

# Chapter 1

## Method

### Concepts

Object	Entity with identity, state and behaviour
Class	Describes a collection of objects sharing structure, behavioural patterns and attributes
Problem domain	Part that is administrated, monitored or controlled by a system
Application domain	The organization that administrates the problem domain
System	A collection components that implements modeling requirements, functions and interfaces

### 1.1 Objects and classes

#### **Objects** - *Entity with identity, state and behaviour*

Each object serves as a separate function. The object could be a customer, where specific people are treated as customers. The object contains that specific customer's identity, state and behaviour.

#### **Class** - *Describes a collection of objects sharing structure*

The class contains multiple objects, meaning a customer class will contain multiple data points. The class also contains multiple different customers and their data points.

#### **Analysis - outside the system**

In analysis, the object's behaviour is described by its events it performs and experiences that happen in definite points in time. Eg. customers ordering and shipping goods.

## Design - inside the system

In design the object's behaviour is described by the operations it can perform and make available to other objects in the system. Eg. add order etc. This allows the update of eg. the customers object state. The design object encapsulates the internal representation of the object state through its operations.

## 1.2 Principles

The 4 principles:

*Model the context* - Useful systems fit the context, so model both application and problem domain during analysis and design.

*Emphasize the architecture* - Understandable architecture makes collaboration between programmers and designers possible. Flexible architecture makes modifications and improvements affordable

*Reuse patterns* - Building on well-established ideas and pretested components

*Tailor the method to suit specific project* - Must be tailored to the specific needs of the analysis and design situation

## Chapter 2

# System Choice