



Time Tracking System – Timesheet

Minor Project

Disclaimer

This Software Requirements Specification document is a guideline. The document details all the high level requirements. The document also describes the broad scope of the project. While developing the solution if the developer has a valid point to add more details being within the scope specified then it can be accommodated after consultation with IBM designated Mentor.

INTRODUCTION

The purpose of this document is to define scope and requirements of a Time Tracking System for consultants of a leading consulting house. The proposed system will allow them to record their time spent on tasks of various projects. This becomes the basis for billing the clients. The Timesheet System will be integrated with their Intranet so that they can even record their timesheet from the client site as well.

This document is the primary input to the development team to architect a solution for this project.

System Users

All the consultants of the consulting house will primarily use the Time Tracking System, Timesheet.

Assumptions

1. In real life, the client, project and data will come directly from the project planning system. To simplify the scope of this project, it can be assumed that this data will be uploaded using CSV files in the database directly from the backend. The client CSV file will have (a) client id and (b) client name; the project CSV file will have (a) project id, (b) client id, and (c) project title; and the task CSV file will have (a) project id, (b) task id, (c) task title, (d) user id of the task owner and (e) budgeted time in hours.
2. Since Timesheet is expected to use Intranet's authentication, for the purpose of this project, entering user name will take you to the user's Timesheet home screen. You may create sample users directly from the backend database.

REQUIREMENTS

Timesheet allows a consultant to record the time spent on each of the project tasks assigned to him/her. The user interface for the same is outlined below.

Monday JUNE 03, 2012	Tuesday JUNE 04, 2012	Wednesday JUNE 05, 2012	Thursday JUNE 06, 2012	Friday JUNE 07, 2012
client	project	task	hours	notes
IBM	Smarter Planet	RFID Integration	4.0	needs further testing
Microsoft	MS Word for iPad	Swipe Interface	1.0	
Oracle	Java 6 EE	Filter's SPI	1.0	working well on UNIX
Time off		Kid's Birthday	2.0	
total 8.0 hours				
<button>Save Timesheet</button>				

The system will use the single screen as shown above to record the time on each project's task.

On the top, it displays the weekly calendar. By default, today's date is highlighted in blue color. The left/right arrows allow calendar navigation by 1-day. The date in focus is always highlighted. Future dates are grayed out and cannot be traversed. However, the user can go back to the previous dates. A calendar icon (not shown here) will display a full calendar using which the user will be able to jump to any of the date of his/her choice.

The text boxes allow entry of client, project, task, time spent, and notes (if any) respectively. Except notes, all other fields are mandatory. The client, project, and the task fields support "type-ahead" feature in addition to a normal drop down. These fields list the data pertaining to the logged-in user ONLY.

If the client type is "time off" then the project field does not show up and the user can specify the reason for time off in the task field.

The total time spent on all the tasks is automatically computed and displayed at the bottom.

Clicking on the "save timesheet" button saves the timesheet.

Optional Requirements

Consider adding a simple report to display budgeted v/s actual time spent for each task. Display the report ordered by clients and projects.

DEVELOPMENT ENVIRONMENT

Timesheet will be developed as a web application using Java/JSP and DB2 database. Eclipse will be used as the IDE for the same. You may consider using a JavaScript framework like Prototype/ Scriptaculous/jQuery.