

Diagnostic Centre Client Coordination System
Analysis and Design Document
Student: Danila Lucia-Diana
Group: 30433

Diagnostic Centre Client Coordination System	Version: <1.0>
	Date: <30/mar/18>
<document identifier>	

Revision History

Date	Version	Description	Author
<30/mar/18>	<1.0>	<made the first version>	<Danila Lucia-Diana>

Diagnostic Centre Client Coordination System	Version: <1.0>
	Date: <30/mar/18>
<document identifier>	

Table of Contents

I.	Project Specification	4
II.	Elaboration – Iteration 1.1	4
1.	Domain Model	4
2.	Architectural Design	4
2.1	Conceptual Architecture	4
2.2	Package Design	5
2.3	Component and Deployment Diagrams	6
III.	Elaboration – Iteration 1.2	6
1.	Design Model	6
1.1	Dynamic Behavior	6
1.2	Class Design	9
2.	Data Model	10
3.	Unit Testing	10
IV.	Elaboration – Iteration 2	10
1.	Architectural Design Refinement	10
2.	Design Model Refinement	11
	<i>[Refine the UML class diagram by applying class design principles and GRASP; motivate your choices. Deliver the updated class diagrams.]</i>	11
V.	Construction and Transition	11
1.	System Testing	11
2.	Future improvements	11
VI.	Bibliography	11

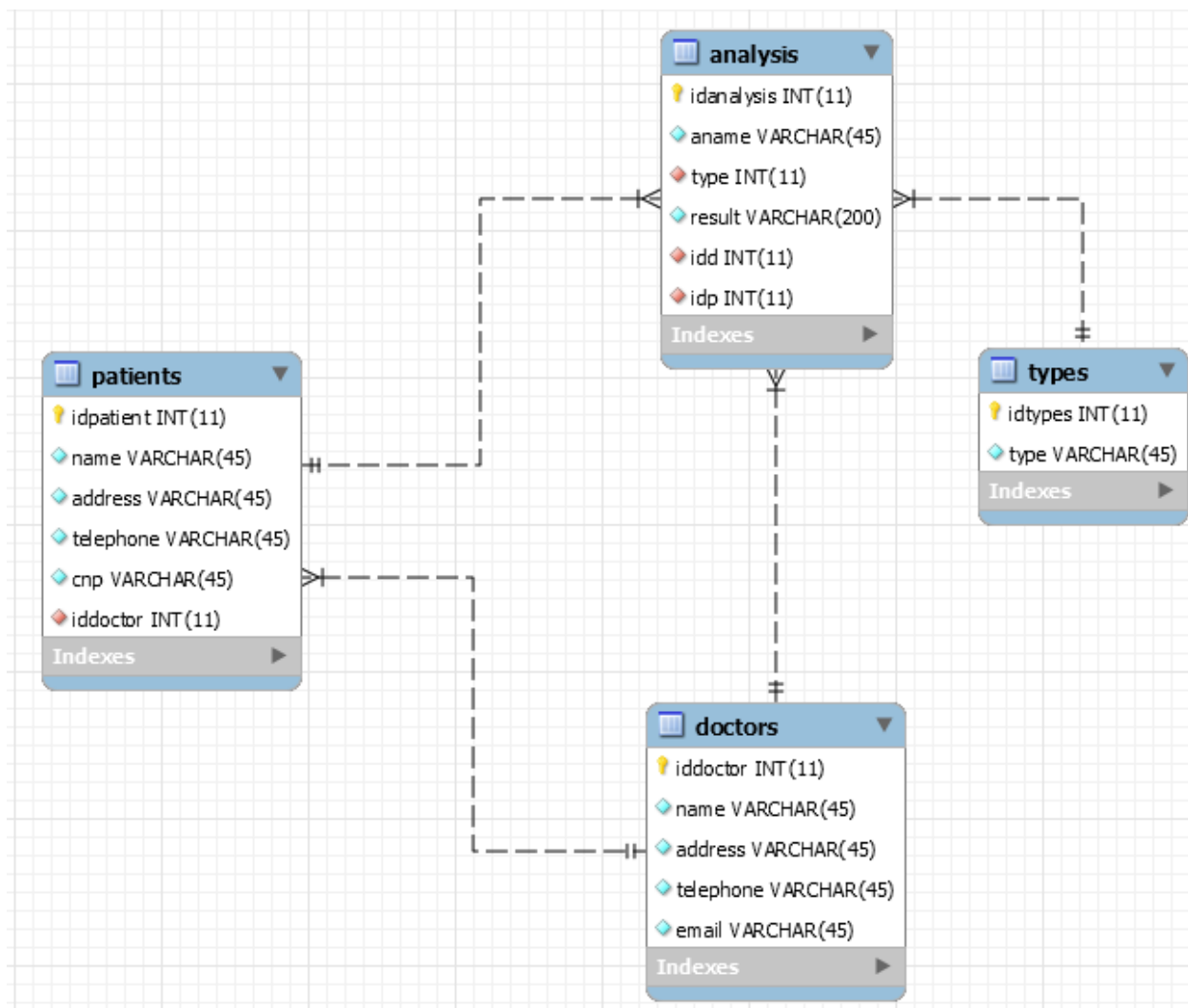
Diagnostic Centre Client Coordination System	Version: <1.0>
	Date: <30/mar/18>
<document identifier>	

