System Requirement Specification Document – Dwelling System

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1 Introduction

(This section shall give an overview of the system and this document.)

This document establishes the baseline of System Requirements of a **Dwelling System.** It consists of the formal functional and non-functional requirements derived from the Stakeholder requirements which is a formal document given by the users. This document is prepared considering the requirements brought out in the StRS by the users and is maintained in the Requirement Management tool X with traceability to the Stakeholder requirements . This formal document acts as a baseline for derived requirements and complete traceability to the derived requirements is established and maintained.

1.1 System purpose

(This section shall cover the aspect that why the system is required ? i.e. purpose of the system)

The Dwelling system acts as a sheltering and recreation area for a family of 4 to 8 people. The system will provide best shelter to the users while keeping the maintenance cost to the minimal. The user may exploit the system for any recreational/entertainment activities also ….

The purpose of the Dwelling System is to focus on the development of cost effective sheltering system with modern aids for sports/entertainment and recreational activities.

1.2 System Scope

(This section shall cover the scope/boundary i.e. what all subsystems/elements will be part of the system)

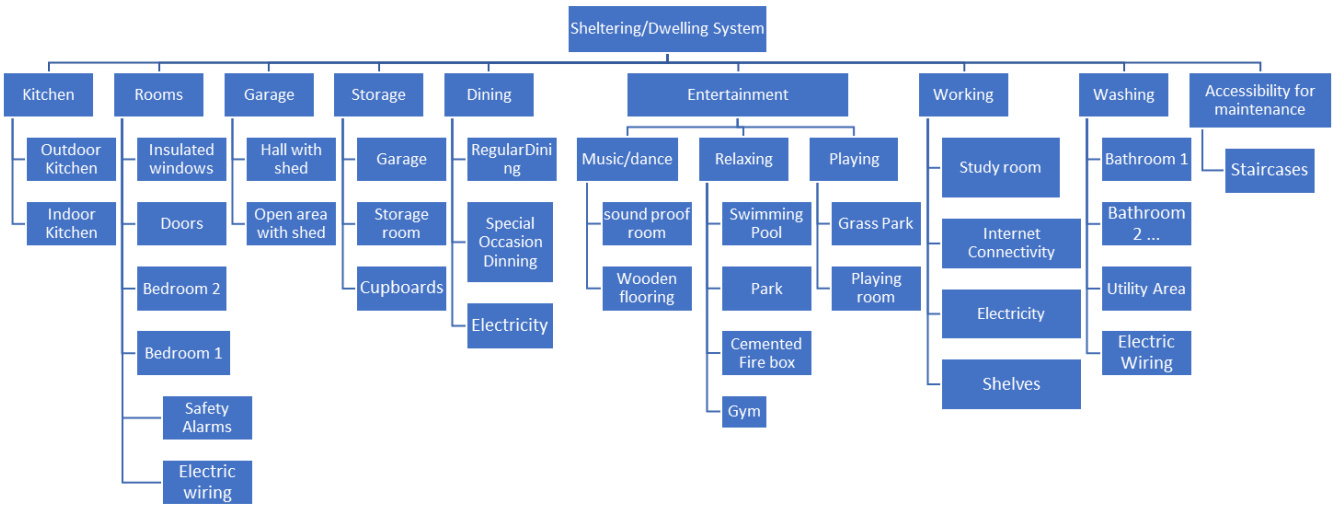
The Scope of the Dwelling system is to plan, design and construct a cost effective sheltering system comprising of units for entertainment, cooking, sheltering, storage, working, playing etc. The scope also includes planning for the maintenance and retirement phases for the system.

1.3 System overview

(This section shall briefly describe the system)

The Dwelling system comprises of 2 floors with 4 Bedrooms and a small kitchen in the first floors and 3 bedrooms and a big kitchen in the seond floor. The system also includes a garage to accommodate parking of 2 cars and suffieicnt open area for 3 more car parkings….

The system breakdown structure is shown in the figure below:



1.3.1 System Context

(This section shall cover the context of the system describing the external entities)

The Dwelling system shall interact with the local electricity board for supply and distribution of electricity. The Water and sewage line connectivity are required for the system for supply of water and waste disposal. The system shall also interface with the local municipal body for collection of waste. The system shall interact with the neighbour area also …

1.3.2 System Functions

*(This section shall cover the major **capabilities/functions** and **constraints** of the system and characteristics of the users who are going to use/maintain the system)*

1.3.2.1 Major Capabilities

The Dwelling system shall provide the following major capabilities:

a) Shelter

b) Entertainment

c) Cooking

d) Dining

e) Sports activities

f) Working

g) Washing etc. (same as identified in the functional hierarchy)

1.3.2.2 Conditions and Constraints

a) The environmental conditions

b) Local municipal body rules and regulations

c) Limited area and cost

d) Working hours during construction constraints etc…

1.3.3 User characteristics

The Dwelling system shall provide capabilities to cater for the following users requirements:

a) Mid aged Couple

b) 4 young/teenage children

c) 2 elderly people

d) Family/Friends

e) Neighbours

f) Contactors/Electrician/plumber involved in construction and maintenance of the system

g) Municipal helpers etc.

1.4 Definitions

(This section shall cover the basic definitions used in this document)

2 References

(This section shall cover the documents reffered for preparation of this document)

[1] StRS

[2] Land Area Plan document etc.

3 System Requirements

(This section shall clearly state all the functional and non-functional requirements of the system)

3.1 Functional requirements

(This section shall cover the functional requirements of the Dwelling system.)

Like..

The system shall provide shelter for 4 adults and 5 children.

The system shall provide spacious area to cater for gathering of 10 people at a time etc….

3.2 Performance requirements

(This section shall cover the non-functional requirements i.e. maintainability, availability of the system)

Like..

The system shall provide a secured closed environment for 24x7

3.3 System interface requirements

(This section shall cover the interface requirements of the system i.e. external and internal interfaces)

3.3.1 External Interfaces

(This section shall cover the external interface requirements of the system)

The system shall interface with the local electricity board for supply of required power.

3.3.2 Internal Interfaces

(This section shall cover the internal interfaces of the system)

Like..

a) The system shall provide electric line from first floor to second floor …

3.4 System operations

(This section shall cover how the system can be effectively used by the users and what are the quality requirement)

3.4.1 Human system integration requirements

3.4.2 Maintainability/Reliability requirements

Like..

The system shall be available for use with down time of not < 5 days in a year etc…

3.4.3 Other quality requirements

(This section shall cover the quality requirements of system)

The Dwelling system shall not have any seepage issues even under heavy rains.

3.5 Environmental conditions

The Dwelling system shall be not have any damages while used under the following environmental conditions:-

Humidity	: 10% to 90%
Operating temperature	: -20°C to + 40°C

Shall be able to withstand dust, rain and snow

3.6 System security requirements

(This section shall cover the security requirements of the dwelling system)

Like..

The system shall provide security from burglary for 24x7 hours

3.7 Information management requirements

(This section shall cover the requirement of managing the design and layout of the building/house)

3.8 Policy and regulation requirements

(This section shall cover the policy requirements of the area such that how many floors can be constructed in the area, collection and disposal of waste etc.)

4 Verification

(This is a crucial section which shall cover the methods which shall be used for conforming the system requirements.)

5 Assumptions and dependencies

(This section shall include any additional assumptions which were considered for the system design and construction) for example:

The temperature of the area will not go below -20 deg celcius etc…

5.1 Acronyms

StRS	Stakeholder Requirement Specification
SyRS	System Requirement Specification