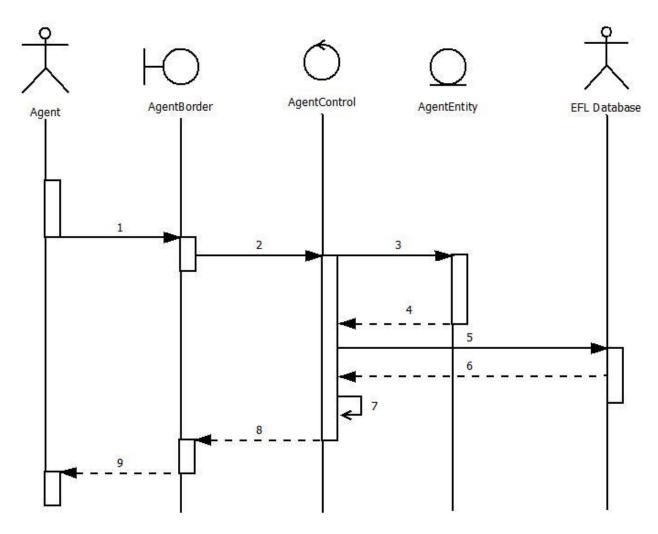
Sequence Diagrams

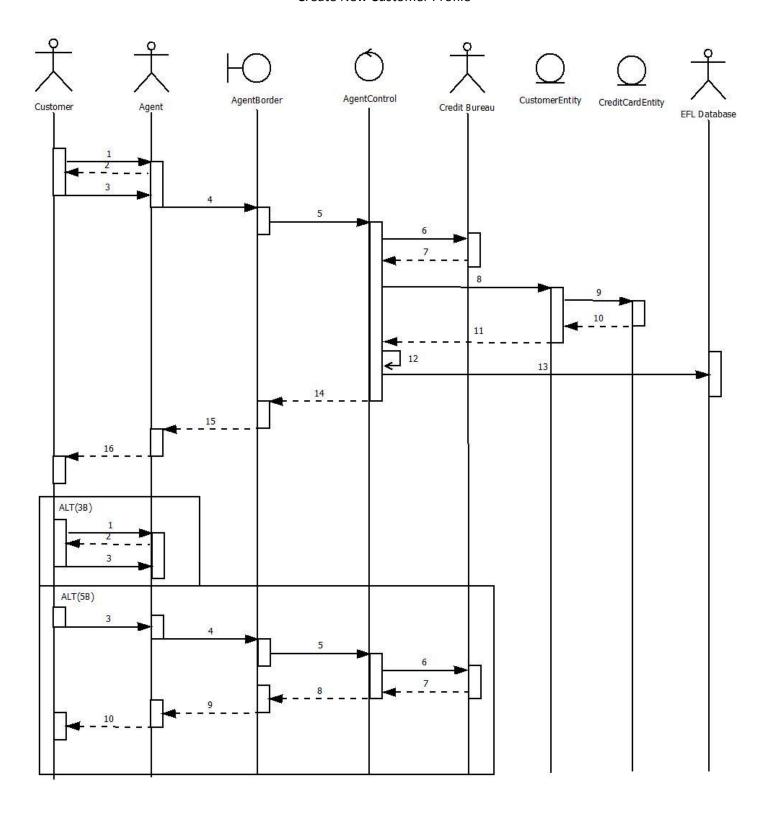
Agent Log-In



Agent Log-In(Normal)

- 1. Agent enters name and password
- 2. AgentBorder.LogIn()
- AgentControl.LogIn()
- 4. AgentControl.agents.get(agentID)
- 5. AgentControl requests information from EFLDatabase
- 6. EFL Databse returns Agent Information
- 7. AgentControl verifies passwords are equal
- 8. AgentControl replies a successful update to AgentBorder
- 9. AgentBorder.MainView().setVisible(true)

Create New Customer Profile



Create New Customer Profile (Normal)

- 1. New Customer calls or enters the travel agency and would like to create an account
- 2. Agent explains fee structure and requests information from customer
- 3. Customer accepts services and provides information and credit card
- 4. Agent enters information into CreateAccount subscreen
- AgentBorder.CreateNewCustomer()
- 6. AgentControl validates Credit Card number
- 7. Credit Information is cleared (valid)
- 8. new CustomerEntity()
- 9. new CreditCardEntity()
- 10. CreditCardEntity returns instance
- 11. CustomerEntity returns instance
- 12. AgentControl.CreateCustomerAccount()
- 13. AgentControl updates EFLDatabase
- 14. AgentControl provides fields to AgentBorder
- 15. AgentBorder.UpdateFields()
- 16. Agent Reports a successfully created account