I. Project Specification

Diagnostic Centre Client Coordination System helps the diagnostic centres to maintain good relations with their clients. The clients may conduct various tests at the diagnostic center and the system must be capable of valuating patient bills and providing them in printable format.

II. Elaboration – Iteration 1.1

1. Domain Model



2. Architectural Design

2.1 Conceptual Architecture

For implementing this project, the architectural patterns I have chosen to implement are: a client server architecture with the following design patterns: table module pattern, and a dao pattern. The user interface will be implemented using an MVC architecture.

Diagnostic Centre Client Coordination System	Version: <1.0>
	Date: <30/mar/18>
<document identifier>	

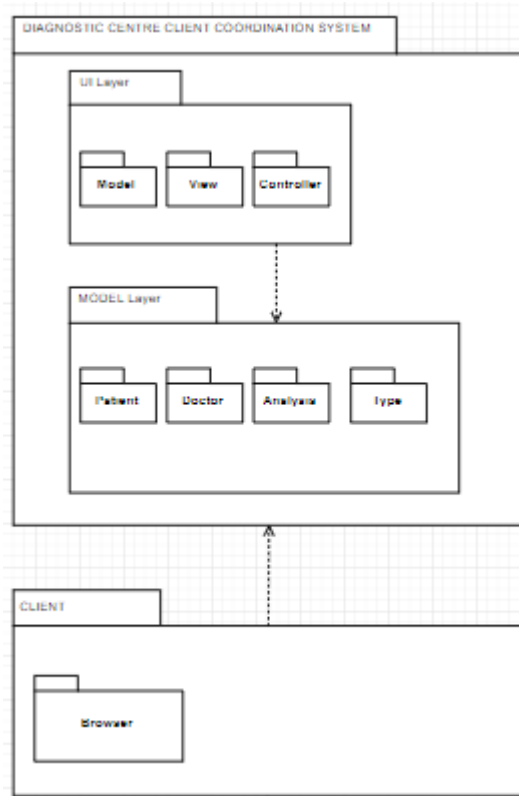
Client Server: Client/server architecture is a computing model in which the server hosts, delivers and manages most of the resources and services to be consumed by the client. This type of architecture has one or more client computers connected to a central server over a network or internet connection. This system shares computing resources.

Dao: access to data varies depending on the source of the data. Access to persistent storage, such as to a database, varies greatly depending on the type of storage (relational databases, object-oriented databases, flat files, and so forth) and the vendor implementation.

Table Module: A single instance that handles the business logic for all rows in a database table or view.

