```
1 Problem Statement: Design an app to book a doctor's appointment using medical insurance provider
            Behaviors and Key Objects:
           Internet/App:
* Behavior: establishWebService, myBlueAppResponse
           * Data: Internet Connection
           App User: searchDoctor, selectDoctor, selectPlan, selectLocation, selectDate, selectTime
* Data: Health Plan ID, User Password, User Email Address, User Phone, User Address, Medical Records, Insurance Cover Plan
10
           App Login:

* Behavior: logintoApp, createnewAccount, forgotPassword, forgotUsername, validate(username, password)

* Data: Username, Email Address, Password, Phone Number
13
              Behavior: bookAppointment, cancelAppointment, editAppointment
           * Data: Appointment ID, Appointment Date, Appointment Summary //Doctor Name, Time and Location
19
           * Behavior: makePayment, cancelPayment
* Data: Payment Method, Card Number
 24 * Sequence of Flow - Invoke Objects with Behaviors:
27 Platform MyBlueApp
myBlueAppResponse response = allowLocationDetection()
userResponse response = user.selectLocationManually() || user.allowLocationDetection()
//The app identifies the user's existing health plan and autofills the "Select Network/Health Plan" field
                      myBlueAppResponse response = autofill.userHealthPlan()
IF response.isValid = false
   myBlueAppResponse response = Print("Please enter the Health Plan details manually")
                            userResponse response = user.selectPlan()

IF response.isValid = true

//The app shows entries where the location matches the selection and the doctor matches the heath plan details
                                       47
48
50
 51
 53
 56
                                                          IF doctor.isAvailable = true
                                                                userResponse response = tap.bookAppointment(appointment)
                                                              userResponse response = tap.bookAppointment(appointment)
myBlueAppResponse response = user.provideContactDetails()
userResponse response = user.provideContactDetails()
userResponse response = tap.confirmAppointment(appointment)

If response.isValid = true
    userResponse response = user.reviewSubTotal(totalSum)
    //User has to select the payment method; Card/Third Party
    userResponse response = user.selectPaymentMethod(Card) || user.selectPaymentMethod(thirdParty)
    user.makePayment(Card) || user.makePayment(thirdParty)
    myBlueAppResponse response = myBlueApp.validatePayment()
    If myBlueApp.validatePayment = true()
        myBlueAppResponse response = sendmessageToUser(appointment)
    ELSE
59
62
65
68
                                                                                 myBlueAppResponse response = message.PaymentFailed(error)
userResponse response = user.makePayment(Card || thirdParty) || userResponse response = user.cancelPayment()
                                                                           END
                                                                     ELSE
 76
77
                                                         FLSF
                                                                myBlueAppResponse response = myBlueApp.Print("No Doctors in your plan available for selected time slot")
                                                         END
                                                    FLSF
                                                         myBlueAppResponse response = myBlueApp.Print("Appointments cannot be booked in the selected Date and/or time slot")
80
                                        FLSF
83
                                              myBlueAppResponse response = myBlueApp.Print("Enter Valid Details")
                                        END
                                  FLSF
                                        myBlueAppResponse response = myBlueApp.Print("The entered Health Plan details are invalid")
88
                      ELSE
                            myBlueAppResponse response = myBlueApp.Print("No existing Health Plan details found for your account, please contact Support Help Line or try entering manually")
                      FND
                ELSE
                      //User has the ability to create new account, recover forgotten password, recover forgotten username
myBlueAppResponse response = user.createnewAccount || myBlueAppResponse response = user.forgotPassword || myBlueAppResponse = user.forgotUsername
                END
          ELSE
           END
```