

**Time Monitoring Tool Implementation Model Document**

**Version <4.0>**

**Revision History**

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**Preface**

The following case study has been modified from its original content. The case study is meant to be used as a starting point to help you understand how to use the artifact. Thus, information has been shrunk to avoid navigating an enormous document (in size and pages).

You can also refer to the related template (in HTML format or WORD format) in the UPEDU Artifacts Templates Implementation Section.

Regards,

Unified Process for Education Team

**Table of Contents**

|  |  |  |
| --- | --- | --- |
| [**1.**](#_bookmark0) | [**Introduction**](#_bookmark0) | [**6**](#_bookmark0) |
|  | [**1.1 Purpose**](#_bookmark0) | [**6**](#_bookmark0) |
|  | [**1.2 Scope**](#_bookmark0) | [**6**](#_bookmark0) |
|  | [**1.3 Definitions, Acronyms, and Abbreviations**](#_bookmark0) | [**6**](#_bookmark0) |
|  | [**1.4 References**](#_bookmark0) | [**6**](#_bookmark0) |
|  | [**1.5 Overview**](#_bookmark0) | [**6**](#_bookmark0) |
| [**2.**](#_bookmark1) | [**Implementation Model Overview**](#_bookmark1) | [**7**](#_bookmark1) |
|  | [**2.1 Implementation Model Structure**](#_bookmark1) | [**7**](#_bookmark1) |
|  | [**2.1.1 Libraries Package**](#_bookmark2) | [**8**](#_bookmark2) |
|  | [**2.1.2 MCM Package**](#_bookmark2) | [**8**](#_bookmark2) |
|  | [**2.1.3 Login Package**](#_bookmark3) | [**9**](#_bookmark3) |
|  | [**2.1.4 DCM Package**](#_bookmark4) | [**10**](#_bookmark4) |
| [**3.**](#_bookmark5) | [**ITERATION 1**](#_bookmark5) | [**11**](#_bookmark5) |
|  | [**3.1 Components & Subsystems**](#_bookmark5) | [**11**](#_bookmark5) |
|  | [**3.1.1 Components and subsystems to be implemented**](#_bookmark5) | [**11**](#_bookmark5) |
|  | [**3.1.2 Implementation model related diagrams**](#_bookmark5) | [**11**](#_bookmark5) |
|  | [**3.2 Builds**](#_bookmark7) | [**13**](#_bookmark7) |
| [**4.**](#_bookmark7) | [**ITERATION 2**](#_bookmark7) | [**13**](#_bookmark7) |

**Table of Figures**

[Figure 1 : Implementation Model – Top Level Package / Final Build (Level 0) 7](#_bookmark1)

[Figure 2 : Implementation Model – Overview (Level 1) 7](#_bookmark1)

[Figure 3 : Implementation Model – Libraries (Level 2) 8](#_bookmark2)

[Figure 4 : Implementation Model – MCM (Level 2) 8](#_bookmark2)

[Figure 5 : Implementation Model – MCM/Project Management (Level 3) 9](#_bookmark3)

[Figure 6 : Implementation Model – MCM/User Management (Level 3) 9](#_bookmark3)

[Figure 7 : Implementation Model – Login (Level 2) 9](#_bookmark3)

[Figure 8 : Implementation Model – DCM (Level 2) 10](#_bookmark4)

[Figure 9 : Client Server Prototype – Build (Level 0) 11](#_bookmark5)

[Figure 10 : Client Server Prototype – Overview (Level 1) 12](#_bookmark6)

[Figure 11 : Client Server Prototype – Libraries (Level 2) 12](#_bookmark6)

[Figure 12 : Client Server Prototype – Login (Level 2) 12](#_bookmark6)

**Implementation Model Document**

# Introduction

* 1. **Purpose**

This document provides a detailed plan for integration within each iteration.

* 1. **Scope**

This document applies to all iterations of the time Monitoring Tool Project. The content may vary and grow following the project evolution.

* 1. **Definitions, Acronyms, and Abbreviations**

Refer to the Glossary Document. See References.

* 1. **References**

Glossary Document, Glossary, TMT Team 1, École Polytechnique de Montréal, 2001

Implementation Model, Implementation Model, TMT Team 1, École Polytechnique de Montréal, 2001

Software Architecture Document, Software Architecture Document, TMT Team 1, École Polytechnique de Montréal, 2001

Test Plan Document, Test Plan, TMT Team 1, École Polytechnique de Montréal, 2001

* 1. **Overview**

This document shows an overview of the Implementation model, its builds, its packages and all related diagrams. Then, for each iteration, components and subsystems to be implemented are identified with their related diagrams. Moreover, it explains how each build is being constructed, tested and evaluated.

# Implementation Model Overview

The following includes an overview of the Implementation Model Diagram (Level 0 and Level 1 view) and packages internal diagrams (Level 2 and 3).

* 1. **Implementation Model Structure**

<<Build>> Final Build

Figure 1 : Implementation Model – Top Level Package / Final Build (Level 0)

<<Package>> DCM Package

<<MDB File>> TMT

Database

<<Package>> Login Package

<<Package>> Libraries

<<HTML File>>

Left Frame

<<HTML File>>

Right Frame

<<HTML File>>

Index (Startup File)

<<Package>> MCM Package

Figure 2 : Implementation Model – Overview (Level 1)

* + 1. *Libraries Package*

<<GIF Files>> Images Library

<<JS File>> JScript Library

<<CSS File>>

Style CSS

Figure 3 : Implementation Model – Libraries (Level 2)

* + 1. *MCM Package*

<<JSP File>>

Header MCM

<<Java Class File>> MCM Servlet

<<Package>> User Management

<<JSP File>>

MCM (Main File)

<<Package>> Project Management

Figure 4 : Implementation Model – MCM (Level 2)

* + - 1. Project Management Package

<<JSP File>>

Export

MsProject

<<JSP File>>

Add Tache

<<JSP File>>

Export Excel

<<JSP File>>

Add Project

Figure 5 : Implementation Model – MCM/Project Management (Level 3)

* + - 1. User Management Package

<<JSP File>>

Validate Jetons

<<JSP File>>

Add User

<<JSP File>>

List Users

<<JSP File>>

Edit Users

Figure 6 : Implementation Model – MCM/User Management (Level 3)

* + 1. *Login Package*

<<HTML File>>

Wrong Password

<<JSP File>>

Login

<<Java Class File>> Login Servlet

<<HTML File>>

Wrong

Username

Figure 7 : Implementation Model – Login (Level 2)

* + 1. *DCM Package*

<<HTML File>>

Calendar

<<JSP File>>

DCM (Main File)

<<JSP File>>

DCM Header

<<Java Class File>> DCM Servlet

Figure 8 : Implementation Model – DCM (Level 2)

# ITERATION 1

* 1. **Components & Subsystems**
     1. *Components and subsystems to be implemented*

During this iteration, a functional prototype of the Client/Server connections must be implemented. Hence, the following packages and components are to be implemented.

1. **General**
   * **TMT MDB Database – Users Table (At Least)**
   * **Index HTML File**
   * **Left Frame HTML File**
   * **Right Frame HTML File**
2. **Login Package**
   * **Login Servlet JAVA CLASS file**
   * **Login HTML File**
   * **Wrong Username HTML File**
   * **Wrong Password HTML File**
3. **Libraries Package**
   * **Images GIF Files – (At least, Error notices on password and username, TMT Logo, Frame Backgrounds)**

The list above suggests the order in which the components should be implemented so they will be ready in time for integration.

* + 1. *Implementation model related diagrams*

Refer to Figure 1 (Section 2.1), 2 (Section 2.1.1) and 6 (Section 2.1.3) for related components diagrams in the Implementation Model.

* + - 1. Specific Build/Subsystem Diagram

The following is an Implementation Diagram Hierarchy of the Build to be constructed (Client/Server Prototype).

<<Build>>

Client/Server Prototype

Figure 9 : Client Server Prototype – Build (Level 0)

<<MDB File>> TMT

Database

<<Package>> Login Package

<<Package>> Libraries

<<HTML File>>

Left Frame

<<HTML File>>

Right Frame

<<HTML File>>

Index (Startup File)

Figure 10 : Client Server Prototype – Overview (Level 1)

<<GIF Files>> Images Library

Figure 11 : Client Server Prototype – Libraries (Level 2)

<<HTML File>>

Wrong Password

<<JSP File>>

Login

<<Java Class File>> Login Servlet

<<HTML File>>

Wrong Username

Figure 12 : Client Server Prototype – Login (Level 2)

* 1. **Builds**

There is only one build in this iteration. The build is constructed integrating the three (3) sections of components and subsystems defined as to be implemented in Section 3.1.1.

This build will be used to verify if the project can go on or not and if the defined baselines will be affected. The Client Server Prototype is more than important in the TMT architecture. All future subsystems will be integrated to this one.

Test and evaluation criteria will be defined by the lab attendant when reviewing implementation artifacts.

# ITERATION 2

**[…]**