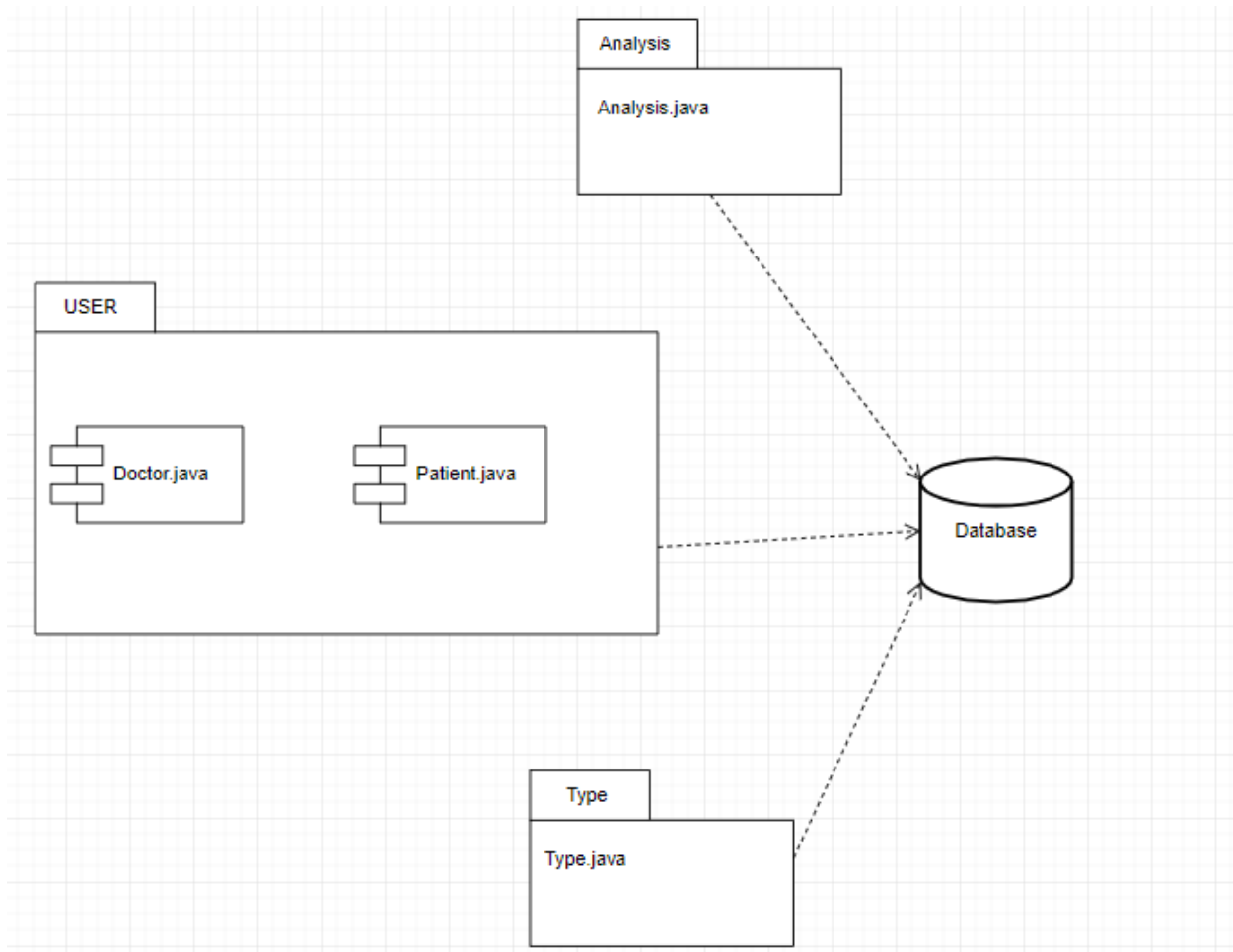
I choose them because the DCCCS will be client server system, dao and table module patterns will deal with the database needed to store the doctors, clients and their analysis (accessing these informations).

2.2 Package Design



Diagnostic Centre Client Coordination System	Version: <1.0>
	Date: <30/mar/18>
<document identifier>	

