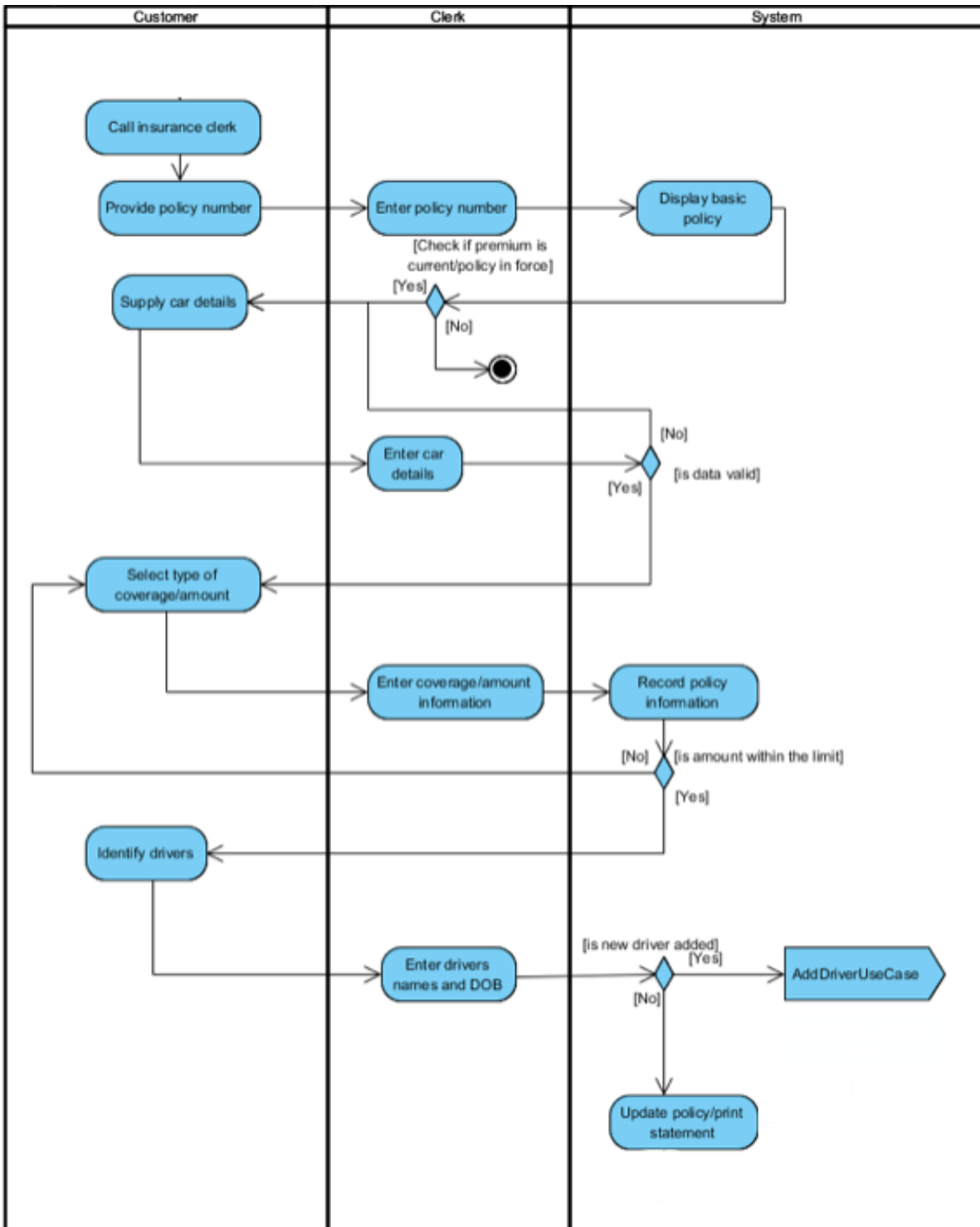# OO Analysis and Design Lab Week 6

Name   :   Robert Gabriel
Class   :   Web2
Student Id   :   R00102430

Q1. Activity diagram

Customer	Clerk	System

Call insurance clerk

Provide policy number → **Enter policy number** → **Display basic policy**

[Check if premium is current/policy in force]

[Yes] ◇ [No]

