# SCE Example Home

This space provides an overview and short examples of the **Socio-Cognitive Engineering Tool (SCET),** which is built and maintained in Atlassian Confluence (a wiki content tool for teams to collaborate and share knowledge efficiently). SCET provides guidance and structure for capturing, maintaining and refining functional (user) requirements with the design rationale.
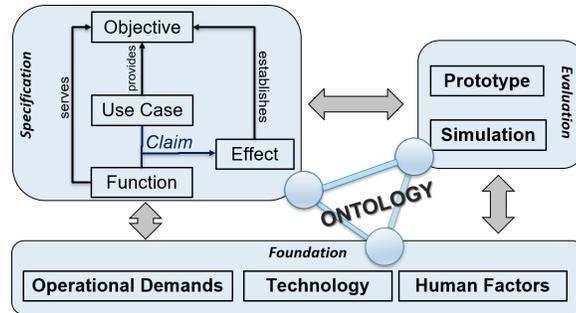
The SCE methodology entails an iterative incremental research and development (R&D) process of human-agent systems with an explicit description of the design rationale. The methodology distinguishes three main components, each providing specific R&D outcomes (see Figure):

- **Foundation**: Operational Demands, Technology and Human Factors.
- **Specification**: Objective, Use Case, Function (requirement) and Effect (claim).
- **Evaluation**: Prototype and Simulation (test).

The SCE activities that provide these outcomes can be performed in parallel. At "some time" they will be integrated into an evaluation (i.e., a prototype or simulation). For this we distinguish development **cycles**. Each development cycle provides a next version of a prototype. **Milestones** are specified for the SCE-outcomes that need to be finished for such an evaluation (*note:* a demonstration can be viewed as a very minimal evaluation).

For agile R&D, SCE defines the **Minimal Viable Product (MVP)** as a coherent and concise set of (interim) SCE-outcomes, i.e. a coherent set of milestones that lead to the envisioned prototype or simulation.

This Atlassian Confluence wiki-environment is called the **Socio-Cognitive Engineering Tool (SCET)**, aimed to support the process as summarized above. SCET provides **design rationale** templates and **links** design concepts to each other (see the SCE Guide). The left frame of SCET shows the items of the main menu (i.e., the "boxes" of the Figure and reference items). General information about the Socio-Cognitive Engineering methodology can be found at http://scetool.ewi.tudelft.nl/; an example application is provided by Neerincx et al.
[1]
(https://doi.org/10.3389/frobt.2019.00118).

References

1. ^ M. A. Neerincx et al., "Socio-Cognitive Engineering of a Robotic Partner for Child's Diabetes Self-Management," Frontiers in Robotics and AI, vol. 6, 2019, doi: 10.3389/frobt.2019.00118.