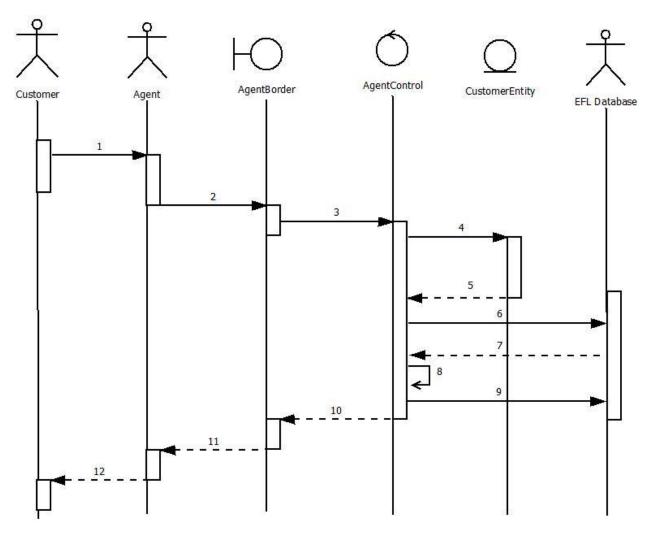
Sequence Diagram – Create New Customer Profile Scenario (Alt 3B)

- New Customer calls or enters the travel agency and would like to create an account
- 2. Agent explains fee structure and requests information from customer
- 3. Customer rejects services

Sequence Diagram - Create New Customer Profile Scenario (Alt 5B)

- 3. Customer accepts services and provides information and credit card
- 4. Agent enters information into CreateAccount subscreen
- AgentBorder.CreateNewCustomer()
- 6. AgentControl sends credit card info to be verified by Credit Bureau
- 7. Credit Information is invalid or unsatisfactory
- 8. AgentControl sends updated display to AgentBorder with error message
- 9. AgentBorder .DisplayErrorMessage()
- 10. Agent Reports an successfully created account

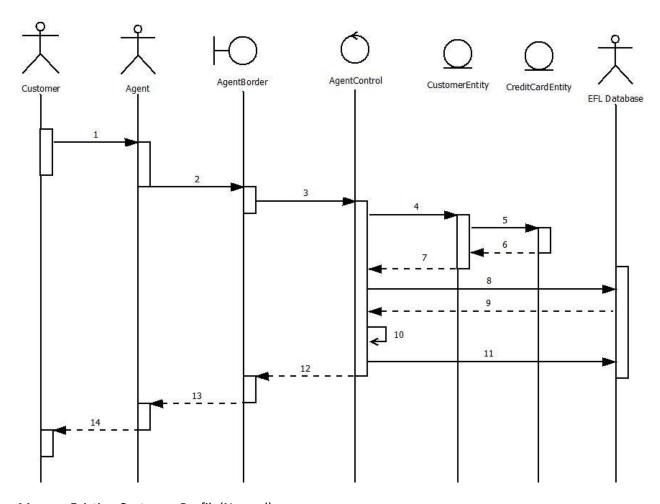
Add Credit to Customer Profile



Add Credit to Customer Profile

- 1. Customer brings in referral or Manager sees reason to provide credit to customer account
- 2. Agent requests to add credit to Customer Account giving the customers profile number
- 3. AgentBorder.AddCredit()
- 4. CustomerEntity()
- 5. CustomerEntity returns a new instance of itself
- 6. AgentControl requests for customer information from EFL Database
- 7. EFL Database returns customer information
- 8. AgentControl.AddCredit()
- 9. AgentControl sends information to the EFL Database
- 10. AgentControl returns successful operation
- 11. AgentBorder.DisplayMessage("Add Credit Successful")
- 12. Agent informs Customer the credit was added

Manage Existing Customer Profile

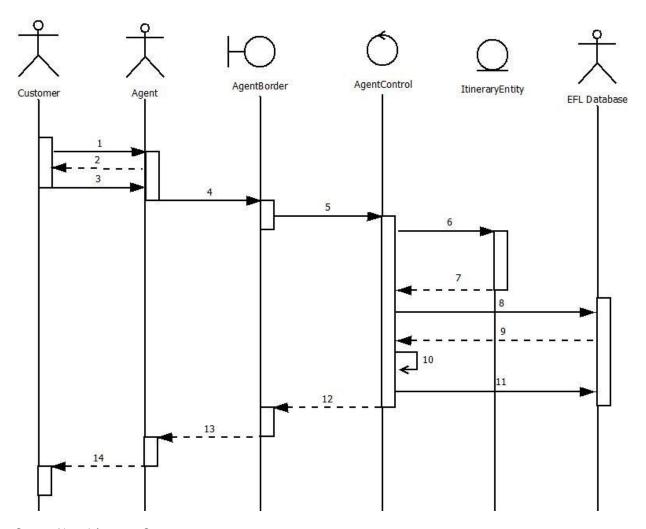


Manage Existing Customer Profile(Normal)

- 1. Customer needs Agent to retrieve or update their profile with some new information
- 2. Agent inputs all necessary information into the terminal
- 3. AgentBorder.Manage Customer()
- 4. CustomerEntity()
- 5. CreditCardEntity ()
- 6. CreditCardEntity returns a new instance of itself
- 7. CustomerEntity returns a new instance of itself
- 8. AgentControl .CustomerLookUp(CustomerID)