Supply car details ←

●

Enter car details → ◇ [No] [is data valid]

[Yes]

Select type of coverage/amount ←

Enter coverage/amount information → **Record policy information**

[No] ◇ [is amount within the limit]

[Yes]

Identify drivers ←

Enter drivers names and DOB → ◇ [is new driver added] [Yes] → **Add DriverUseCase**

[No]

Update policy/print statement

Q1 Use Case

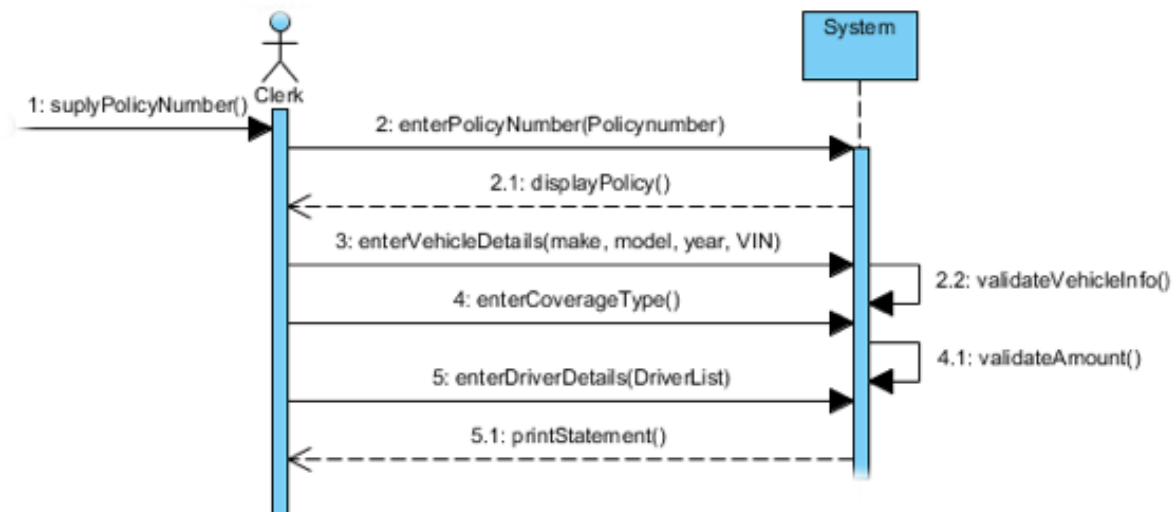| Use Case Name:	**Add new vehicle**	
Scenario:	Add new vehicle to an existing policy	
Triggering Event:	Need for new vehicle registration	
Brief Description:	A customer wants to add new car into existing policy. The clerk collects all information required, updates the policy. Prints updated statement.	
Actors:	Clerk, accounting department	
Stakeholders:	Clerk, accounting department	
Preconditions:	Customer must hold existing policy and premium is current.	
Postconditions:	New car added to the policy, new premium calculated, new policy statement printed	
Flow of Events:	Actor	System
	1. Clerk enters policy number	2. System displays insurance policy
	3. Clerk verifies displayed information and enters vehicle details	4. System validates information provided.
	5. Clerk enters type of coverage and the amount	6. System records entered values and validates amount with policy limits
	7. Clerk enters car drivers and percent of driving time for each	8. System records details, updates policy, calculates premium, prints policy statement
Exception Conditions:	3. If premium is not paid system offers payment option before continue. 4. If any of vehicle detail is not valid system allows for making correction 6. If policy limits are exceeded system offers different coverage. 7. If new driver is added system calls *Add new driver* use case before continue	

Q2. Pre and post- conditions

- **Preconditions:** policy, InsuredPerson,

- **Postconditions:** Vehicle has Coverages, Policy has InsuredVehicles, Policy has InsuredPersons, InsuredVehicle, InsuredPerson

Q3. System sequence diagram

Clerk

1: suplyPolicyNumber()

2: enterPolicyNumber(Policynumber)

2.1: displayPolicy()

3: enterVehicleDetails(make, model, year, VIN)

2.2: validateVehicleInfo()

4: enterCoverageType()

4.1: validateAmount()

5: enterDriverDetails(DriverList)

5.1: printStatement()

System

Q4 Class diagram