

МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ
РОССИЙСКОЙ ФЕДЕРАЦИИ

Федеральное государственное автономное образовательное
учреждение высшего образования

Санкт-Петербургский национальный исследовательский университет

ИТМО

Мегафакультет трансляционных информационных технологий
Факультет информационных технологий и программирования

Лабораторная работ №5.

По дисциплине «Анализ и проектирование на UML»

Тема: Диаграммы классов

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CRC карточки 4 основных классов:

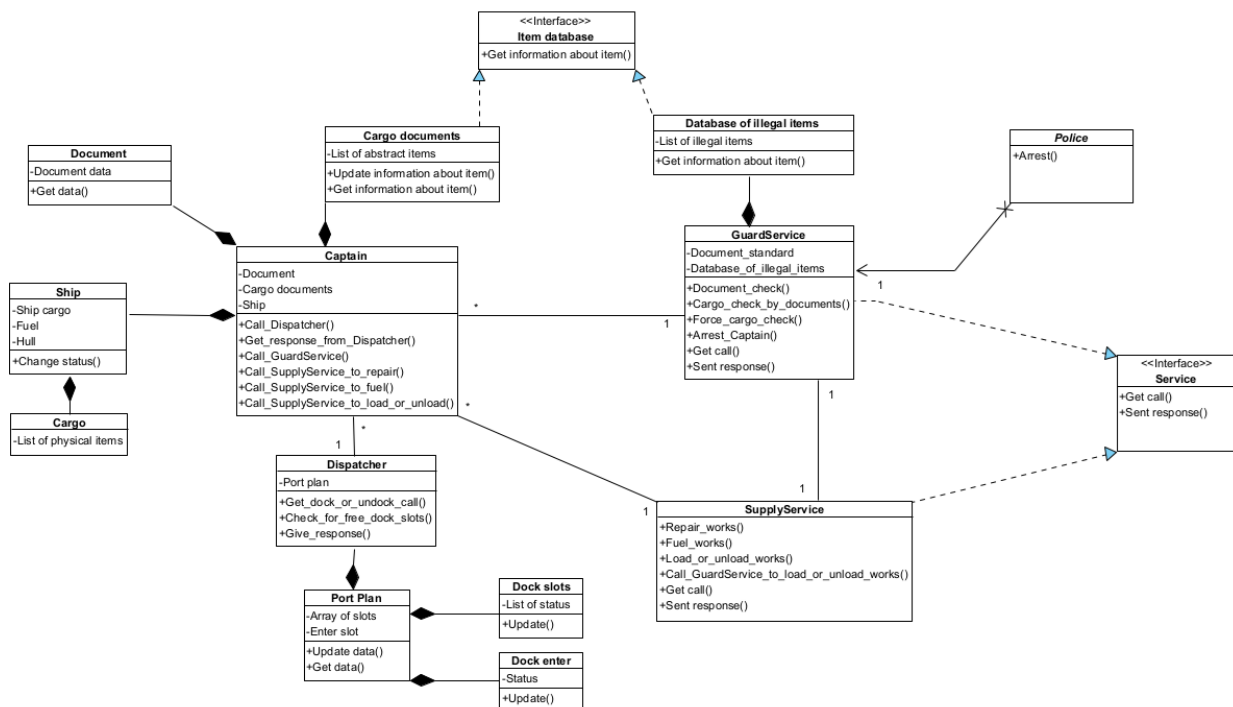
CRCCard	
Super Classes: Captain	
Sub Classes:	
Description: This person is head of ship and cargo owner	
Attributes:	
Name	Description
Document	Captain's document
Cargo documents	Database of ship's cargo
Responsibilities:	
Name	Collaborator
Call dispatcher	Call dispatcher to dock/undock
Get response from dispatcher	Get response from dispatcher after some call
Call GuardService	Call GuardService for checks
Call SupplyService to repair	Call SupplyService to repair
Call SupplyService to fuel	Call SupplyService to fuel
Call SupplyService to	Call SupplyService to

CRCCard	
Super Classes: Dispatcher	
Sub Classes:	
Description: This person is dock manager. He gives permissions for dock/undock.	
Attributes:	
Name	Description
Port plan	Port plan with available dock slots
Responsibilities:	
Name	Collaborator
Get dock/undock call	Get dock/undock call from Captain
Check for free dock slots	Check for free dock slots before give response to dock/undock call
Give response	Give response to call

CRCCard	
Super Classes: GuardService	
Sub Classes:	
Description: This service checks documents and cargo for following rules and updates ship's documents after load/unload some cargo from ship	
Attributes:	
Name	Description
Document standard	Some rules for check capitan document
Database of illegal items	Database for check ship's
Responsibilities:	
Name	Collaborator
Get call and arrive	Get call for check from capitan and arrive
Document Check	Check Captain's document
Cargo check by documents	Check ship's cargo for illegal items
Force cargo check	Check cargo by yourself without documents
Arrest Captain	Arrest Captain if some check failed