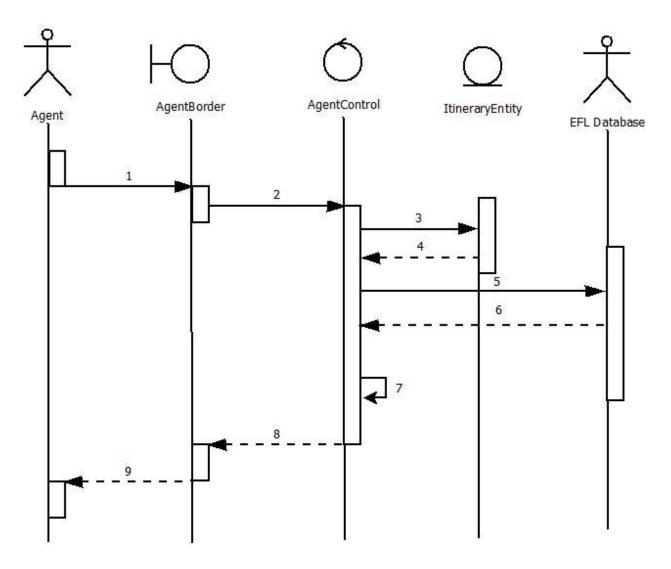
 (Note: CustomerID is a name or phone number)
- 9. EFL Database returns information
- 10. AgentControl.UpdateCustomer(customerID)
- 11. AgentControl sends updated information to EFLDatabase
- 12. AgentControl returns updated information to the AgentBorder class
- 13. AgentBorder.UpdateFields()
- 14. Agent reports a successful update to Customer

Create New Itinerary Case



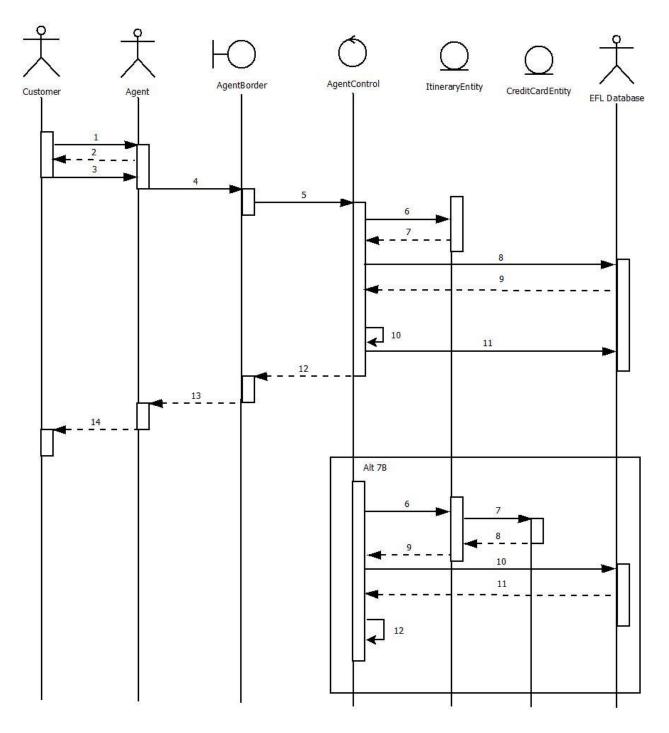
Create New Itinerary Case

- 1. The Customer has requested to book a flight without a case already opened
- 2. The Agent requests information about the flight from the customer
- 3. The Customer gives the Agent the needed information
- 4. The Agent Inputs all the information in the AgentBorder Terminal
- 5. AgentBorder.CreateNewFlightItinerary()
- 6. ItineraryEntity()
- 7. ItineraryEntity returns a new instance of itself to AgentControl
- 8. AgentControl .SearchFlights()
- 9. EFLDatabase returns Information containing all the info for the Itinerary
- 10. AgentControl .CreateNewItinerary()
- 11. AgentControl sends Itinerary class to the EFLDatabase
- 12. AgentControl returns class info to AgentBorder
- 13. AgentBorder .UpdateFields
- 14. Agent Reports Back a successful Itinerary Creation



Produce Flight List(Normal)

- 1. Agent sends request to produce flight list by inserting customer and itineraryID
- 2. AgentBorder.ProduceFlightList()
- 3. ItineraryEntity()
- 4. ItineraryEntity returns a new instance of itself
- 5. AgentControl.eflDatabase.getCustomer(customerID).getItinerary(itineraryID)
- 6. EFL Database returns information to the AgentControl
- 7. AgentControl .SearchFlights(itineraries.getItinerary(itineraryID)
- 8. AgentControl. ProduceFlightList(flights)
- 9. AgentBorder.UpdateFields()

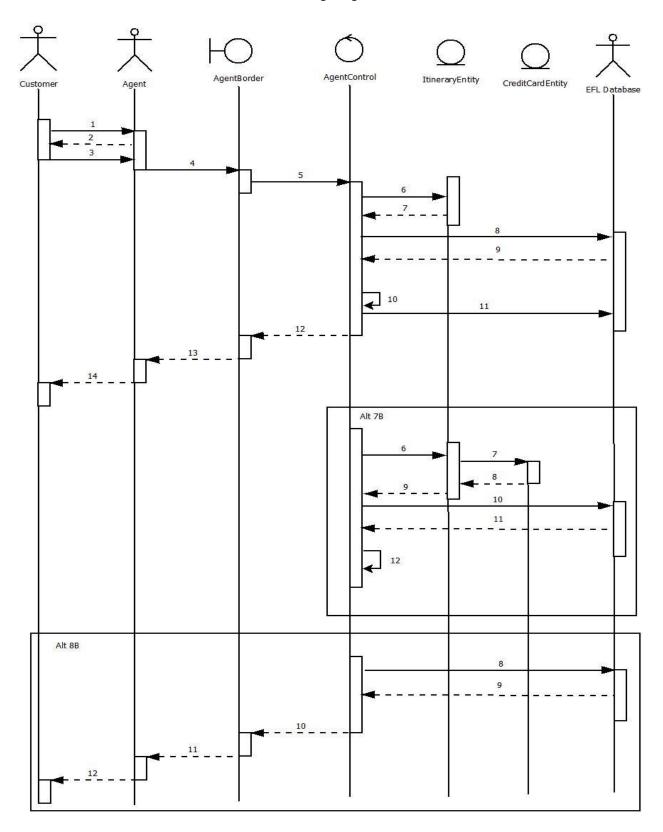


Reserve Flight(Normal)

- 1. Customer Wants to make a flight reservation
- 2. Agent requests specific information about the flight
- 3. Customer provides Agent with the information
- 4. The Agent Inputs all the information in the AgentBorder Terminal
- AgentBorder.ReserveFlight()
- ItineraryEntity()
- 7. ItineraryEntity returns a new instance of itself to AgentControl
- 8. AgentControl.eflDatabase.getCustomer(customerID).getItinerary(itineraryID)
- 9. EFLDatabase returns info containing all the info for the Itinerary
- 10. AgentControl.ResereFlight(flight)
- 11. AgentControl sends Itinerary info to the EFLDatabase
- 12. AgentControl returns info to AgentBorder
- 13. AgentBorder.UpdateFields()
- 14. Agent Reports Back a successful Itinerary Creation

Reserve Flight(7B)

- 6. ItineraryEntity()
- CreditCardEntity()
- 8. CreditCardEntity returns a new instance of itself
- 9. ItineraryEntity returns a new instance of itself to AgentControl
- 10. AgentControl requests for the saved Itinerary for customer from EFLDatabase
- 11. EFLDatabase returns a text document containing all the info for the Itinerary
- 12. AgentControl updates all needed info into the ItineraryEntity



Manage Flight(Normal)

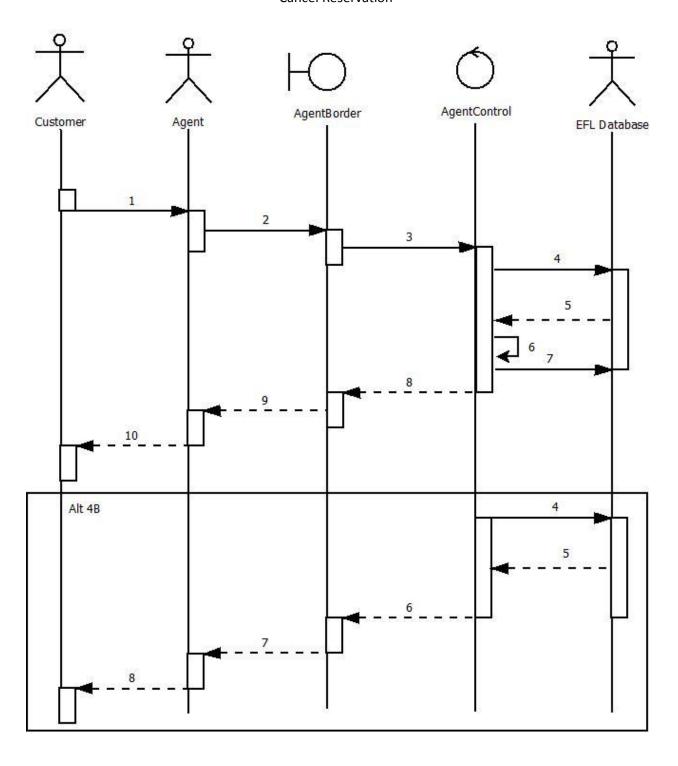
- 1. Customer Wants to make a flight reservation
- 2. Agent requests specific information about the flight
- 3. Customer provides Agent with the information
- 4. The Agent Inputs all the information in the AgentBorder Terminal
- AgentBorder.ModifyReservation()
- 6. ItineraryEntity()
- 7. ItineraryEntity returns a new instance of itself to AgentControl
- 8. AgentControl.eflDatabase.getCustomer(customerID).getItinerary(itineraryID)
- EFLDatabase returns a text document containing all the info for the Itinerary
- 10. AgentControl.ModifyReservation(itinerary)
- 11. AgentControl sends Itinerary class to the EFLDatabase
- 12. AgentControl returns class instance to AgentBorder
- 13. AgentBorder .UpdateFields
- 14. Agent Reports Back a successful Itinerary Creation

