

Use Case Subject

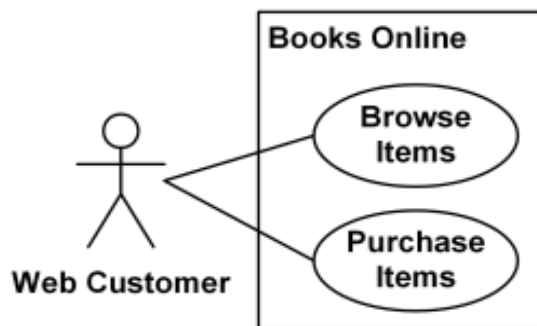
The **Unified Modeling Language™ (UML®)** is a standard visual modeling language intended to be used for

- modeling business and similar processes,
 - analysis, design, and implementation of software-based systems
- UML is a common language for business analysts, software architects and developers used to describe, specify, design, and document existing or new business processes, structure and behavior of artifacts of software systems.

Use case diagrams are usually referred to as **behavior diagrams** used to describe a set of actions (**use cases**) that some system or systems (**subject**) should or can perform in collaboration with one or more **external users** of the system (**actors**). Each use case should provide some observable and valuable result to the actors or other stakeholders of the system.

A **subject** is a **classifier** (including **subsystem**, **component**, or even **class**) representing a business, software system, physical system or device under analysis, design, or consideration, having some **behavior**, and to which a set of **use cases applies**.

Subject (sometimes called a system boundary) is presented by a rectangle with subject's name, associated keywords and stereotypes in the top left corner. **Use cases** applicable to the subject are located inside the rectangle and **actors** - outside of the system boundary.



Books Online (subject) with applicable use cases and Web Customer actor.

Business Model Subject

Use cases could be used to model some *business* to analyse business processes, recognize the problems being experienced, determine the opportunities to better serve customers.

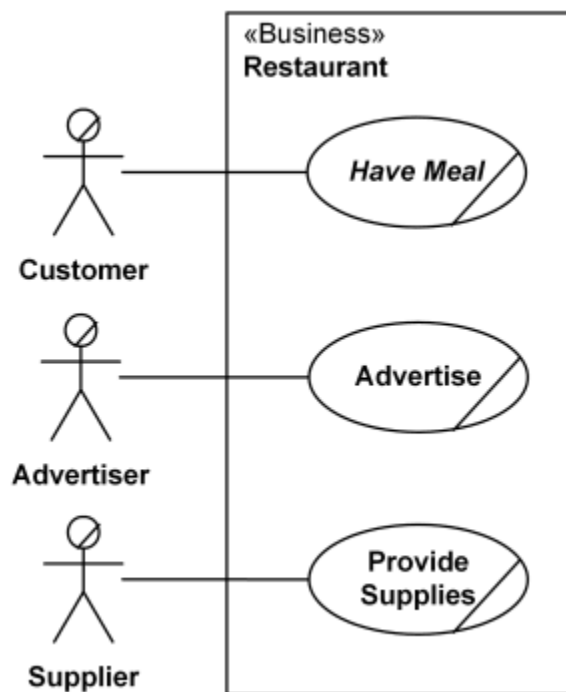
Subject of use cases in this case is business, enterprise, company or its division, department, team.

Examples of business subjects:

- Department Store
- Airport
- Restaurant

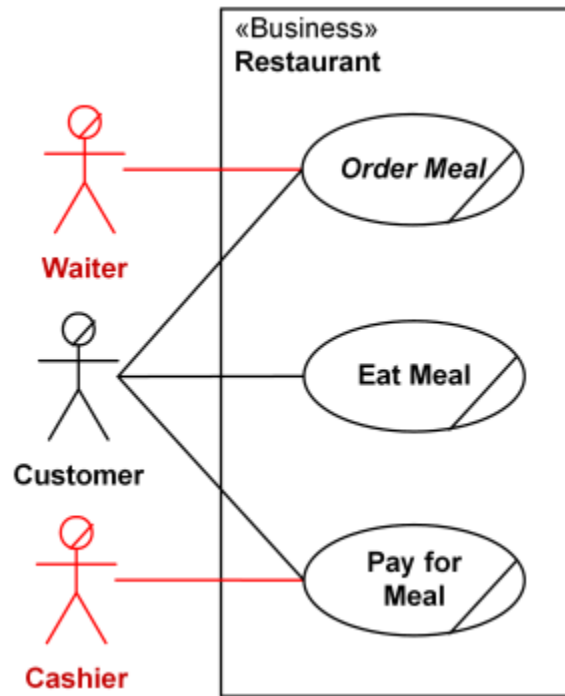
UML provides no standard stereotypes to model business processes but we can use custom stereotypes like «**Business**» or «**Department**», if needed for clarity.

Example below shows «Business» Restaurant with **business actors** Customer, Advertiser and Supplier and related **business use cases**.



Common Mistakes

Example below shows typical misconception for the «Business» Restaurant with **business actors** mistakenly including Waiter and Cashier. These are both working for the restaurant and are part of the business. They should not be shown as actors because actors are **external** users (customers) of the business (system).



Mistake: Restaurant business should not have Waiter and Cashier as actors

Software System Subject

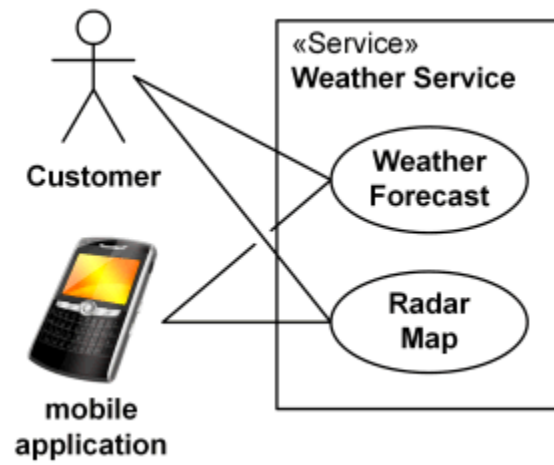
System use cases describe a system that automates some business use case(s) or process. Subject in this case is software and/or hardware system, subsystem, component or device.

Examples of systems:

- Web Site
- Payment System
- Automated Teller Machine (ATM)
- Point of Sale (POS) Terminal

UML provides no standard **stereotypes** for subject (i.e. use case classifier) but UML 2.4 specification examples use the stereotypes from **components**:

- «Subsystem»
- «Process»
- «Service»
- «Component»



*Weather Service **subject** stereotyped as «Service».*