**SE745 - Software Modeling**

**Homework 1**

**Due Monday, September 7**

**Use Cases for Requirements Modeling**

**Problem:**

The Caribbean Fantasy Tours (CFT) on-line booking system is intended to be a one-stop cruise planning and booking site. Using the site customers will be able to book cruises on any of the shipping lines registered with CFT. A cruise consists of a sequence of Caribbean ports. At a particular port there may be one-or more on-shore excursion packages, where each package is offered by an on-shore tour operator. When booking a cruise, a customer can get information about the ports visited, the ship room price packages, ship facilities, and the on-shore excursions that are available via CFT at each port-of-call. Note that a customer should only be able to book on-shore excursions for the ports visited on the cruise that they are booking or have booked.

**Task:**

Develop a use case list and draw a use case diagram for the given problem. Clearly identify the list of actors and the list of use cases. Write a detailed description of each of the identified use cases. *If you are using a template not provided in class, make sure to cite the reference.*

*Note: If you need any clarifications, contact the instructor. DO NOT make illogical or unrealistic assumptions. Any assumptions should be clearly documented.*



|  |  |
| --- | --- |
| Use-Case ID | UC01 |
| Metadata | Author: Ian Shoenberger, Priority: High |
| Name | Book Cruise |
| Actor(s) | Customer, Shipping Line |
| Description | The Customer will view possible cruises, select one, and complete a booking. |
| Pre-Conditions | There are cruises available for booking. |
| Post-Conditions | The customer will have booked a cruise with a specifc cruise line for a specfic date |
| Primary Scenario of Events | 1. The customer will be presented with a variety of cruise lines.  2. The customer selects one.  3. The customer specifies the cruise date.  4. The customer specifies the number of travelers he/she is booking.  5. The customer enters payment information.  6. The Customer confirms the booking.  6. The customer receives confirmation that the booking has been added to the Shipping Line's roster. |
| Secondary Scenario | 1. The customer halts the particular booking at any step prior to step 6 of the primary flow, and exits.  2. The customer halts the particular booking at any step prior to step 6 of the primary flow, and continues searching for a different cruise. |
| Special Requirements |  |

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| --- | --- |
| Use-Case ID | UC02 |
| Metadata | Author: Ian Shoenberger, Priority: Low |
| Name | View Port Info |
| Actor(s) | Customer |
| Description | The Customer selects a particular port that is part of a cruise, and views relevant information. |
| Pre-Conditions | The Customer has selected a cruise to book, or has previously booked. |
| Post-Conditions | The Customer views a port description. |
| Primary Scenario of Events | 1. The Customer chooses a port to query.  2. The Customer is displayed details and facts about the port. |
| Secondary Scenario |  |
| Special Requirements |  |

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| --- | --- |
| Use-Case ID | UC03 |
| Metadata | Author: Ian Shoenberger, Priority: Medium |
| Name | Add Ship Room Price Packages |
| Actor(s) | Customer |
| Description | The Customer views a set of cruise packages for ship accommodations, and attaches this option to their booking. |
| Pre-Conditions | The Customer is in the process of booking a particular cruise. |
| Post-Conditions | The Customer will have chosen an option package for their cruise. |
| Primary Scenario of Events | 1. The Customer views a display of different accomodation options.  2. The Customer selects a particular package.  3.The Customer confirms the addition to their package to the cruise. |
| Secondary Scenario | 1. After step 2 of the primary flow, the user cancels the request and returns to the list of packages. |
| Special Requirements | The user must select a package to book the cruise. (*assumption)* |

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| --- | --- |
| Use-Case ID | UC04 |
| Metadata | Author: Ian Shoenberger, Priority: Medium |
| Name | Get Ship Facilities Info |
| Actor(s) | Customer |
| Description | The Customer inquires about ship facilities and views information. |
| Pre-Conditions | None |
| Post-Conditions | The Customer views a variety of ship facility details. |
| Primary Scenario of Events | 1. The Customer selects a particular cruise.  2. The Customer selects the option to view ship facility details.  3. The Customer is displayed details and facts about the facilities. |
| Secondary Scenario |  |
| Special Requirements |  |

|  |  |
| --- | --- |
| Use-Case ID | UC05 |
| Metadata | Author: Ian Shoenberger, Priority: Medium |
| Name | Add On-Shore Excursion |
| Actor(s) | Customer, On-Shore Tour Operator |
| Description | The Customer adds the excursion to the booking, that is related to a particular port during their cruise. |
| Pre-Conditions | The Customer has selected a cruise to book / has previously booked. |
| Post-Conditions | The Customer adds the excursion to his/her cruise. |
| Primary Scenario of Events | 1. The Customer selects a port that is registered as a stop on their cruise.  2. The Customer views a set of excursions.  3. The Customer selects a particular excursion.  4. The Customer confirms the addition of the excursion to their cruise.  5. The Customer is returned to the list of ports associated with his/her cruise. |
| Secondary Scenario | 1. The user cancels the request at any step from step 2 – step 4 during the primary flow. |
| Special Requirements | The Customer cannot add the same excursion from the same port twice.  The Customer cannot book excursions at a port that have conflicting time durations. |