Manage Flight(7B)

- ItineraryEntity()
- CreditCardEntity()
- 8. CreditCardEntity returns a new instance of itself
- 9. ItineraryEntity returns a new instance of itself to AgentControl
- 10. AgentControl.eflDatabase.getCustomer(CustomerID).getItinerary(itineraryID)
- 11. EFLDatabase returns a text document containing all the info for the Itinerary
- 12. AgentControl updates all needed info into the ItineraryEntity

Manage Flight(8B)

- 8. AgentControl.itineraries.get(itineraryID)
- 9. EFL Database returns a null
- 10. AgentControl reports a failed operation to AgentBorder
- 11. AgentBorder.DisplayErrorMessage()
- 12. Agent tells customer that the Itinerary doesn't exist and offers to create a new one



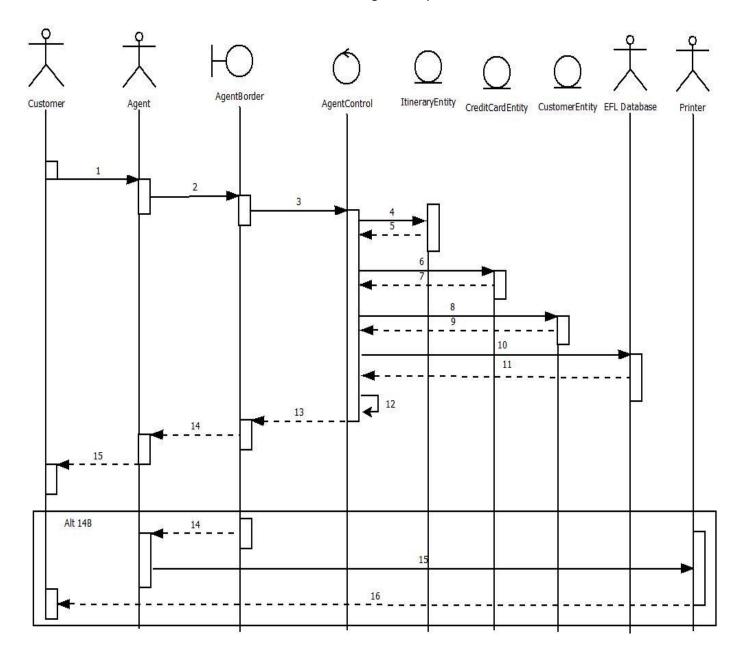
Cancel Reservation (Normal)

- 1. Customer Requests that their flight reservation is cancelled
- 2. Agent looks up the Itinerary to cancel by the customer and itinerary number in Agent Border
- 3. AgentBorder.CancelReservation()
- 4. AgentControl.eflDatabase.customer(customerID).itineraries.get(itineraryID)
- 5. EFL Database returns itinerary information
- 6. AgentControl.CancelReservation()
- 7. AgentControl sends updated information to the EFL Database
- 8. AgentControl returns successful cancellation to AgentBorder
- 9. AgentBorder.UpdateFields()
- 10. Agent reports to Customer a successful

Manage Flight(4B)

- 4. AgentControl.customer(customerID).itineraries.get(itineraryID)
- 5. EFL Database returns a null
- 6. AgentControl reports a failed operation to AgentBorder
- 7. AgentBorder.DisplayErrorMessage()
- 8. Agent tells customer that the Itinerary doesn't exist and offers to create a new one

Produce Flight Receipt



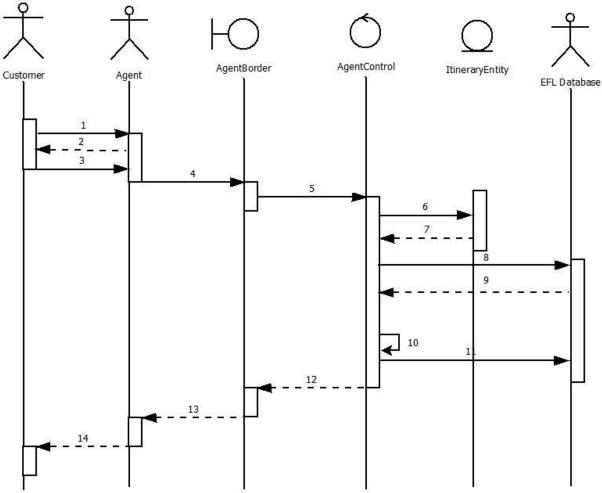
Produce Flight Receipt (Normal)

- 1. Customer Requests to print their flight reservation
- 2. Agent looks up the Itinerary to print by the customer and itinerary number in Agent Border
- AgentBorder.ProduceFlightReceipt()
- 4. ItineraryEntity()
- 5. ItineraryEntity returns a new instance of itself
- CreditCardEntity()
- 7. CreditCardEntity returns a new instance of itself
- 8. CustomerEntity()
- 9. CustomerEntity returns a new instance of itself
- 10. AgentControl.eflDatabase.getCustomer(customerID)
- 11. EFL Database returns itinerary information
- 12. AgentControl sets information to get returned as document flight reservation from itinerary
- 13. AgentControl .ProduceFlightReceipt(eflDatabase customer.itineraries.get(itineraryID))
- 14. AgentBorder.DisplayDocument()
- 15. Agent sends soft copy to customer via email

