

Functional requirements

Name	R. #1 Enter client's information
Summary	Allows the user to enter and save the client's info.
Input	
Name, trade register number, register's expedition date, kilos transported and total paid value	
Output	
The client's information has been modified. The client's type is calculated and displayed.	

Name	R. #2 Load ship and display cargo's value
Summary	Allows the user to enter the travel's information
Input	
Number of cargos, number of transported boxes, weight per box (in grams), owning client and cargo type (dangerous, perishable and non-perishable).	
Output	
A travel with the specified cargo has been created. The total price of the cargo for each client is displayed.	

Name	R. #3 Unload the ship
Summary	Allows the user to unload the ship
Input	
None.	
Output	
The ship returns to its initial values.	

Name	R. #4 Display the ship's total transported weight
Summary	Displays the ship's total transported weight
Input	
None.	
Output	
The weight the ship is carrying is displayed.	

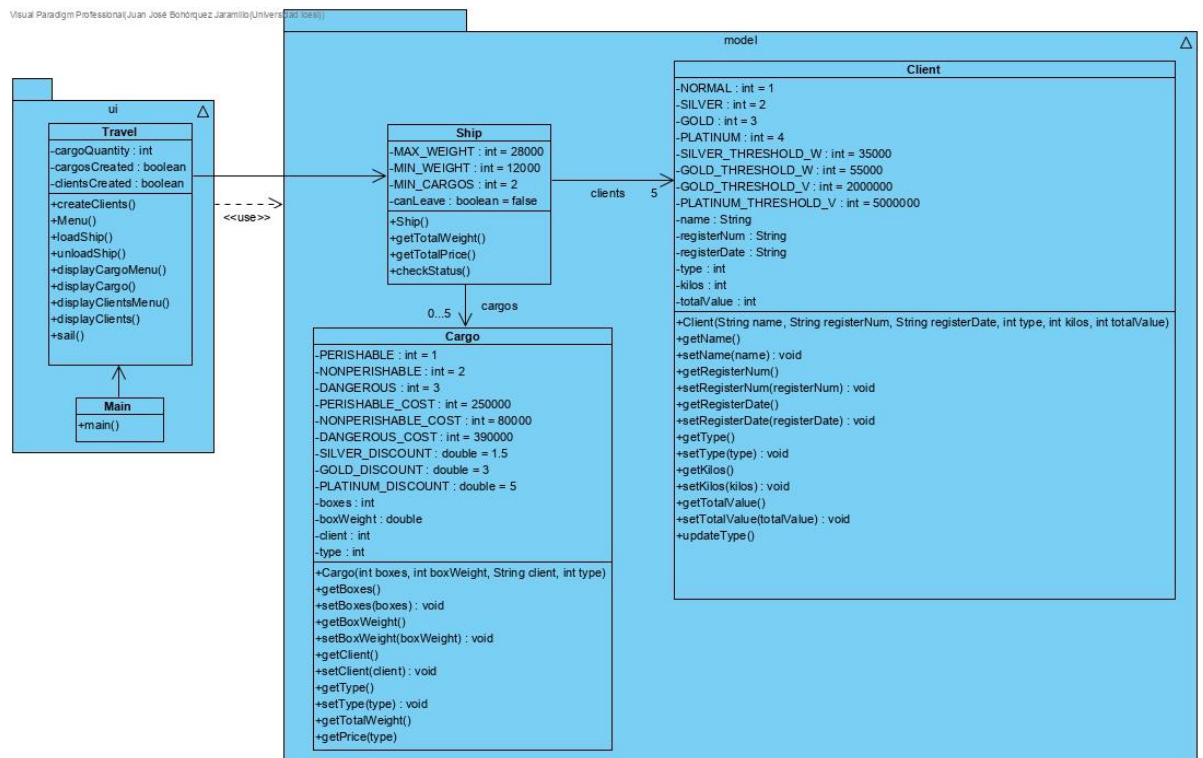
Name	R. #5 State whether the ship is able to leave port
Summary	Checks if the ship can leave port given the conditions and displays a message.
Input	
None.	
Output	
A message that says whether the ship will be able to leave is shown.	

Name	R. #6 Update the client's type
Summary	Allows the user to update the client's type depending on their total transported weight
Input	
None.	
Output	
The client's type has been updated	

Non-functional requirements

- The ship can only carry 28.000 kilos per travel.
- "El Pirata" lends its services only to 5 big companies of the region.
- Cargo types have different costs:
 - Dangerous cargos cost 390.000 pesos per kilo
 - Perishables cost 250.000 per kilo.
 - Non-perishables cost 80.000 kilo.
- Dangerous and perishable cargos can't be transported in the same travel.
- If the entirety of the cargo can't be transported, it can't be sent at all.
- The ship can only leave port with a minimum of two cargos or at least 12.000 kilos in total.
- Clients start out with Normal type.
 - They rank up to Silver when they've transported over 35.000 kilos.
 - Gold with over 55.000 kilos or 2 million pesos paid.
 - Platinum when they've paid over 5 million pesos.
- A discount is applied depending on the client's type.
 - Silver: 1,5% (for perishable cargos)
 - Gold: 3% (for perishable and non-perishable cargos)
 - Platinum 5% (for any type of cargo)

Class Diagram



Object Diagram

