INFS2044 Workshop 1a – Requirements Validation

In this workshop, you will examine the quality of requirements and validate the completeness of requirements.

Preparation
- Revisit the SMART and FURPS+ topics from INFS1026 Systems Requirements and User Experience
- Bring a copy of the workshop instructions (this document) to the workshop

To Know
Upon completion of this session, you will be able to:
- Identify deficient requirements and improve them
- Assess the completeness of a domain model
- Assess the completeness of a use case list

Task 1. Requirements Review (40 minutes)

Aim:
- Assess the quality of given requirements using the SMART and FURPS+

Your tutor will lead this activity.

In preparation, read the SMART and FURPS+ articles on the course site.

You will be examining a set of requirements to determine if they satisfy the SMART criteria, categorise requirements according to FURPS+, and brainstorm to identify any other requirements that may have been missed.

Task 2. Review Domain Model (30 minutes)

Aim:
- Validate domain model against use cases.

Simulate the use case narrative in Appendix A on the domain model given in Appendix B.

Answer the following questions:
- Does the domain model capture all relevant concepts, attributes, and relationships that are needed for simulating the use case narrative? If not, what has been missed?
- Add the missed elements to the domain model.

Task 3. CRUD Analysis (30 minutes)

Aim:

- Apply the CRUD technique to assess completeness of use cases

Your tutor will lead this activity.

In preparation, read the CRUD reading given on the course site.

Tabulate the CRUD operations that each use case listed in Appendix C carries out on the relevant elements in the domain model resulting from Task 2.

Look at the set of CRUD operations that the system carries out on each domain concept.

Are there any operations that you think that the system will need to handle that are not present in the table?

Suggest additional use cases that account for the missed operations.
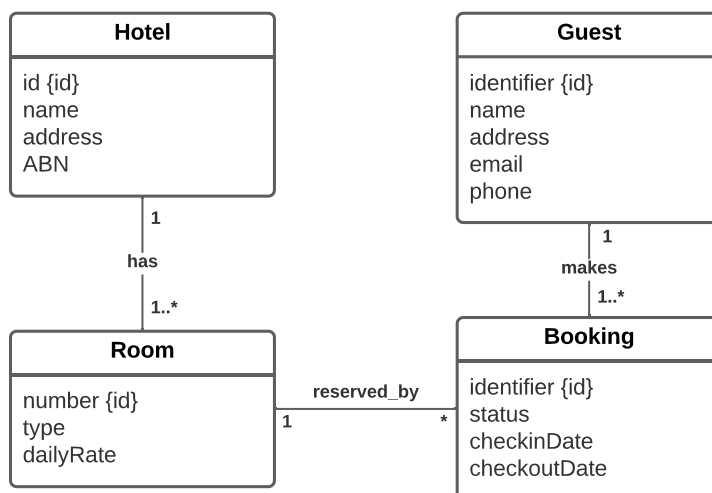
Appendix A – Use Case narrative "Make Booking"

Use Case UC01: Make Booking

1. *User enters date range, and System presents available rooms, their descriptions, and daily rates.*
2. *User selects room, and System presents total price.*
3. *User enters contact details and payment details, and System verifies payment, records payment confirmation, and issues booking confirmation.*

Assumptions:
- Bookings are made without registering a user account for the user.

Appendix B – Domain Model for Booking System

Hotel
id {id}
name
address
ABN

1
has
1..*

Room
number {id}
type
dailyRate

Guest
identifier {id}
name
address
email
phone

1
makes
1..*

Booking
identifier {id}
status
checkinDate
checkoutDate

reserved_by
1   *

Appendix C – Use Case List for Booking System

UC01	Make Booking
UC02	Edit Booking
UC03	View Bookings
UC04	Find Hotel
UC05	Find Rooms