Produce Flight Receipt (14B)*

- 14. AgentBorder.DisplayDocument()
- 15. AgentBorder displays document and Agent chooses print
- 16. Printer prints the flight Receipt to the customer

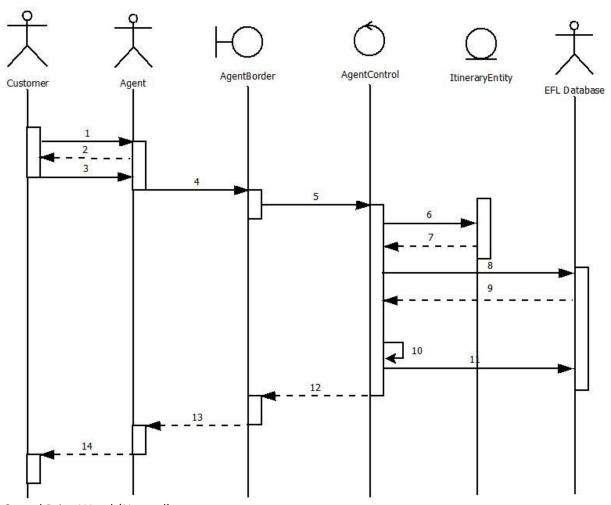
Create Price Watch



Create Price Watch(Normal)

- 1. The Customer doesn't like the prices for their flights
- 2. The Agent offers to create a price watch and requests their desired price
- 3. The Customer gives the Agent the needed information
- 4. The Agent Inputs all the information in AgentBorder
- AgentBorder.CreatePriceWatch()
- 6. ItineraryEntity()
- 7. ItineraryEntity returns a new instance of itself to AgentControl
- 8. AgentControl.eflDatabase.customer(customerID).itineraries.get(itineraryID)
- 9. EFLDatabase returns a text document containing all the info for the Itinerary
- 10. AgentControl updates the price watch info into the ItineraryEntity instance
- 11. AgentControl sends Itinerary Case with updated price watch to the EFLDatabase
- 12. AgentControl returns info to AgentBorder
- 13. AgentBorder.UpdateFields()
- 14. Agent Reports Back a successful price watch creation

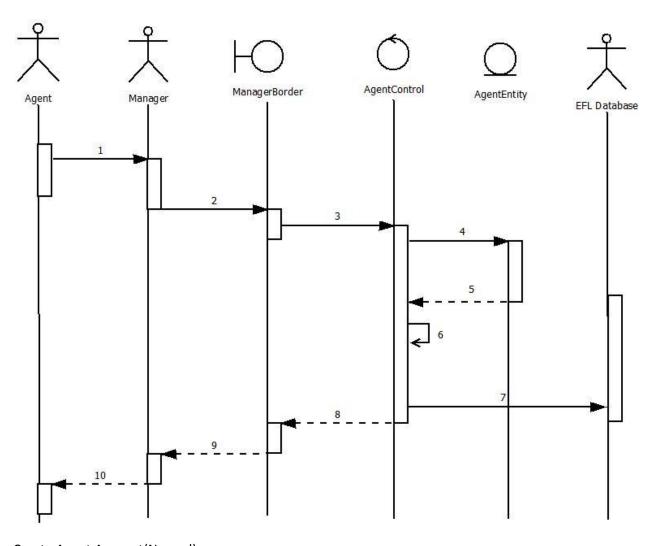
Cancel Price Watch



Cancel Price Watch(Normal)

- 1. The Customer Requests to book a price watch flight or wants to cancel price watch
- 2. The Agent requests the itinerary number
- 3. The Customer gives the Agent the needed information
- 4. The Agent Inputs all the information in AgentBorder
- AgentBorder.CancelPriceWatch()
- 6. ItineraryEntity()
- 7. ItineraryEntity returns a new instance of itself to AgentControl
- 8. AgentControl.eflDatabase.customer(customerID).itineraries.get(itineraryID)
- 9. EFLDatabase returns a text document containing all the info for the Itinerary
- 10. AgentControl cancels the price watch in the ItineraryEntity instance
- 11. AgentControl sends Itinerary Case with updated information to the EFLDatabase
- 12. AgentControl returns class instance to AgentBorder
- 13. AgentBorder.DisplayMessage("Price Watch Deleted")
- 14. Agent Reports Back a successful price watch cancelation

