Android Blood Bank

Analysis and Design Document

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**Group: 30432**

Revision History

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 4/4/2018 | 1.0 | Preliminary domain model, architectural design and deployment diagram | Danila Vlad-Mihai |
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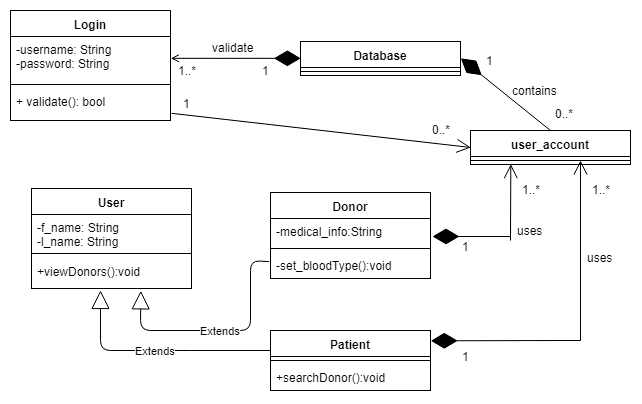
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# Project Specification

The Android Blood Bank project is a system whose intent is to create an android-based tool designed for people involved or willing to be involved in blood transfusion events.

# Elaboration – Iteration 1.1

# Domain Model



# Architectural Design

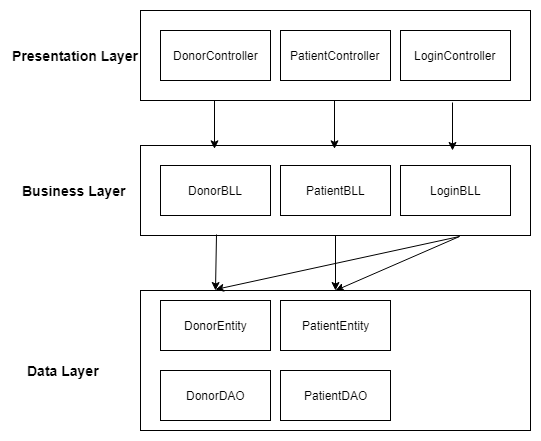
## Conceptual Architecture

For this system, the Layers Architectural Pattern is going to be used. We will group the logical functionalities of the application from the technical point of view as follows: Presentation Layer, Business Layer and Data Layer. This division is performed to increase maintainability, readability, reusability and to minimize the number of overlapping functionalities across the entire application.

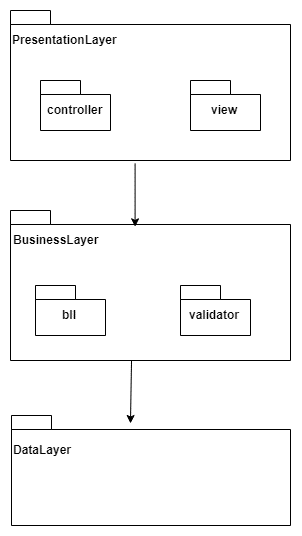
Presentation Layer: provides the application’s user interface

Business Layer: implements the business functionality of the application.

Data Layer: provides access to database.



## Package Design



## Deployment Diagram

# 

# Elaboration – Iteration 1.2

# Design Model

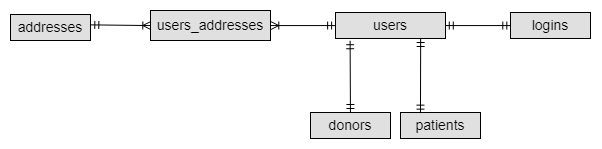
## Dynamic Behavior

*[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



# 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