Use Cases

for

CS411

Version 0.1

Prepared by Alex Hines

Group 9

11/2/16

• 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.

• Use Case Identification

• 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.

• 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.

• Use Case History

• Created By

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

• Date Created

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

• Last Updated By

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

• Date Last Updated

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

• Use Case Definition

• 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.

• 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.

• 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.

• 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:

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

• Postconditions

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

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

• 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.

• 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.

• 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.

• 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.

• 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.

• Frequency of Use

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

• Business Rules

List any business rules that influence this use case.

• 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.

• 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.

• 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

ID	*Primary Actor*	*Use Case Title*
1	User	Search for a Food Truck
2	User	Create a Profile
3	User	See Details of Nearby Truck
4	User	Check Nearby Trucks

Use Case Template

Use Case ID:	1
Use Case Name:	Search for a Food Truck

Created By:	Hongyu Zhou	Last Updated By:	Matthew Pinheiro
Date Created:	October 4	Date Last Updated:	November 2nd

Actors:	Users who want to find trucks according to some criteria
Description:	Through the search bar, actors search for food trucks by name, or through a filter option to search for trucks based on cuisine, price, or rating.
Trigger:	Actor selects the clearly visible search bar in the list view (non-Map) portion of the screen.
Preconditions:	• Food Truck Brand must be in the supported database • Food Trucks must be in Boston
Postconditions:	None.
Normal Flow:	• User types keyword into search box. If the keyword matches the names of any truck brands in the database, information about the brands are shown in order of relevance and the map is populated with positions of said trucks.
Alternative Flows:	• The user types a keyword into the search box. The user also selects one or more filters, displaying the trucks as in normal flow but according to the selected criteria.
Exceptions:	1.0.E.1) User inputs a keyword with no results in the database. The resulting query returns an error message indicating that there are no matches.
Includes:	Use Case 4 for displaying of truck locations.
Priority:	Low priority in comparison to use cases 3 and 4.
Frequency of Use:	Likely high, but lower in comparison to uses cases 3 and 4.
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:	Users have internet access and are searching for trucks in Boston.
Notes and Issues:	May want to give details about Food Trucks near the user-specified Food Truck. Will determine by next major group assignment.

Revision History

Name	Date	Reason For Changes	Version
Revision 1	Oct 5	To add more Information	1.0
Revision 2	Nov 2	Update according to new Use Cases	1.1

Use Case Template

Use Case ID:	2		
Use Case Name:	Create a User Profile		
Created By:	Alex Hines	Last Updated By:	A. Hines
Date Created:	11/2/16	Date Last Updated:	11/2/16

Actors:	User
Description:	User wants to create a profile to save state

Trigger:	A user will click “Register” on the page
Preconditions:	The desired username must not be already registered
Postconditions:	The username and password pair will be registered in our DB
Normal Flow:	First the user clicks “register”. They will be taken to a registration form where information is input. The inputs (username, password, etc) will be checked for validity and then registered if acceptable. The user will then be able to log in under that username.
Alternative Flows:	None
Exceptions:	2.0.E.1) The username is already taken; password does not meet requirements; other information invalid.
Includes:	None
Priority:	Low
Frequency of Use:	Sometimes
Business Rules:	None
Special Requirements:	
Assumptions:	We assume that we will have a persistent DB to store profile information.
Notes and Issues:	

Revision History

Name	Date	Reason For Changes	Version

Use Case Template

Use Case ID:	3		
Use Case Name:	See Details of a Nearby Truck		
Created By:	Giuliano Conte	Last Updated By:	Giuliano Conte
Date Created:	11/2/16	Date Last Updated:	11/2/16

Actors:	User
Description:	User wants to see details of a specific nearby truck.
Trigger:	A user will click on a truck on the map
Preconditions:	None
Postconditions:	Details of the selected truck will show up on the page
Normal Flow:	The user opens the webpage. The map of nearby trucks is centered around the user. The user may navigate the map. Finally, the user clicks on a specific truck.
Alternative Flows:	None
Exceptions:	None
Includes:	Use Case 4 for displaying truck locations.
Priority:	High
Frequency of Use:	Often
Business Rules:	None
Special Requirements:	
Assumptions:	We assume we have the operating trucks in a persistent DB.
Notes and Issues:	

Revision History

Name	Date	Reason For Changes	Version

Use Case Template

Use Case ID:	4		
Use Case Name:	Check Nearby Trucks		
Created By:	Giuliano Conte	Last Updated By:	Giuliano Conte
Date Created:	11/2/16	Date Last Updated:	11/2/16

Actors:	User
Description:	A user wants to see what trucks are nearby
Trigger:	User opens the webpage
Preconditions:	None
Postconditions:	None
Normal Flow:	User opens the webpage
Alternative Flows:	None
Exceptions:	None
Includes:	None
Priority:	High
Frequency of Use:	Very often
Business Rules:	None
Special Requirements:	
Assumptions:	We assume that we have operating trucks stored in a persistent DB
Notes and Issues:	

Revision History

Name	Date	Reason For Changes	Version