2.3 Component and Deployment Diagrams



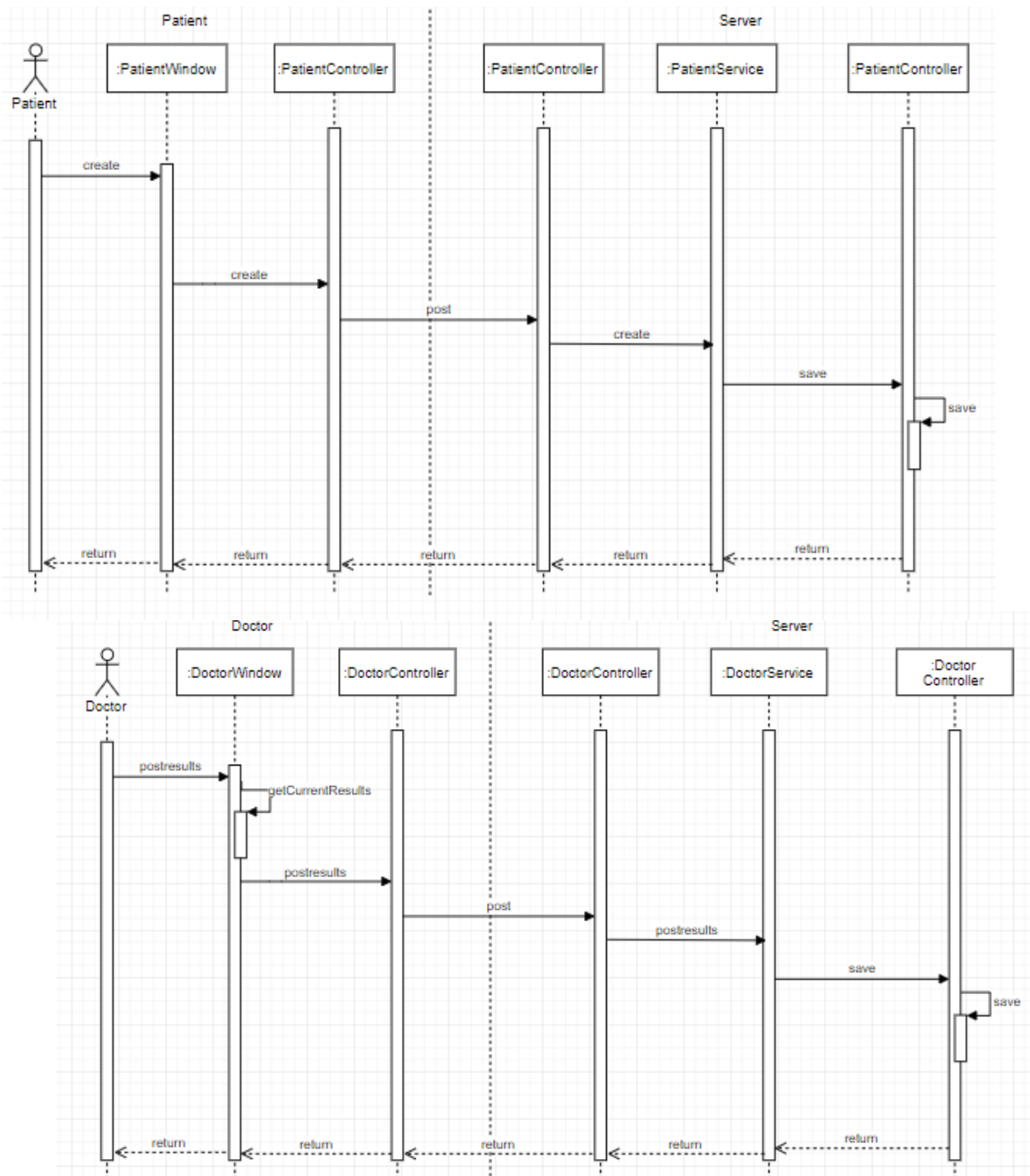
III. Elaboration – Iteration 1.2

1. Design Model

1.1 Dynamic Behavior

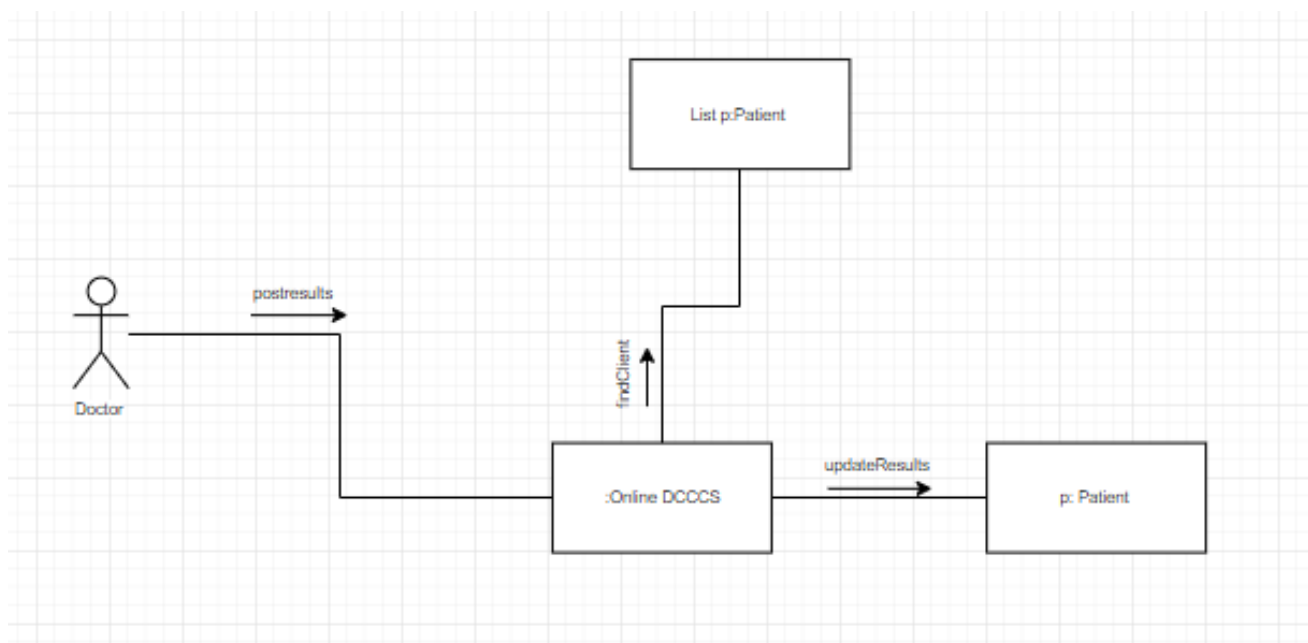
