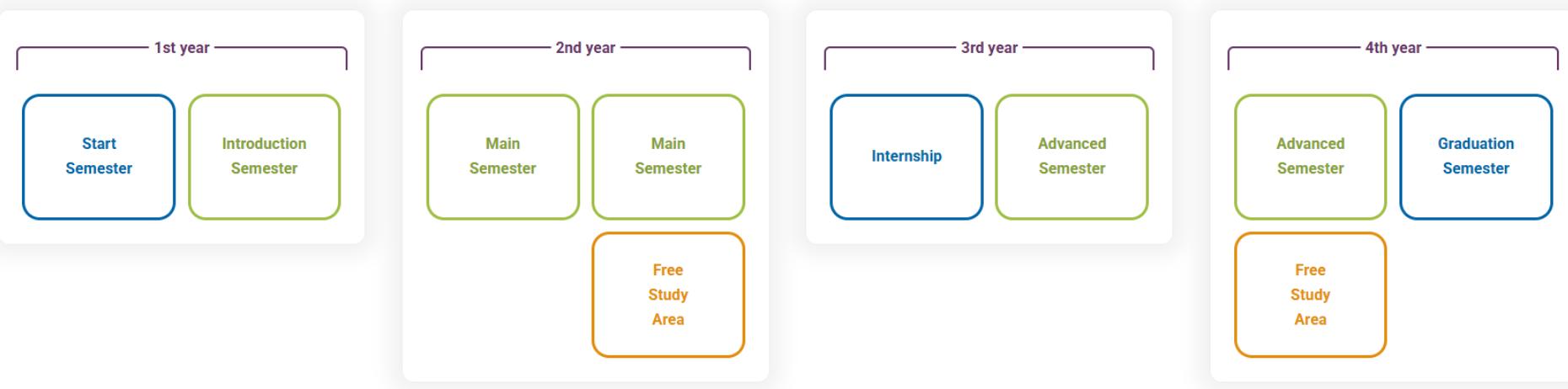




# Exploring the Software Path at Fontys

# Study Programme at Fontys



# Software Path at Fontys

1. Start Semester

2. Software Design &  
Engineering  
(IN-SDE)

3. Full Stack  
Development  
(MA-FSD)

4. Topics for Main  
Semester

5. Internship

6. Complex Software  
Systems  
(AV-CSS)

6/7. Topics for Advanced  
semester OR Topics for  
Free Study Area

8. Graduation

# Start Semester

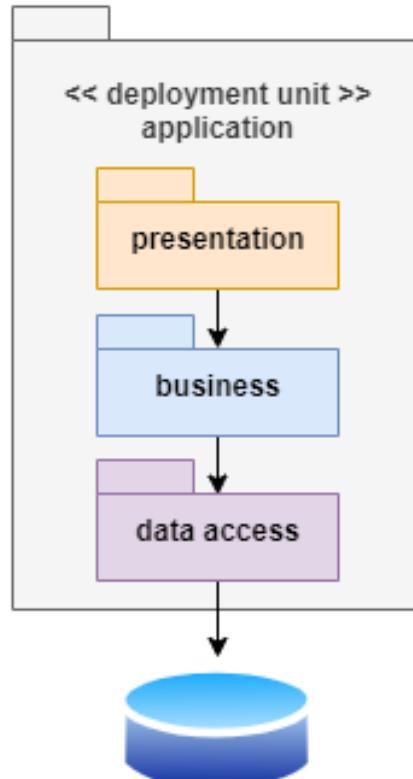
- Scripting
- Basic programming
- **You can (in theory) write every program**

# Introduction Semester Software Design & Engineering (IN-SDE)

You will learn to **analyse**, **design**, and deliver **object-oriented** software solutions

- Define requirements (analysis)
- Design your solution (object orientation, UML, GUI design)
- Realise your solution
  - C# and ASP.NET
  - HTML and CSS
  - Databases and SQL

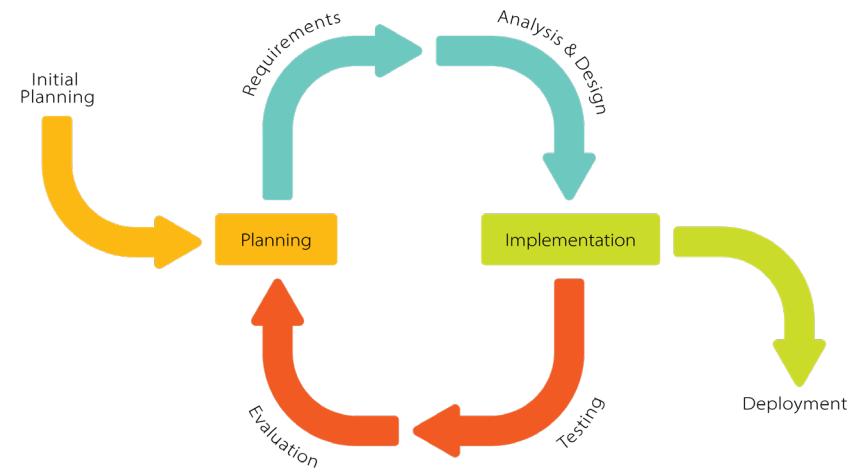
# Architecture Software Design & Engineering (IN-SDE)





