**SAAD 1001 – Assignment #2  
UML Use Cases – FTB IOS**

**Assignment: this is an individual or small team (2 persons max) assignment – see specifications next page**

1. Read the FTB company narrative provided below
2. Consult with your ‘client’ (instructor) about any additional information, assumptions, or clarifications needed to understand the business case. Failure to do this may result in inaccurate case work.
3. Produce a UML Use Case diagram for the FTB In-Office System (IOS) using MS Visio or other appropriate modeling tool and a Use Case Glossary for all cases.
4. Produce **one** fully-dressed written use case for **one single** use case selected from the many on your diagram. Please make sure you choose a larger case with several steps (i.e. not one like ‘Login’).

**Rubric – FTB IOS Use Case Diagram, Fully Dressed Use Case and Use Case Glossary:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Score: 0-1** | **2** | **3** | **Score** |
| **Use Case Diagram (12 points max)** | | | |
| Not all human actors identified and some misidentified | Most but not all human actors identified and or few or none misidentified | All human actors identified and none misidentified |  |
| Not all system actors identified and some misidentified | Most but not all system actors identified and or few or none misidentified | All system actors identified and none misidentified |  |
| Not all cases identified and some misidentified | Most but not all cases identified and or few or none misidentified | All cases identified and none misidentified |  |
| UML Diagramming conventions not followed in more than two instances | UML Diagramming conventions mostly but not perfectly followed | UML Diagramming conventions followed |  |
| **Fully Dressed Written Use Case (12 points max)** | | | |
| Happy path is missing or incomplete and or contains errors | Happy path is mostly complete and or contains few errors | Happy path complete and contains no errors |  |
| Alternate path is missing or incomplete and or contains errors | Alternate path is mostly complete and or contains few errors | Alternate path complete and contains no errors |  |
| All other sections (stakeholders, special requirements & open issues, etc.) missing or incomplete | All other sections (stakeholders, special requirements & open issues, etc.) mostly but not fully developed | All other sections (stakeholders, special requirements & open issues, etc.) fully developed |  |
| UML conventions not followed in more than two instances | UML conventions mostly but not perfectly followed | UML conventions followed in every aspect |  |
| **Use Case Glossary (6 points max)** | | | |
| Use case numbers and or descriptors missing, and or do not match diagram and or are poorly written | Use case numbers and or descriptors are present, match the diagram but are not in all cases clearly written | Use case numbers and descriptors are present, match the diagram and are in all instances clearly written |  |
| Human and or System actors that interact with a case in the diagram are often missing | Human and or System actors that interact with a case in the diagram are mostly but not all present | Human and or System actors that interact with a case in the diagram are all present |  |
| **Total Score:** | | | **/30** |

**Project Overview: (01/212014)**

The Float The Boat Company (FTB) that you have worked with in the past (see Practice Use Case for the FTB In-Boat System) was so pleased with your efforts on their In-Boat system that they want you to build out their In-Office system as well. Apparently the company they hired previously really botched the job by focusing too much on coding and not enough on systems analysis and design. Because of this, FTB would like you to submit to them, for approval, a Use Case diagram, one fully-dressed Written Use Case and a Use Case Glossary before they are willing to pay you for any development time.

The following notes entitled ‘FTB IOS Narrative’ were taken by one of your company’s senior systems analysts:

**FTB IOS Narrative:**

**The FTB Business**

FTB is a small ferry company with three small boats that provide the following services:

* Regular service to an island national park.
* Charter service to an outlying island with a light house (this island is hard to get to due to tides and weather conditions).
* Charter ferry service for a boat club and the city during pre-scheduled special events.

**What FTB wants from their In-Office System (IOS)**

FTB would like a new In-Office (IOS) system (used by clerks and the owner) that would interact with their In-Boat systems (already built by your company and described above) and perform other tasks as indicated. They were so unhappy with the work done on the current In-Office system that they have decided that you should begin your SAAD work from scratch, i.e. they will not be providing you any documentation from the current system. Besides, those documents are currently involved in a law suit anyway.

The owner, who is getting on in years and has some issues with his sight, would like some security on the new system wanting all users to have to login. After logging in, Dispatch can then enter information into the IOS beginning when a client calls or emails the office.

The IOS will use a third party electronic payment system that processes (Visa, Debit, etc.). This POS system sends and receives financial information from the IOS. Tickets with detailed information about the trip (e.g. date, time, boat, and passenger) and receipts are printed by the IOS using a separate Email/Printer system. The owner would also like to be able to use the financial information stored on the IOS from these transactions to make marketing reports exclusively for their own use and they want to be the only ones who are able to display or view this type of report.

When a client calls or emails the office with a request for a booking, the office clerk registers the client (the person or organization paying for the tickets on the system), then they register information about the passengers (the people who will take the trip). It is important that the client provide the detailed information needed to register each individual passenger as this is required by law. The clerk then takes information about the voyage and means of payment. Using this information, payments, receipts and tickets can then be processed / created.

Some changes to this booking information are done on the boats. Sometimes people just show up on the dock and other times, due to weather/tide conditions, the captains have to change peoples’ destinations, etc. In addition, some people pay at the boat even if they book their passage via the IOS. For safety and business reasons, it is critical that these changes are recorded on the IOS via the In-Boat Systems (IBS). All changes on the one system are reflected in the other in that any new bookings or changes to passages, client and passenger information and payment status are always shared between the IOS and IBS systems.

As a customer service, when a client selects a destination and pre-pays, an email can be sent by the clerk that contains historical information related to the area they have selected. In addition, the clerk is able to send electronic versions of both the tickets and receipts via email to clients or passengers. The clerk can also print off the historical information and tickets and receipts and send them via regular mail through the postal service.

Your boss is very excited to get this additional IT business and wishes you good luck. He reminds you to keep in mind the processes that were demonstrated (in class) when building the Practice FTB In-Boat system use case.

**NOTES:**

* Remember to # all cases on both the UC Diagram and UC Dictionary
* <http://www.mcnabsisland.ca/>

NB: Citations - Remember that citations must be provided for any code, algorithm, text or image copied from another source (e.g. the Web, a textbook, an online tutorial, etc.). Not attributing appropriately (plagiarism) or using illegally copied materials (copyright breach) are serious academic offenses. If you are in doubt as to when or how to cite, consult with your instructor and the resources provided by the college.