Health System Application

Analysis and Design Document

Student: Bucur Diana

**Group: 30433**

Revision History

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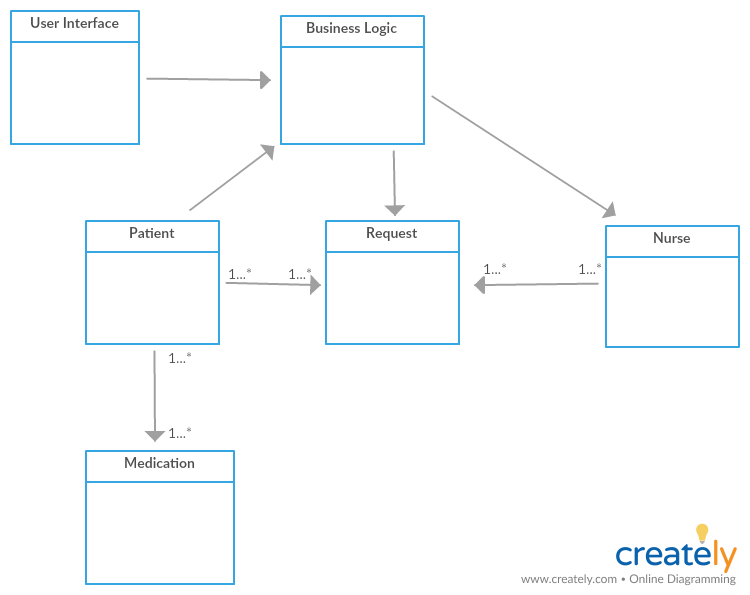
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# Project Specification

*[Present the project specification]*

# Elaboration – Iteration 1.1

# Domain Model



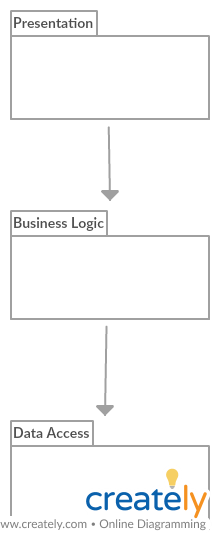
# Architectural Design

## Conceptual Architecture

The system will use a Client-Server architecture, which is an architecture of a [computer](https://www.britannica.com/technology/computer) [network](https://www.britannica.com/technology/computer-network) in which many [clients](https://www.britannica.com/technology/client) (remote processors) request and receive service from a centralized [server](https://www.britannica.com/technology/server) (host computer). Client computers provide an interface to allow a computer user to request services of the server and to display the results the server returns. Servers wait for requests to arrive from clients and then respond to them. These fits the requirements of the system, as the nurses are supposed to receive requests from patients and respond to them.

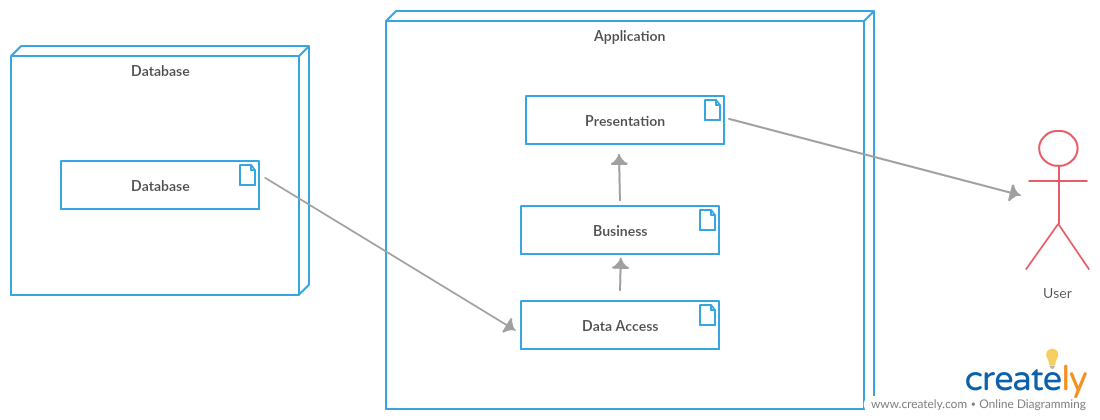
This computing model is especially effective when clients and the server each have distinct tasks that they routinely perform. In [hospital](https://www.britannica.com/science/hospital) [data processing](https://www.britannica.com/technology/data-processing), for example, a client computer can be running an application program for entering patient information while the server computer is running another program that manages the [database](https://www.britannica.com/technology/database) in which the information is permanently stored. Many clients can access the server’s information simultaneously, and, at the same time, a client computer can perform other tasks.

## Package Design



## Component and Deployment Diagrams

# Deployment diagram:



# Elaboration – Iteration 1.2

# Design Model

## Dynamic Behavior

*[Create the interaction diagrams (1 sequence, 1 communication diagrams) for 2 relevant scenarios]*

## Class Design

*[Create the UML class diagram; apply GoF patterns and motivate your choice]*

# Data Model

*[Create the data model for the system.]*

# Unit Testing

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

# Elaboration – Iteration 2

# 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.]*

# Design Model Refinement

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

# Construction and Transition

# System Testing

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

# Future improvements

*[Present future improvements for the system]*

# Bibliography