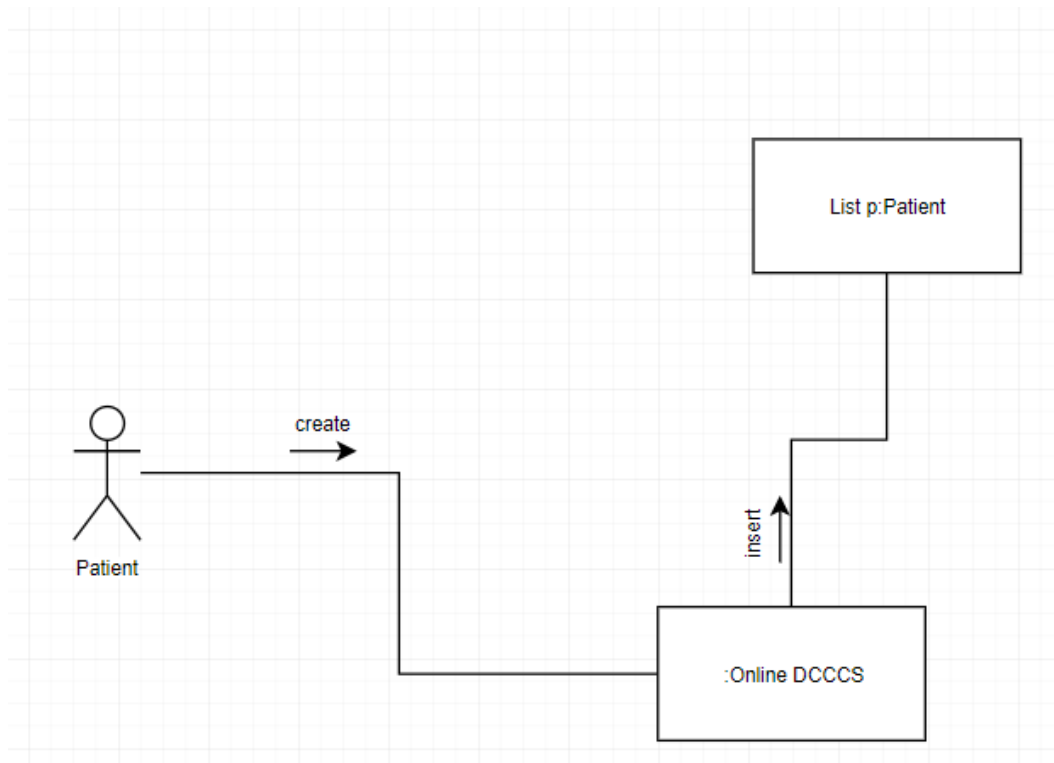
Diagnostic Centre Client Coordination System	Version: <1.0>
	Date: <30/mar/18>
<document identifier>	

Sequence diagrams:



