



ISYS90050 IT Project and Change Management

Tutorial 2



'shall', 'must' and 'should'

- When do you use them in requirement specification?

Requirements terminology

- Be consistent in use of terms (use glossary if you have to) in documentation
 - Use the term 'shall' for *mandatory* requirements; 'should' for *desired* requirements
 - The terms 'will' and 'shall' are contractually binding and held up in court!
 - Avoid 'must'

Shall:

- be present as a requirement and be verifiable => the system shall have a log in screen that has a unique identifier/user name for the user.
- Shall is used to indicate a requirement that is contractually binding, meaning it must be implemented, and its implementation verified.

Should:

- Goals, non-mandatory provisions. 'Should' is used to indicate a goal which must be addressed by the design team but is not formally verified. Eg. Ease of use? Should be easy to use for whom; what's easy for you may not be easy for me?

TASK 1: Requirements

- **Functional requirements**

- **System behaviour** in particular situations

- **What** the system **should do**

- **Non-functional requirements**

- **Characteristics** that the system must have

- **How well** the functional requirements should perform

- **Domain requirements**

- Reflect **characteristics and constraints** of that **domain**

TASK 2: Catherine's Catering (1)

- **Catherine:** Good Afternoon and a warm welcome to all of you from Easy Solutions Consulting. I am excited to have all of you aboard for this IT project, in order to help me **scale up and manage my existing catering business**. I am looking forward to working with your team to help you with the requirements in this project.
- **Thomas:** Good Afternoon, Catherine. My team and I are excited to be a part of this incredible project and help you build a **new IT system** to manage your catering business. We understand that your passion for cooking and preparing **fine meals** is the foundation of your current catering business. Will you be able to give us a high level overview of your day to day operations? In this way, we will be able to understand the key requirements expected of this new IT system.
- **Catherine:** Sure. As you are aware, Catherine's catering started off as a **small business**, that **caters meals, receptions and banquets for business and social occasions such as luncheons and weddings**. It was a small company with **5 employees (including myself)** and we were working on small projects. As a part of hosting these receptions and banquets, I used to **personally meet with my customers** to determine the number of guests, the type of meals, and other information necessary to cater to an event.
- **Thomas:** OK. Catherine, would you be able to elaborate on the important things that are required to cater to an event?

TASK 2: Catherine's Catering (2)

- **Catherine:** Definitely. In addition to the number of guests and the type of meals, I also present my customers with different menu options that they can choose from. The menu offerings can also be customized by the clients (such as meeting specific dietary needs). I hope this is clear?
- **Thomas:** Absolutely Catherine.
- **Catherine:** Good. To continue, my business continued to scale up (thanks to referrals from existing customers) and the number of events started to increase. In addition, the building of a new convention center and a good business community in the city has been largely responsible for the increase in my business. In order to handle the demands of the expansion, I had to recruit 20 new employees. I am glad to say that my catering business is now run by 25 full time employees.
- **Thomas:** That's excellent Catherine! By the way, how are you managing your current business tasks?
- **Catherine:** Thomas, currently I am managing all these tasks using spread sheets and word processing software, but I am struggling of late to keep up with endless phone calls from clients, who call me to check what type of meals or menu options are available. They also call me to make changes to the number of guests on the guest list. But these are just a few. My customers also call me to check on the availability of special dietary items or requirements that I can accommodate (such as vegan, vegetarian, low sodium diet or low carbohydrate diet to name a few). Handling these queries from customers is taking a lot of my time. Sometimes, customers call up to give their feedback after an event. Not to forget, during holiday season and other busy times of the year, I have to hire a lot of part time employees to cook and cater to these events. Last year I hired about 25 part time employees during Christmas to meet the demand. The complexity of the manual scheduling and rostering process for the 25 part time employees + my full time employees were extremely overwhelming and literally a nightmare for my human resources manager. Especially when multiple employees requested shift changes or employees fell sick during the holiday season, the scheduling tasks and conflicts were extremely complex to manually handle.

TASK 2: Catherine's Catering (3)

- **Thomas:** I can definitely understand! I have made a note of these important activities for us to review. Finally, will you be able to tell us how do you currently manage your client data?
- **Catherine:** Absolutely and this is very important. My clients value the privacy of their data and are very particular about the same. To make sure that their information is safeguarded, only I have access to sensitive client information such as their names, addresses, menu preferences, contact details and pricing information for catering events. Client information is only shared on a need to basis with other employees. For example, delivery employees are only given the address of the delivery location where food needs to be catered. Protecting client's data is a must have feature in the new system.
- **Thomas:** Sure I understand. Thank you, Catherine, for sharing a lot of insightful information about how your catering business is run currently. We have a lot to go through and finalize about what we spoke at length today. We will be looking forward to our regular meetings to continue our discussions to build the new IT system.
- **Catherine:** Thank you so much Thomas and team. I am looking forward to working with you, and excited to see a new IT system to manage my business soon. I will see you later!

Task 2

- Purpose of the business?
- Purpose of the project? Why is the project needed?

Business Strategy

Problem

Opportunity

IT Project

Task 3

Functional Requirements

- Client shall be able to <Complete the Functional Requirement)
- The web application shall <Complete the Functional Requirement)
- System shall generate <Complete the Functional Requirement)
- The database shall <Complete the Functional Requirement)

Domain Requirements

- The system shall <Complete the Domain Requirement)
- The application shall <Complete the Domain Requirement)

Non Functional Requirements

- The web application shall <Complete the Non-Functional Requirement)



Task 4

- Do you need to review your **initial project description**?
- What can you do with the client to **avoid project requirement mistakes, misunderstandings, or potential project failures**?
- Identify **actions** that may contribute to project success and **validation of requirements** in Section 6 of the **Statement of Requirements template** provided.

Task 4

Documentation

Elicitation

- Interviews
- Document Analysis
- Role-playing
- Brainstorming workshops
- Observations
- User personas
- Prototyping

Alignment



Purpose

Project Summary

Functional Requirements

- Client shall be able to <Complete the Functional Requirement>
- The web application shall <Complete the Functional Requirement>
- System shall generate <Complete the Functional Requirement>
- The database shall <Complete the Functional Requirement>

Domain Requirements

- The system shall <Complete the Domain Requirement>
- The application shall <Complete the Domain Requirement>

Non Functional Requirements

- The web application shall <Complete the Non-Functional Requirement>

Complete?

Agreement and Approval

Approval of Statement of Requirements

Project Name:

Project Manager:

The purpose of this document is to document the requirements of the project. It is the basis for development and determination of satisfactory completion of the project.

Needs of Stakeholders

I have reviewed the information contained in this Statement of Requirements and accept they represent a complete and accurate specification of the requirements of the project:

NAME	ROLE	SIGNATURE	DATE

Change Management and Validation

Variations to Project Requirements and Validation

Date

Details

Testing



Tutorial Quiz!

- ➡ You have 5 mins to complete the quiz