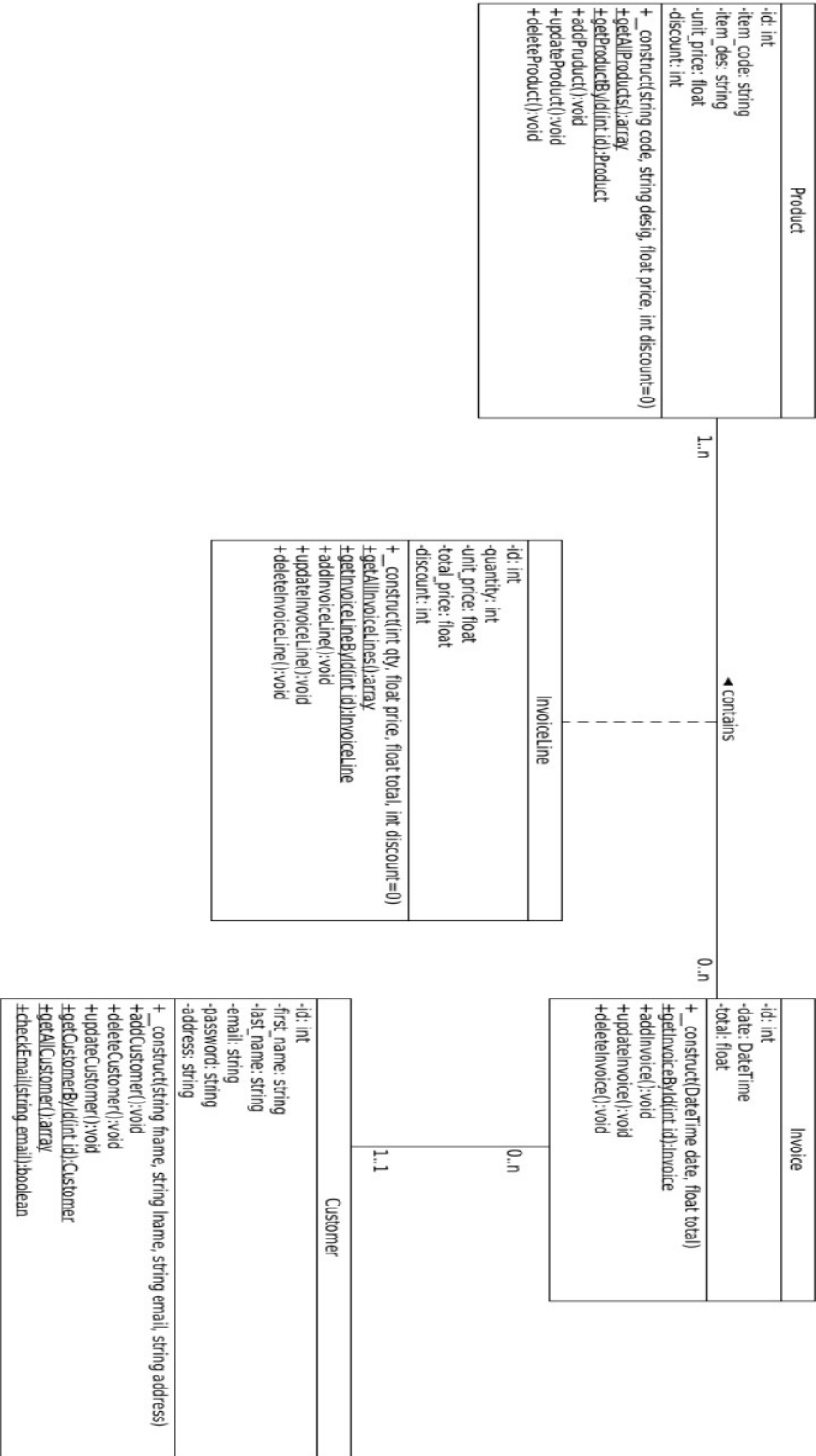


We aim to develop an e-commerce application. Below you will find the corresponding class diagram:



Below is the description of each class:

<b>Product</b>	
<b><u>Properties</u></b>	
id	Product identifier, private integer
item_code	Product code, private string
unit_price	Unit price, private float
discount	Discount, default value is 0, private integer
<b><u>Methods</u></b>	
__construct(...)	Constructor
getAllProducts()	Public and static method that returns a multidimensional array containing the list of all products
geProductById()	Public and static method that takes an id parameter and returns an instance of the Product class
addProduct()	Public method to add a product to the database
updateProduct()	Public method to update product information. Note that the product's ID is not modifiable.
deleteProduct()	Public method to delete a product

<b>Invoice</b>	
<b><u>Properties</u></b>	
id	Invoice identifier, private integer
date	Billing date, private DateTime
total	Total amount of the invoice, private float
<b><u>Methods</u></b>	
__construct(...)	Constructor
getInvoiceById(...)	Public and static method that takes an id parameter and returns an instance of the Invoice class
addInvoice()	Public method to add an invoice to the database
updateInvoice()	Public method to update invoice information. Note that the invoice's ID is not modifiable.
deleteInvoice()	Public method to delete an invoice

<b>InvoiceLine</b>
--------------------

<b><u>Properties</u></b>	
id	Order line identifier, private integer
quantity	Quantity of ordered items, private integer
unit_price	Unit price, private float
total_price	Total amount, private float
discount	Discount, default value is 0, private integer
<b><u>Methods</u></b>	
__construct(...)	Constructor
getAllInvoiceLines()	Public and static method that returns a multidimensional array containing all the order lines
getInvoiceLineById()	Public and static method that takes an id parameter and returns an instance of the InvoiceLine class
addInvoiceLine()	Public method to add an order line to the database
updateInvoiceLine()	Public method to modify an order line. Note that the product's ID is not modifiable.
deleteProduct()	Public method to delete an order line

<b>Customer</b>	
<b><u>Properties</u></b>	
id	Product identifier, private integer
first_name	Product code, private string
last_name	Unit price, private float
email	Discount, default value is 0, private integer
password	Customer's password, private string
address	
<b><u>Methods</u></b>	
__construct(...)	Constructor
getAllCustomer()	Public and static method that returns a multidimensional array containing the list of all customers
getCustomerById()	Public and static method that takes an id parameter and returns an instance of the Customer class
addCustomer()	Public method to add a customer to the database
updateCustomer()	Public method to update customer information. Note that the customer's ID is not modifiable.
deleteCustomer()	Public method to delete a customer
checkEmail()	Public and static method that returns TRUE if the email address exists in the database, FALSE otherwise

Below is the physical data model

