Pandemic tracker

Analysis and Design Document

Student: Husman Andrei

**Group:30431**

Revision History

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# Project Specification

# The goal of the project is to provide the users information about the COVID-19 virus in real time.

# Elaboration – Iteration 1.1

# Domain Model

The project uses one entity which is the Country entity.

**A screenshot of a social media post

Description automatically generated**

# Architectural Design

## Conceptual Architecture

The architecture features on a client server basis, the backend being segregated from the frontend. The web app uses data which is independently collected and achieves a high degree of cohesion and a low coupling in the way the system behaves.

The backend uses a layered architectural pattern, using responsibility segregation and data independence.

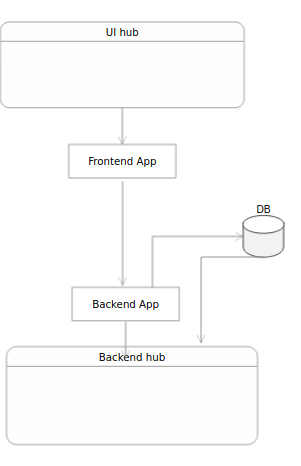
## Package Design

A picture containing photo, sitting, looking, man

Description automatically generated

## Component and Deployment Diagrams

*[Create the component and deployment diagrams.]*

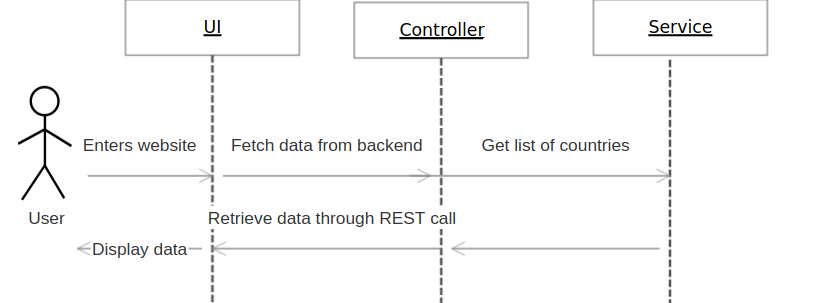


# Elaboration – Iteration 1.2

# Design Model

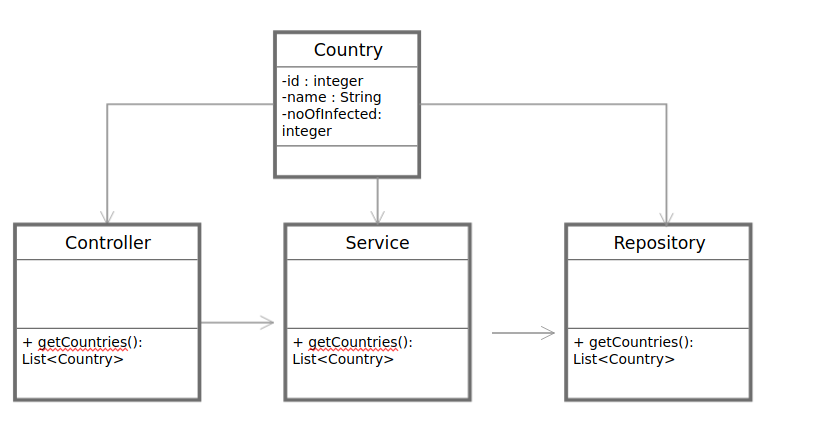
## Dynamic Behavior

*[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