# Project of Software Design & Engineering (IN-SDE)

- Real project with Partners in Education (PiE)
- Iterative engineering process

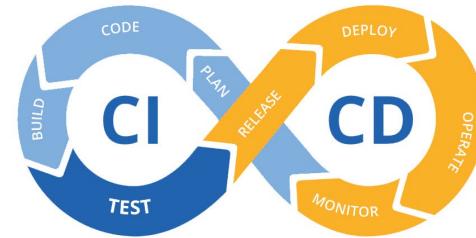


# Full Stack Development (MA-FSD)

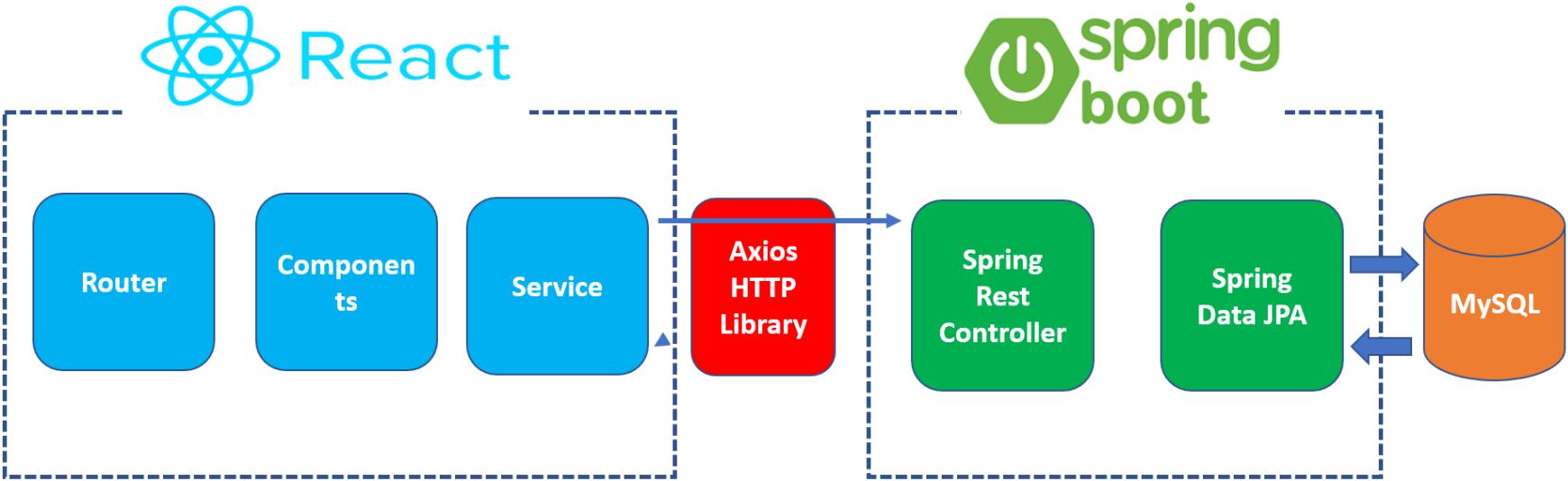
You will learn to create a **full stack** (both front-end and back-end) application using frameworks.

Topics:

- Continuous Integration/Development
- Architecture
- Testing
- UX
- Software quality
- Security

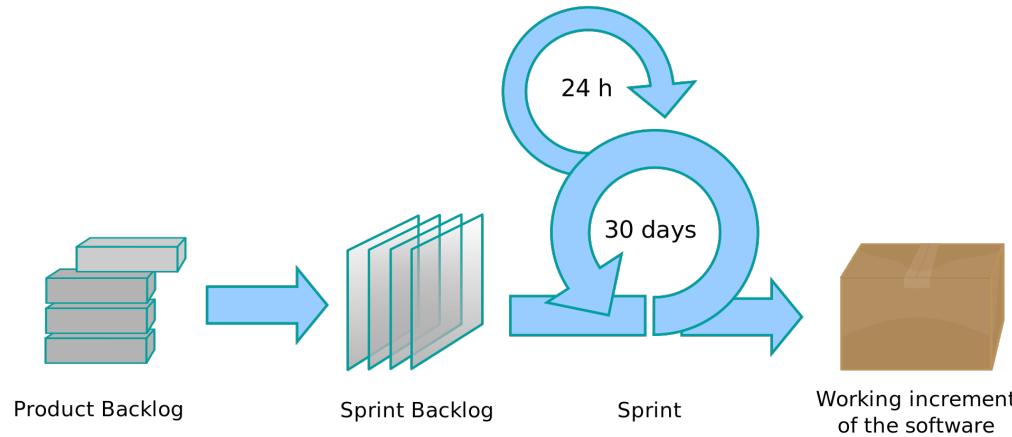


# Main Semester Architecture Full Stack Development (MA-FSD)



# Project of Full Stack Development (MA-FSD)

- Project for an actual client (Partner in Education)
- Agile software engineering process





