COSBAS Architectural Requirements Documentation

Git: `https://github.com/undecidables/Requirements-Documentation`

<undecidables>
Elzahn Botha *u13033922*
Jason Richard Evans *u13032608*
Renette Ros
Szymon Ziolkowski
Tienie Pritchard
Vivian Venter

March 2015

Contents

1 Architectural Requirements

1.1 Introduction

The software architecture requirements for the COSBAS system.

1.2 Architectural Scope

1.3 Quality Requirments

1.4 Integration and Access Channel Requirments

1.5 Architecture Constraints

2 Architectural Patterns or Styles

2.1 MVC Architectural Pattern

2.1.1 Description

MVC (Model-view-controller) is a software architectural pattern which devides the software application into three interconnected parts, so as to seperate the internal representation from the way the information is represented to the user.

2.1.2 Reason for use

- Client-Server communication
- Reduced code complexity
- Efficient code-reuse
- Decoupled code

2.2 Adapter Design Pattern

2.2.1 Description

The adapter design pattern changes or converts the interface of a class into another interface the client expects. The design pattern makes classes that would normally not be able to work together, interact seamlessly.

2.2.2 Reason for use

- Increased plugability of the system - Because many different biometric access points as well as non-biometric access points will have to interact with the system. This makes it easy for a new type of access point to be added to the system.

3 Architectural Tactics or Strategies

4 Use of Reference Architectures and Frameworks

5 Access and Integration Channels

6 Technologies