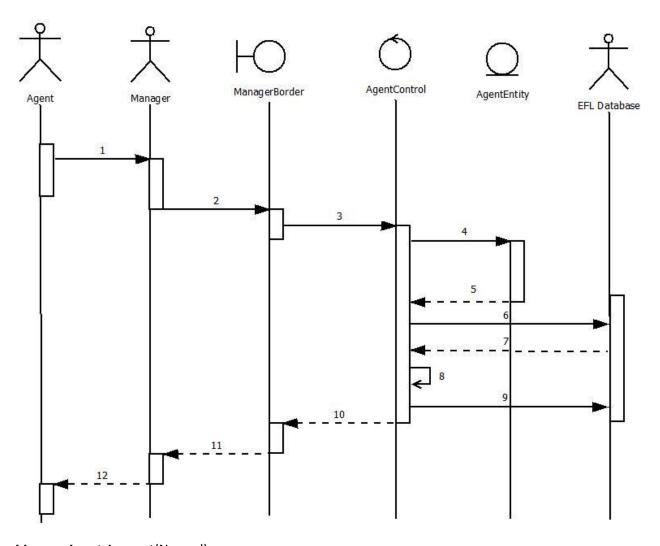
Create Agent Account



Create Agent Account(Normal)

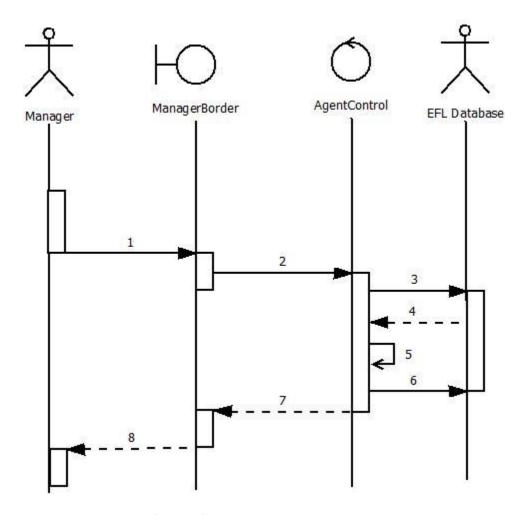
- 1. Agent is a new hire and gives manager information to create an agent account
- 2. Manager enters information into ManagerBorder subscreen
- 3. ManagerControl.CreateNewAgent()
- 4. AgentEntity()
- 5. AgentEntity returns a new instance of itself to AgentControl
- 6. AgentControl.CreateNewAgent()
- 7. AgentControl sends agent info to EFLDatabase
- 8. AgentControl sends updated display to AgentBorder with customer instance
- 9. ManagerBorder.UpdatesFields()
- 10. Manager Reports a successfully created account

Manage Agent Account



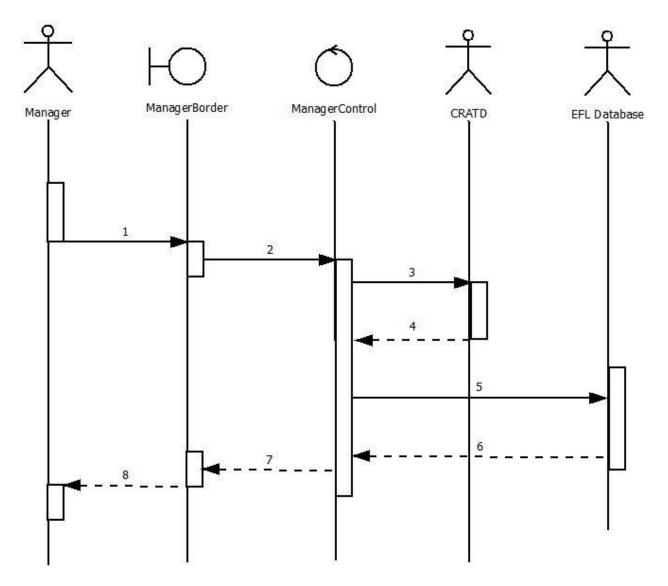
Manage Agent Account(Normal)

- 1. Agent gives manager updated information to change their account
- 2. Manager enters information into ManagerBorder subscreen
- 3. ManagerBorder.ModifyAgentAccount()
- 4. AgentEntity()
- 5. AgentEntity returns a new instance of itself to AgentControl
- 6. AgentControl .eflDatabase.getAgentEntity(agentID)
- 7. EFI Database returns information to AgentControl
- 8. AgentControl.ModifyAgentAccount()
- 9. AgentControl sends agent info to EFLDatabase
- 10. AgentControl sends updated display to AgentBorder with customer instance
- 11. ManagerBorder .UpdateFields()
- 12. Manager Reports a successfully created account



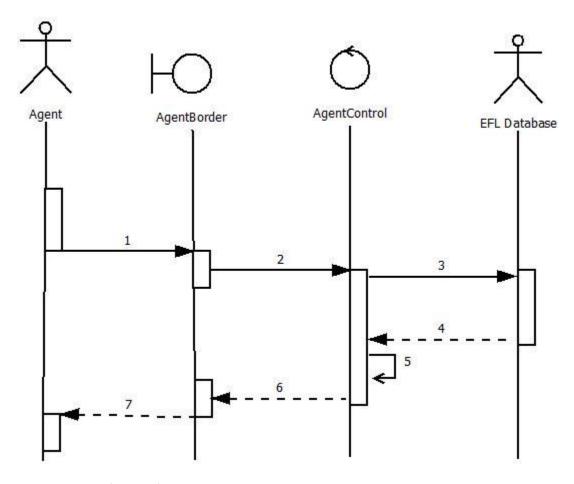
Produce Daily Reports(Normal)

