

Title: **Web-Based Computer-Aided Design Tool for Service Models**

Description: Computer-aided design (CAD) tools allow people to build models, structure, and present their ideas in a uniformed way, collaborate with others and receive feedback. Today the business value is provided through services and it is tightly related with the organization of socio-technical components. Visualization of these services becomes important in order to make explicit how services are organized.

This project focuses on building a web-based CAD tool. The main goal is to be able to present services with the help of a well-designed user interface (UI), and with intuitive user experience (UX). The edge would be to allow service designers to build models fast, receive instant feedback on the “correctness” of their models, and be able to collaborate with others.

The project consists of research and technical parts split in three milestones:

1. Do a short literature review [research part] on:
 - a. Service design models to understand what it is useful for and why people do it,
 - b. UI editors and UX papers, methods, and tools.
2. Understand selected service models. Then, explore and propose different visualization techniques to approach the service model design in a tool [research and technical part].
3. Build a web UI editor prototype [technical part].

Prerequisites: (1) Motivation to conduct a research based project. (2) Web technologies knowledge.

Benefits for the student:

- Build a web-based tool.
- Learn how to apply visualization and human-computer interaction techniques to achieve a smooth UX.
- Learn SEAM, a business and IT service modeling method.
- Get in-depth knowledge of service-oriented architecture (SOA).

Domain: Computer-aided design, service-oriented architecture, web-based, user experience

Project type: Master or semester project

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