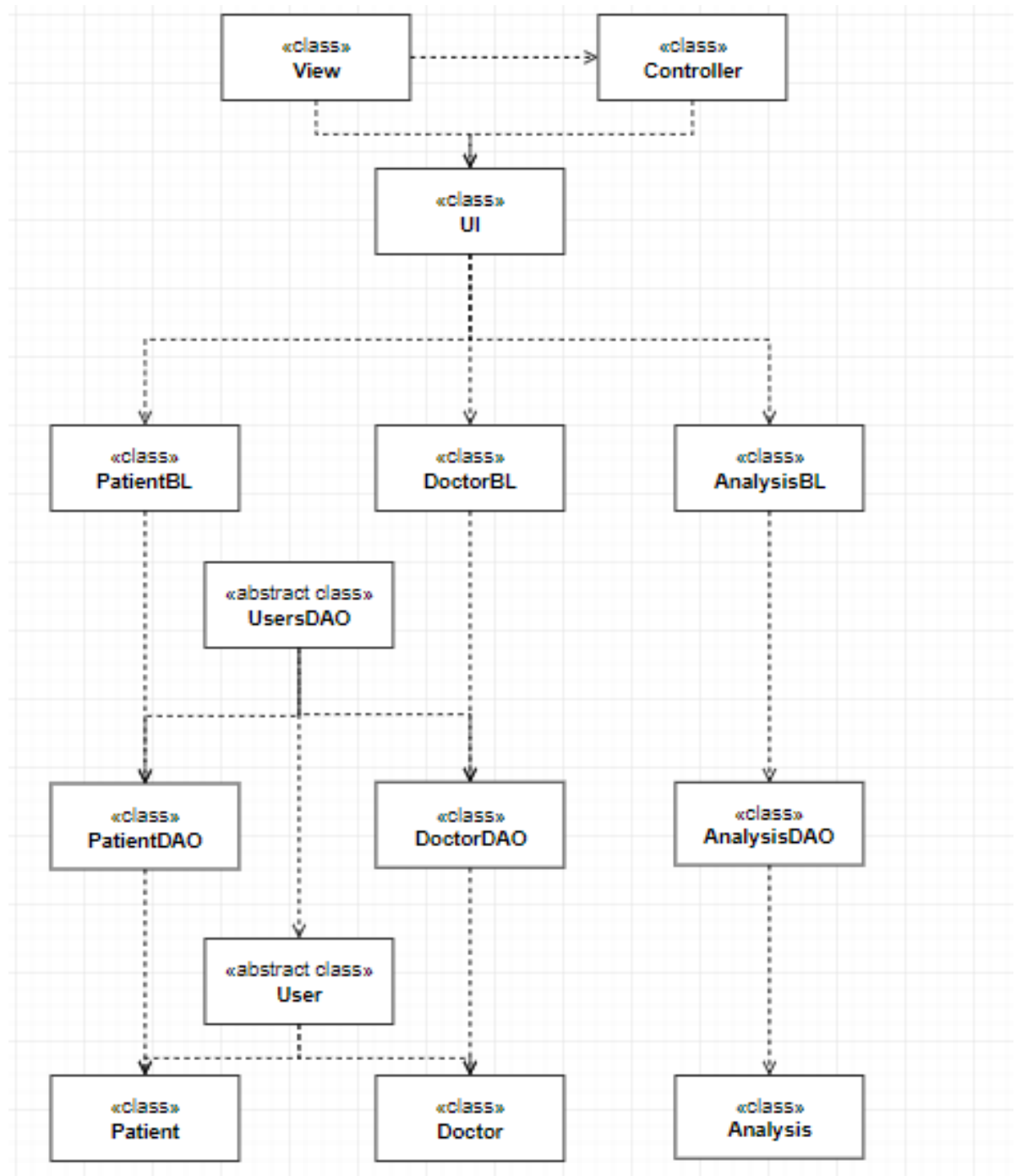
Diagnostic Centre Client Coordination System	Version: <1.0>
	Date: <30/mar/18>
<document identifier>	

Communication diagrams:



