

Use Cases

for

<Project>

Version <version>

Prepared by <author>

<organization>

<date created>

1. Guidance for Use Case Template

Document each use case using the template shown in the Appendix. This section provides a description of each section in the use case template.

2. Use Case Identification

1. Use Case ID

Give each use case a unique integer sequence number identifier. Alternatively, use a hierarchical form: X.Y. Related use cases can be grouped in the hierarchy.

2. Use Case Name

State a concise, results-oriented name for the use case. These reflect the tasks the user needs to be able to accomplish using the system. Include an action verb and a noun. Some examples:

- View part number information.
- Manually mark hypertext source and establish link to target.
- Place an order for a CD with the updated software version.

3. Use Case History

1. Created By

Supply the name of the person who initially documented this use case.

2. Date Created

Enter the date on which the use case was initially documented.

3. Last Updated By

Supply the name of the person who performed the most recent update to the use case description.

4. Date Last Updated

Enter the date on which the use case was most recently updated.

3. Use Case Definition

1. Actors

An actor is a person or other entity external to the software system being specified who interacts with the system and performs use cases to accomplish tasks. Different actors often correspond to different user classes, or roles, identified from the customer community that will use the product. Name the actor that will be initiating this use case and any other actors who will participate in completing the use case.

2. Trigger

Identify the event that initiates the use case. This could be an external business event or system event that causes the use case to begin, or it could be the first step in the normal flow.

3. Description

Provide a brief description of the reason for and outcome of this use case, or a high-level description of the sequence of actions and the outcome of executing the use case.

4. Preconditions

List any activities that must take place, or any conditions that must be true, before the use case can be started. Number each precondition. Examples:

1. User's identity has been authenticated.
2. User's computer has sufficient free memory available to launch task.

5. Postconditions

Describe the state of the system at the conclusion of the use case execution. Number each postcondition. Examples:

1. Document contains only valid SGML tags.
2. Price of item in database has been updated with new value.

6. Normal Flow

Provide a detailed description of the user actions and system responses that will take place during execution of the use case under normal, expected conditions. This dialog sequence will ultimately lead to accomplishing the goal stated in the use case name and description. This description may be written as an answer to the hypothetical question, "How do I <accomplish the task stated in the use case name>?" This is best done as a numbered list of actions performed by the actor, alternating with responses provided by the system. The normal flow is numbered "X.0", where "X" is the Use Case ID.

7. Alternative Flows

Document other, legitimate usage scenarios that can take place within this use case separately in this section. State the alternative flow, and describe any differences in the sequence of steps that take place. Number each alternative flow in the form "X.Y", where "X" is the Use Case ID and Y is a sequence number for the alternative flow. For example, "5.3" would indicate the third alternative flow for use case number 5.

8. Exceptions

Describe any anticipated error conditions that could occur during execution of the use case, and define how the system is to respond to those conditions. Also, describe how the system is to respond if the use case execution fails for some unanticipated reason. If the use case results in a durable state change in a database or the outside world, state whether the change is rolled back, completed correctly, partially completed with a known state, or left in an undetermined state as a result of the exception. Number each alternative flow in the form "X.Y.E.Z", where "X" is the Use Case ID, Y indicates the normal (0) or alternative (>0) flow during which this exception could take place, "E" indicates an exception, and "Z" is a sequence number for the exceptions. For example "5.0.E.2" would indicate the second exception for the normal flow for use case number 5.

9. Includes

List any other use cases that are included ("called") by this use case. Common functionality that appears in multiple use cases can be split out into a separate use case that is included by the ones that need that common functionality.

10. Priority

Indicate the relative priority of implementing the functionality required to allow this use case to be executed. The priority scheme used must be the same as that used in the software requirements specification.

11. Frequency of Use

Estimate the number of times this use case will be performed by the actors per some appropriate unit of time.

12. Business Rules

List any business rules that influence this use case.

13. Special Requirements

Identify any additional requirements, such as nonfunctional requirements, for the use case that may need to be addressed during design or implementation. These may include performance requirements or other quality attributes.

14. Assumptions

List any assumptions that were made in the analysis that led to accepting this use case into the product description and writing the use case description.

15. Notes and Issues

List any additional comments about this use case or any remaining open issues or TBDs (To Be Determineds) that must be resolved. Identify who will resolve each issue, the due date, and what the resolution ultimately is.

Use Case List

<i>ID</i>	<i>Primary Actor</i>	<i>Use Case Title</i>
A.B	Food Buyers	Search the Route of a Specific Food Truck

Use Case Template

Use Case ID:	A		
Use Case Name:	Search the location for Specific Food Truck		
Created By:	Hongyu Zhou	Last Updated By:	Hongyu Zhou, Alex Hines, Giuliano, Matt
Date Created:	October 4	Date Last Updated:	October 5

Actors:	Food Buyers
Description:	People use this app to Search for the location of a specific food truck, so they can know where they are now, and where they will go. So they can go to the location to buy food.
Trigger:	People want to eat the food on a specific food truck, but they don't know this truck's schedule. They don't know where they are now, or where they will go. But they want to know.
Preconditions:	1. people don't know the route of specific food truck, and they want to know.
Postconditions:	There is the data of the route of the food truck in the database.
Normal Flow:	The user will select the truck off the map and be shown a pop-up interface giving information about the truck, its current location, and its future location.
Alternative Flows:	The user will select the truck off a sortable list off the map. The same information about location will be available without using map view.

Exceptions:	The database fails to return information that we want to display, such as current position.
Includes:	1. where is the truck now 2. where the truck will go
Priority:	In all likelihood, use-case A will be the first most important to fulfill functionality for, given its high predicted-frequency-of-use coupled with its functionality being shared by other use-cases as well.
Frequency of Use:	It's likely that use-case A will likely average somewhere around once per instance of accessing the application. 1/access is also the frequency of use for an ideal scenario, i.e. the user opens the app, looks up a specific food truck, determines that it is within an acceptable distance and proceeds to the listed location. Given that no relevant information is available, it's impossible to predict the upper-limit of accesses since a user could theoretically exhaustively search through every food truck available, becoming dissatisfied with the distances each time (though that's pretty unlikely).
Business Rules:	N/A
Special Requirements:	May have auto-fill suggestions when entering the food truck for users who don't know the whole name.
Assumptions:	May have auto-fill suggestions when entering the food truck for users who don't know the whole name.
Notes and Issues:	May want to give details about Food Trucks near the user-specified Food Truck.

Revision History

Name	Date	Reason For Changes	Version
Revision 1	oct 5	Add more infomtion	A.B