



SmartHome Requirements

J.-M. Bruel

1.1 – 2021-10-01

Table of Contents

| | |
|---|---|
| Goals | 2 |
| G.1 Overall context and goals | 2 |
| G.2 Current situation | 2 |
| G.3 Expected benefits | 2 |
| G.4 Functionality overview | 2 |
| G.5 High-level usage scenarios | 2 |
| G.6 Limitations and exclusions | 2 |
| G.7 Stakeholders and requirements sources | 2 |
| Environment | 4 |
| E.1 Glossary | 4 |
| E.2 Components | 4 |
| E.3 Constraints | 4 |
| E.4 Assumptions | 5 |
| E.5 Effects | 5 |
| E.6 Invariants | 5 |
| Project | 6 |
| P.1 Roles | 6 |
| P.2 Personnel characteristics and constraints | 6 |
| P.3 Imposed technical choices | 6 |
| P.4 Schedule and milestones | 7 |
| P.5 Tasks and deliverables | 7 |
| P.6 Risk and mitigation analysis | 7 |
| P.7 Requirements process and report | 7 |
| System | 8 |
| S.1 Components | 8 |
| S.2 Functionality | 8 |
| S.3 Interfaces | 8 |
| S.4 Detailed usage scenarios | 8 |
| S.5 Prioritization | 8 |
| S.6 Verification and acceptance criteria | 8 |



This repository constitutes the requirements of the [Smart Home Challenge Problem](#). It follows the method presented in the [Handbook of requirements and business analysis](#). It uses the AsciiDoc template available [here](#).

CHANGELOG

| Version | Date | Comment |
|------------|-------------------|--|
| 1.0 | 2021-09-23 | Initial draft by J.-M. Bruel |
| 1.1 | 2021-09-27 | Stackeholders' initial definition by J.-M. Bruel |
| <i>1.1</i> | <i>2021-10-01</i> | <i>Current PDF version, by J.-M. Bruel</i> |

Goals



Front matter

G.1 Overall context and goals

⚠ Nothing available at this point.

G.2 Current situation

⚠ Nothing available at this point.

G.3 Expected benefits

⚠ Nothing available at this point.

G.4 Functionality overview

1 The [Smart Home](#) must support prevention and detection of unauthorized physical intrusion.

2 The [Smart Home](#) must support prevention and detection of unauthorized computer intrusion.

3 The [Smart Home](#) must provide an identification-based access control system.

G.5 High-level usage scenarios

⚠ Nothing available at this point.

G.6 Limitations and exclusions

⚠ Nothing available at this point.

G.7 Stakeholders and requirements sources

Here is a non-exhaustive list of the stakeholders.

Table 1. Target side stakeholders

| Stakeholder | Category | Comment |
|---------------|--------------------|--|
| Owner | User | Owner of the Smart Home (not necessarily inhabiting it). |
| Inhabitants | User | People leaving regularly in the Smart Home . |
| Medical staff | Medical department | Person in charge of the health of the inhabitants . |

Table 2. Production side stakeholders

| Stakeholder | Category | Comment |
|--------------|----------------------|---------|
| System Admin | Technical department | ... |



Front matter

Environment

E.1 Glossary

This section defines the domain-specific terms used in this document. It also lists the icons used in this document. For stakeholders definitions, see [G.7 Stakeholders and requirements sources](#).

1 Terms

Here is a list of terms' definitions in alphabetical order:

Inhabitants

see [here](#)

Medical staff

see [here](#)

Owner

see [here](#)

Smart Home

The system under development: a home featuring a broad range of automated services to make it, e.g., more convenient, safer, or less costly to live in.

2 Icons

Here is the list of significations for the icons used when tracing the implementation artifacts:

Table 3. Icons signification

| Icon | Signification |
|------|--|
| ☑ | A precisely referenced artifact satisfying the requirement |
| ⚙ | An artifact not yet fully functional |
| ⊗ | No corresponding artifact yet (requirement not satisfied) |

E.2 Components

⚠ Nothing available at this point.

E.3 Constraints

1 Ipse Lorem

E.4 Assumptions

⚠ Nothing available at this point.

E.5 Effects

⚠ Nothing available at this point.

E.6 Invariants

⚠ Nothing available at this point.

Project



Front matter

P.1 Roles

Q Here are the roles for the production of the [Companion Book](#):

- Leader: The person in charge of leading and organizing the writing effort.
- Writers: The persons contributing to the writing effort.
- Reviewers: The persons in charge of reviewing the [Companion Book](#).

✓ [Corresponding Artifact](#)

P.2 Personnel characteristics and constraints

R Ipse Lorem

TBD

Author

[J.-M. Bruel](#)

Date

2021-02-21

Deadline

June

Importance

serious

Needs

- ☐ stakeholders to ask
- ☐ documentation to consider
- ☒ management decision (by Bertrand Meyer)

⊗ [Corresponding Artifact]

P.3 Imposed technical choices

S Ipse Lorem

⊗ [Corresponding Artifact]

P.4 Schedule and milestones

T Ipse Lorem

P.5 Tasks and deliverables

⚠ Nothing available at this point.

P.6 Risk and mitigation analysis

⚠ Nothing available at this point.

P.7 Requirements process and report

⚠ Nothing available at this point.



Back matter

TBD list

[\[p2-persons\]](#).

System

S.1 Components

⚠ Nothing available at this point.

S.2 Functionality

⚠ Nothing available at this point.

S.3 Interfaces

⚠ Nothing available at this point.

S.4 Detailed usage scenarios

⚠ Nothing available at this point.

S.5 Prioritization

⚠ Nothing available at this point.

S.6 Verification and acceptance criteria

⚠ Nothing available at this point.