# Advanced Semester Complex Software Systems (AV-CSS)

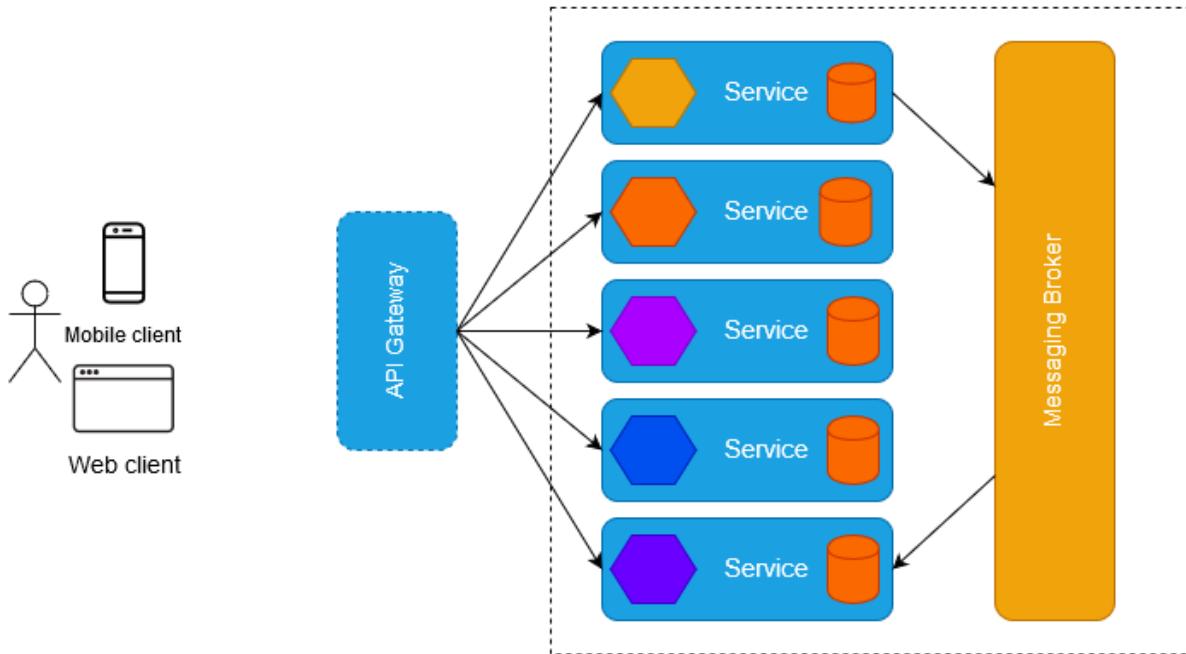
You will learn to design and realise **enterprise software** and will prepare for being a (junior) software engineer.

Topics:

- Scalability
- Cloud
- Stakeholder analysis
- GDPR / Privacy concerns
- Availability / Performance
- Maintainability



# Architecture Complex Software Systems (AV-CSS)



# Project of Complex Software Systems (AV-CSS)

- Project with Partner in Innovation
- Actual request for innovation

<b>ASML</b>	<b>axians</b>	<b>BDO</b>	<b>BIERENS</b> DEBT RECOVERY LAWYERS	<b>blueriq</b>	<b>breeens network</b>	<b>CTOUCH®</b>	<b>CY2</b>
<b>DAF</b> A PACCAR COMPANY	<b>Fontys</b> University of Applied Sciences	<b>GAC BUSINESS SOLUTIONS</b> Better connected to the Digital Neighborhood	<b>EINDHOVEN</b>	<b>HBS HILTON DA COSTA BOOPEN</b> KOFENEN EN CO PKF WALLAST Accountants & Adviseurs	<b>infoland</b> altijd een stap verder	<b>ionbond</b>   <b>IHI GROUP</b>	<b>JUMBO</b>
 Ministerie van Defensie	<b>openmaze.</b>		<b>simac</b>	 Sociale Verzekeringsbank	<b>SUC</b> CLOUD NATIVE SOLUTIONS		

# What happens after graduation?

- You develop **client-server** applications and/or **enterprise software**
- You are a software **professional**: CI/CD, automated testing, frameworks, code review, etc.
- You take software quality, maintainability, security, legislation (GDPR), performance, availability, etc. into account
- You work with **technologies** such as Cloud, Docker, Kubernetes, etc.
- You work with a small group of colleagues as a **team**
- You apply **Agile** (Scrum) for development (continuous delivery)

# Or .... You continue studying

- Fontys ICT: [Master of Applied IT](#)