- 1. Manager requests for daily reports to be computed
- 2. ManagerBorder .ProduceDailyReports()
- 3. AgentControl.eflDatabase
- 4. EFL Database returns requested information
- 5. AgentControl.ProduceDailyReports()
- 6. Updated reports are updated to the EFL Database
- 7. AgentControl returns information from Daily reports
- 8. ManagerBorder.UpdateFields()



Get Updates From CRATD (Normal)

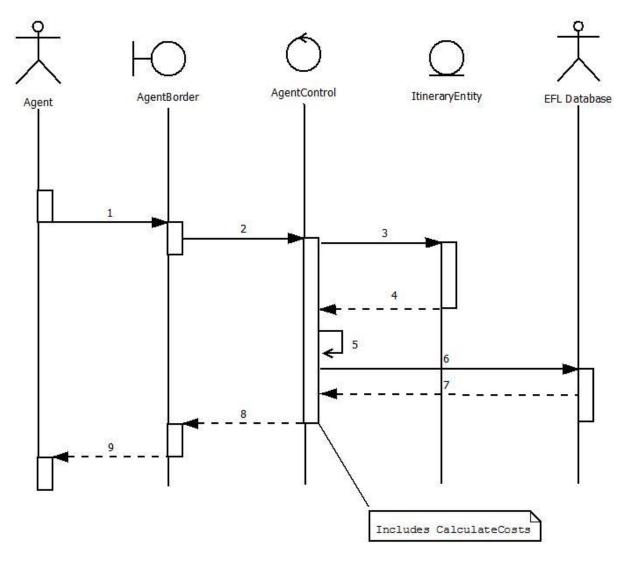
- 1. Manager initiates downloading of updates from CRATD
- 2. ManagerBorder.GetCRATDUpdates()
- 3. ManagerControl .cratd.getUpdates ()
- 4. CRATD returns updates to the ManagerControl
- 5. ManagerControl.eflDatabase.airports.setFields()
- 6. EFL Database returns success message to the ManagerControl
- 7. ManagerControl returns success message to the ManagerBorder
- 8. ManagerBorder.DisplayMessage("CRATD Updates Successful")



Calculate Costs (Normal)

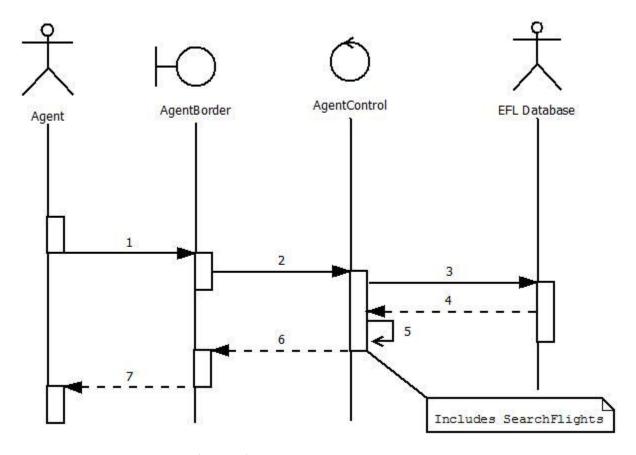
- 1. Agent requests for a calculate costs action by submitting flight information into AgentBorder
- AgentBorder.SearchFlights()
 (Note: Other methods that call Calculate Costs; SearchFlights() is the most common.)
- 3. AgentControl.eflDatabase.getFlights()
- 4. EFL Database returns information to AgentControl
- 5. AgentControl.ComputeCosts
- 6. AgentControl returns updated information to AgentBorder
- 7. AgentBorder.UpdateFields()

Search Flights



Search Flights (Normal)

- 1. Agent Requests for a list of current flights that matches an Itinerary given by the Itinerary number
- 2. Agent hits submit and AgentBorder forwards the information to AgentControl
- 3. ItineraryEntity()
- 4. ItineraryEntity returns a new instance of itself to AgentControl
- 5. AgentControl.SearchFlights(AgentControl.eflDatabase.getItinerary(itineraryID))
- 6. AgentControl.eflDatabase.getFlightsList()
- 7. EFL Database returns the list to AgentControl
- 8. AgentControl returns the list to AgentBorder
- 9. AgentBorder .UpdateFields()



Provide Met Watch Scenarios (Normal)

- 1. Agent requests all met Price Watch Scenarios to be listed
- 2. AgentBorder.ProvideMetWatchScenarios()
- 3. AgentControl.eflDatabase.getCustomer(customerID).getItinerary(itineraryID).getPriceWatch()
- 4. EFL Database returns a list of all current Prices Watches
- 5. AgentControl.ProvideMetWatchScenarios()
- 6. AgentControl returns a list of Met Price watches with flight information
- 7. AgentBorder .UpdateFields()