Presentation Layer Main + SelectedBranchID : int + branchSelected : boolean + Main + Protocol **Business Layer** Use **Service Layer** StockControllerService Use Service + BranchControlller : branchController Use + StockControllerService : stockControllerService **Domain Layer** Item Product Purchase - productID : int - ID : int - purchaseID : int - name : String - location : String - purchaseDate : Date - manufacturer : String - expireDate : Date - products : Map<Integer,Map<Integer,Integer>> - amountToNotify : int - isUsable : Boolean - categoryID : int - amount : int Control - supplyTime : Date Discount - Demand : int - discountID : int StockController - productID : int Items: List<Item> - discountStartDate : Date - products : List<Product> - discountEndDate : Date - discount : Map<Integer,Type> - productsCounter : int - purchases : List<Purchase> Control - purchasesCounter : int Category - categories : List<Categories> - ID : int Sorted - categoriesCounter : int - name : string Has - discounts : List<Discount> - parentCategory : Category - discountsCounter : int - subCategories : List<Category> Branch Control - branchID : int - name : string BranchController stockController : StockController - branches : List<Branch> - counterBranches : int