APPENDIX I

USE CASE SPECIFICATIONS for SELECT CRUISES

Please refer to

Apperly, H., Hofman, R., Latchem, S., Maybank, B., McGibbon, B., Piper, D.
Select Perspective and UML, Pearson Education.

where the Select Cruises case study is laid out on pages 167 to 205. The problem
representation has been applied to the case study and a list of use cases with the
resulting actions and data is as follows:

Use case: “make booking”

Actions:
confirmBooking
uses: BookingNumber, CruiseNumber, Membership Number,
VoyageDate, Cost

requestMailing
uses: BookingNumber, MailRequestNumber, DateMailRequested

Use case: “send mailing”

Actions:
retrieveMailingList
uses: MailRequestNumber, DateMailRequested

printLetter
uses: MailRequestNumber, DateMailRequested, BookingNumber

recordMailingDate
uses: MailRequestNumber, DateMailRequested
Use case: “find quote”
Actions:

locateQuote
uses: QuoteNumber, BookingNumber, DateTransacted.

verifyReservation
uses: BookingNumber, DateTransacted

Use case: “make payment”
Actions:

verifyCreditCardDetails
uses: MembershipNumber, Name, CardType, CardHolderName, IssueingOrganisation, CardNumber, ValidFrom, ExpiresEnd

transactOnLine
uses: BookingNumber, MembershipNumber, Name, DateTransacted, TotalCost, InvoiceNumber, DateBalancePaid, CreditCardAuthorisationCode

retrieveAuthorisation
uses: BookingNumber, MembershipNumber, Name, DateTransacted, Total Cost, InvoiceNumber, DateBalancePaid, CreditCardAuthorisationCode

Use case: “find cruise”
Actions:

retrieveCruiseList
uses: CruiseNumber

retrievePassageList
uses: PassageNumber
retrieveBerthDetails
uses: BerthNumber, BerthType, BerthDescription

allocateBerthToCustomer
uses: BookingNumber, BerthNumber, BerthType,
 BookingDate, DateBerthReserved, DateBerthBooked

retrieveCruiseCost
uses: BookingNumber, BookingDate, CruiseNumber, Cost

Use case: “make inquiry”

Actions:
recordQuote
uses: QuoteNumber, BookingNumber,
 RequiredNumberOfBerths, 
 TotalCost, Date Transacted

requestQuoteMailing
uses: MailRequestNumber, DateMailRequested

Use case: “find customer details”

Actions are:
locateCustomerRecord
uses: MembershipNumber, Name

recordPersonalDetails
uses: MembershipNumber, Name, Address, DayTelephone,
      EveningTelephone, DateOfBirth, SailingAbility

recordCruisePreferences
uses: MembershipNumber, Name, PreferredOcean,
      PreferredPassageNumber, PreferredSeason,
Use case: “send all mailings”

Actions:

sendBatchMailing
uses: MailRequestNumber,
      DateMailRequested, NumberOfRequests,
      CurrentRequest.

Use case: “maintain fleet information”

Actions:

RecordShipDetails
uses: ShipNumber, ShipName, NumberOfBerths,
      ShipDescription,

AddShip
uses: ShipNumber, ShipName, NumberOfBerths,
      ShipDescription, NumberOfShips

RemoveShip
uses: ShipNumber, ShipName, NumberOfBerths,
      ShipDescription, NumberOfShips

AllocateShipToPassage
uses: ShipNumber, PassageNumber, FromPortPassage,
      ToPortPassage, NumberNights,
      JoinDate, PassageCost, PassageDescription.

RecordBerthDetails
uses: BerthNumber, BerthType, BerthDescription.

AllocateBerthToShip
uses: BerthNumber, BerthType, BerthDescription, ShipNumber
Use case: “maintain cruise information”

Actions:

recordCruiseDetails
uses: CruiseNumber, Ocean, FromPortCruise, ToPortCruise, CruiseDescription

recordPassageDetails
uses: CruiseNumber, PassageNumber, FromPortPassage, ToPortPassage, NumberNights, JoinDate, PassageCost, PassageDescription

allocatePassageToCruise
uses: PassageNumber, CruiseNumber, FromPortCruise, ToPortCruise, CruiseDescription.

DATA used in the Select Cruises case study are:
BookingNumber
VoyageDate
Cost
MailRequestNumber
DateMailRequested
QuoteNumber
NumberOfBerths
TotalCost
CruiseNumber
CardType
CardHolderName
IssuingOrganisation
CardNumber
ValidFrom
ExpiresEnd
DateTransacted
InvoiceNumber
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ShipDescription

the total number of elements are as follows:

Number of actions is: 30
Number of data is: 52
Number of uses is: 126