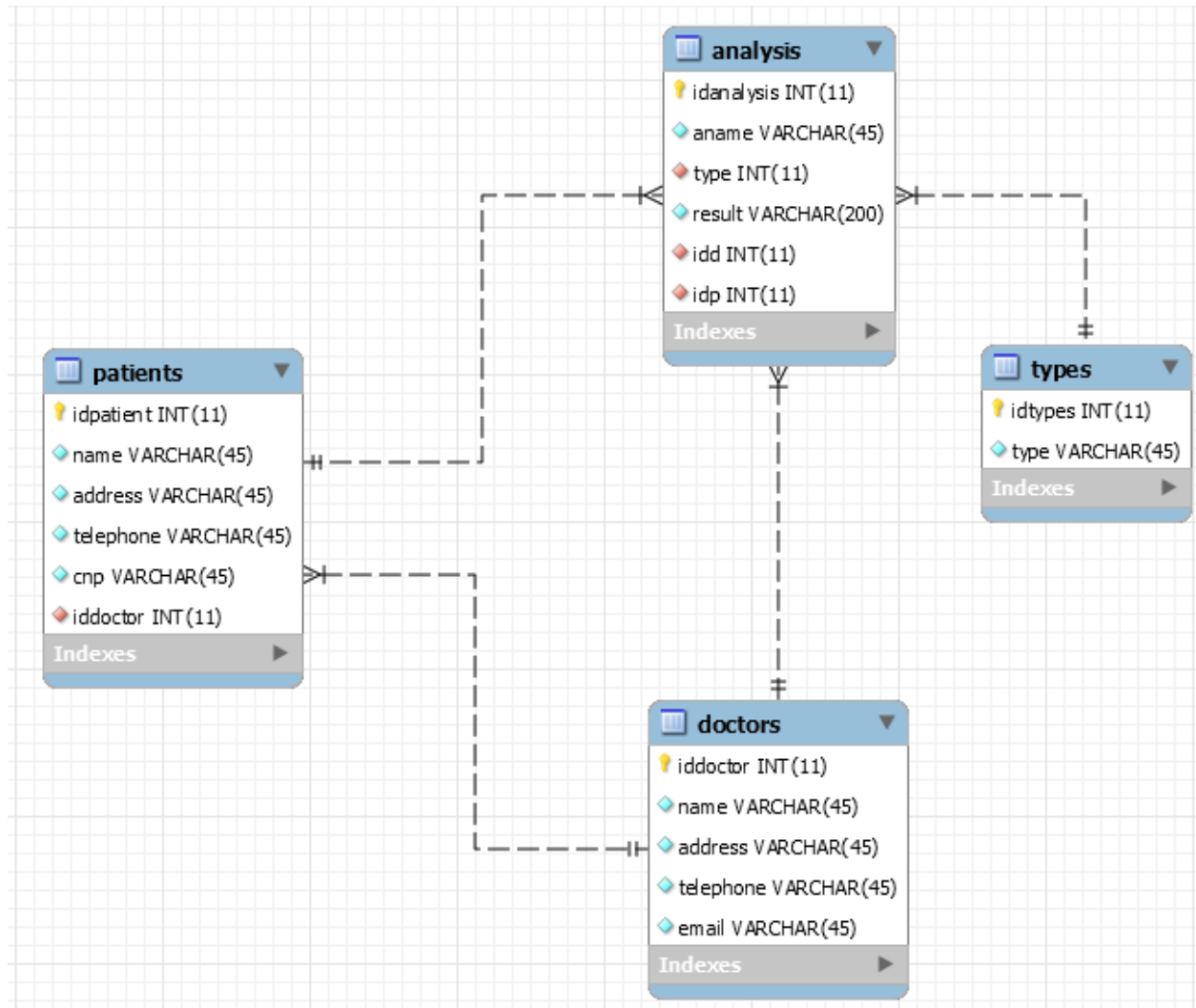
Diagnostic Centre Client Coordination System	Version: <1.0>
	Date: <30/mar/18>
<document identifier>	

1.2 Class Design



Diagnostic Centre Client Coordination System	Version: <1.0>
	Date: <30/mar/18>
<document identifier>	

2. Data Model



3. Unit Testing

[Present the used testing methods and the associated test case scenarios.]

IV. Elaboration – Iteration 2

1. Architectural Design Refinement

[Refine the architectural design: conceptual architecture, package design (consider package design principles), component and deployment diagrams. Motivate the changes that have been made.]

Diagnostic Centre Client Coordination System	Version: <1.0>
	Date: <30/mar/18>
<document identifier>	

2. Design Model Refinement

[Refine the UML class diagram by applying class design principles and GRASP; motivate your choices. Deliver the updated class diagrams.]

V. Construction and Transition

1. System Testing

[Describe how you applied integration testing and present the associated test case scenarios.]

2. Future improvements

[Present future improvements for the system]

VI. Bibliography