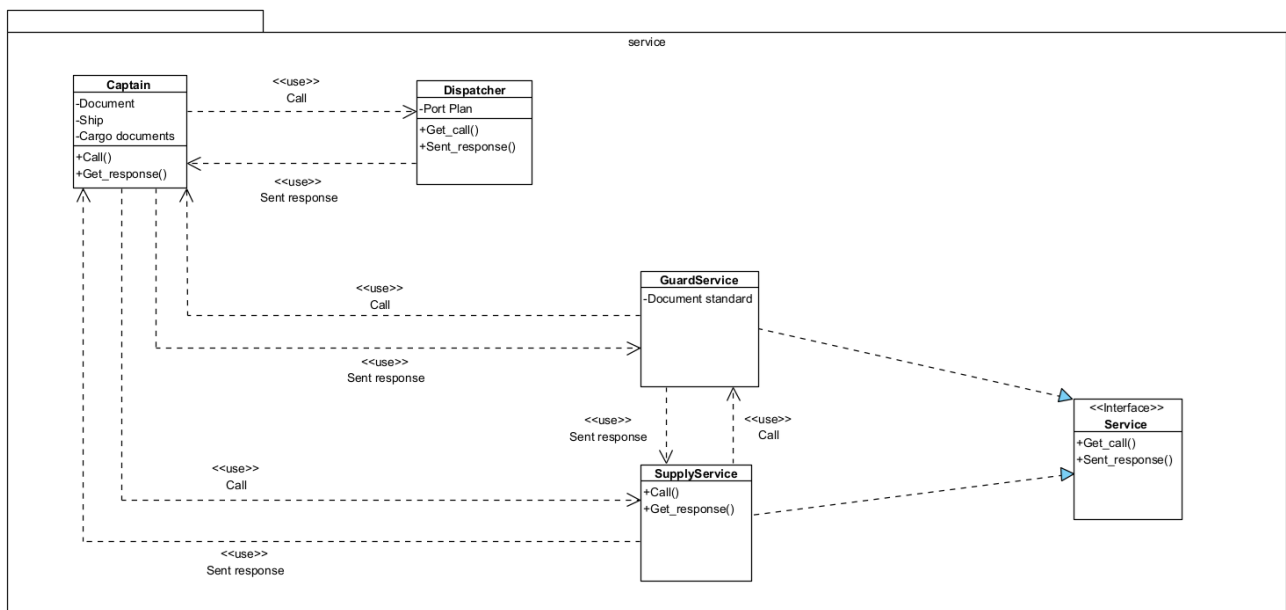
CRCCard	
Super Classes: SupplyService	
Sub Classes:	
Description: This service fuels and repairs ships. It also load/unloads some ship's cargo	
Attributes:	
Name	Description
Responsibilities:	
Name	Collaborator
Repair works	Repair ship
Fuel works	Fuel ship
Load/Unload works	Load/unload some ship's cargo
Call GuardService to Load/unload works	Call GuardService to update documents if load/unload works is done

Концептуальная диаграмма классов:

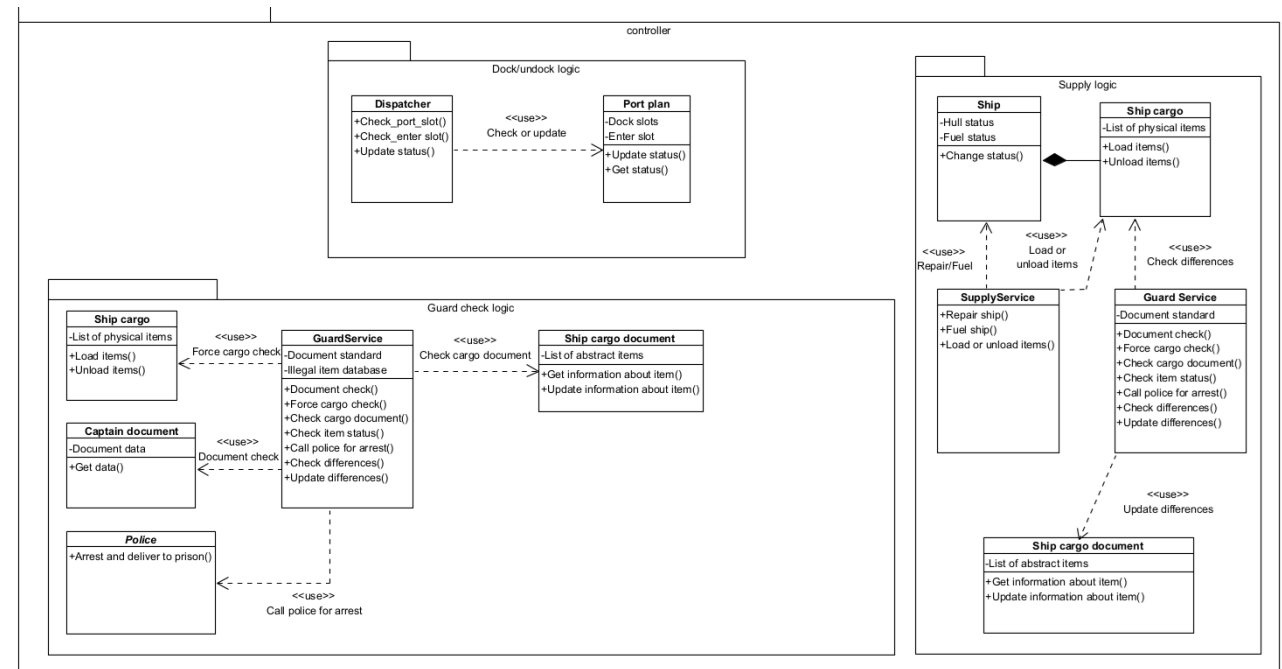


Техническая диаграмма классов, трехслойная архитектура.

1) Пользовательский слой



2) Слой проверки доступа к данным и обработки запросов:



3) Слой хранения данных:

