

PUSS214204

v. 0.1

TimeMate

Software Top Level Design Document

Group 2

Responsible: System Group

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1 Document History

Version	Date	Responsible	Description
0.1	2021-02-11	UG	Document created.

2 Introduction

This document describes the design of "TimeMate". The system is a further development of the system "BaseBlockSystem". "TimeMate" hosts various functions related to the creating of time reports, getting a view of reported time and more.

3 Reference Documents

1. Software Requirements Specification: TimeMate, v. 0.5, Doc. number: PUSS214201
2. Software Top Level Design Document: BaseBlockSystem, v 1.0, Doc. number: PUSS12004

4 Terminology

- **Java Server Page (JSP):** Server-side technology that enables the creation of dynamic views.
- **Servlets:** Java programs that runs on the server side.
- **Java Beans:** A Java class that only contains set/get methods with private attributes

5 Overview

Placeholder for the overview of the project - replace with information regarding the project!

5.1 Java Server Pages

Below are the pages used for "TimeMate" and what their function is.

5.1.1 login.jsp

The view that is shown when a user that is not logged tries to access the system. This is the only page in the "TimeMate" system an user can access without having an account. The page consists of two fields, one for username and one for password, as well as an option to request a new password in case that the user has forgotten their password.

5.1.2 index.jsp

This file contains the view that is shown when an user has logged in. From here, the user can access the menu, which is dynamically updated depending on what group the user belong to.

5.1.3 report.jsp

This file contains the view that represents the creation of time reports.

5.1.4 usermanagement.jsp

This file contains the view of the usermanagement page. The view is used by the administrator and the project leaders.

5.1.5 administration.jsp

This file contains the view of the administration page. Only the administrator has access to this view.

5.2 Servlets

The files below are the controllers for the system.

5.2.1 LoginServlet

Communication link between the view login.jsp and the bean LoginBean.

5.2.2 IndexServlet

Communication link between the view index.jsp and the bean IndexBean.

5.2.3 TimeReportServlet

Communication link between the view report.jsp and the bean ReportBean.

5.2.4 UserManagementServlet

Communication link between the view usermanagement.jsp and the bean UserManagementBean.

5.2.5 AdministrationServlet

Communication link between the view administration.jsp and the bean AdministrationBean.

5.3 Java Beans

The files below are the Java Beans that are used to send information from the server to the client view.

5.3.1 LoginBean

Get/set class which contains the data required to render the login.jsp view

5.3.2 IndexBean

Get/set class which contains the data required to render the index.jsp view

5.3.3 ReportBean

Get/set class which contains the data required to render the report.jsp view

5.3.4 UserManagementBean

Get/set class which contains the data required to render the usermanagement.jsp view

5.3.5 AdministrationBean

Get/set class which contains the data required to render the administration.jsp view

5.4 Other classes

The classes below are never accessed by the user in any way, but are instead helper classes to the servlets.

5.4.1 MailHandler

Class to send mail to user upon account creation.

5.4.2 Database

Class to establish connection between Tomcat and our database.