ACME Inc.

Time Tracking System
Vision Document

Manager Perspective

Version 0.1

Document Revision History

Date	Version	Description	Author
11/28/2015	0.1	Draft version for Dr. Barber's Requirements Engineering course based on Manager Requirements	Neel Shah

Table of Contents

Vision

1. Introduction

1.1 Purpose

This document describes high-level user needs and features for the proposed Course Registration System product. It is written for stakeholders at N/A to establish a common foundation for proceeding with requirements gathering and analysis and system design and development. This document is written considering the requirements acquired from the Manager stakeholder.

1.2 Product Overview

The Time Tracking System is a web-accessible system intended to allow a globally distributed workforce to record details of their time expenditures working for a variety of clients as well as non-project time codes. Users can either click start/stop timers throughout the day or simply add time on a weekly timesheet.

1.3 Definitions, Acronyms and Abbreviations

1.4 References

- Session notes from an interview with a Manager stakeholder (Manager_01112015_1800)

2. User Description

2.1 User/Market Demographics

Global corporations are always in need of robust timekeeping solutions, and there are many used in the industry today. Users include employees and management from all over the world, and require a solution that is simple and interoperable with technologies being used in other departments.

2.2 User Profiles

The primary users of the product will be employees and direct managers of the corporation. The product will be marketed to global entities, and other users will include accounting personnel and upper management.

2.3 User Environment

The product should be web-accessible from any company owned computer. There should be very little interaction with the corporations IT department during installation, so a cloud-based solution is preferred.

In addition, the system must interface with existing ticketing system (namely JIRA) which should be available through web APIs, as well as produce billing reports consumable by existing accounting systems.

2.4 Key User Needs

Both employees and managers need a solution that correlates time entries with company projects with little to no effort from the user. These correlations must be visible to and consumable by all users; they may be constrained by permissions. Additionally, the user experience must be simplistic and intuitive, minimizing the time spent in the application.

2.5 Alternatives and Competition

A survey of related products conducted by the requirements team has yielded three top competitors: Yast (http://www.yast.com/), Harvest (https://www.getharvest.com/), and Toggl (https://www.toggl.com/).

3. Product Overview

3.1 Product Perspective

Figure 1 provides a high-level architecture of the Time Tracking System. The figure shows the main system being accessed via a Employee Time Entry interface and Manager Approval/Rejection interface. Additionally, there is an interface with a ticketing system (JIRA) and the legacy accounting system. Finally, there is a data access interface to communicate with persistent storage.

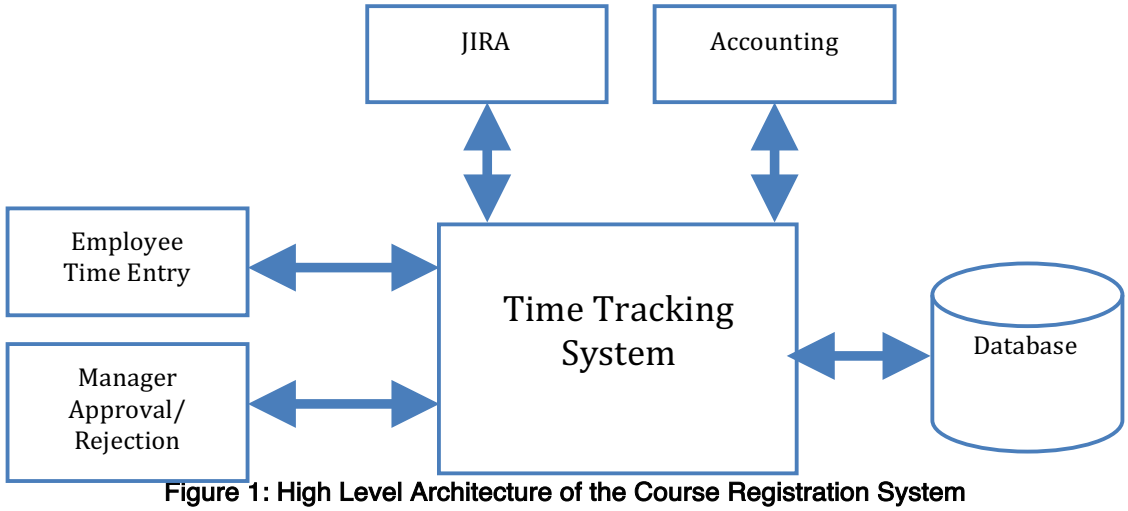

Figure 1: High Level Architecture of the Course Registration System

3.2 Product Position Statement

The web-based Time Tracking System is intended to allow a globally distributed workforce to record details of their time expenditures working for a variety of clients as well as non-project time codes.

3.3 Summary of Capabilities

- *Allow employees to enter time* – Employees can enter and modify time entries with ease at any time.
- *Allow managers to approve or reject time* – Managers are notified of time entry creations on a schedule and can approve, reject, or modify entries at any time.
- *Accessibility over time* – All users can view time entries they are responsible for as constrained by permissions. The system also generates billing and other reports.

3.4 Assumptions and Dependencies

- The Manager stakeholder is just *one* of many user types. The specific needs of the Manager stakeholder may not reflect the needs of all users but we consider them as a baseline.
- This is not in any way a ticketing system nor should it provide ticketing features.

3.5 Cost and Pricing

The cost should be competitive to top alternatives for this solution space, and should cost less than JIRA or similar products since it provides a subset of the functionality.

4. Feature Attributes

- *Priority:* The relative desirability of a feature (expressed as low, medium, or high)
- *Stability:* The measure of how stable this feature will be (expressed as stable, unstable, or volatile)

5. Product Features

The following is a lost of features the first release of this product will have. In the future, more features will be provided that will differentiate this product from others.

5.1 Feature: Create Employee Time Entry Based On Timer

An employee should be able to start and stop a timer to create a minimal time entry. This feature should be accessible at all times.

- Priority: high
- Stability: stable

5.2 Feature: Accept/ Decline/ Override Employee Time Submission

A manager should be able to accept, decline, or override an eligible time entry submission. This feature should be accessible at all times.

- Priority: high
- Stability: stable

5.3 Feature: Send Email Notifications To Manager

A manager should receive a notification via email weekly on Monday mornings. The notification will include all time entries made in the previous week (12:00 AM Monday to 11:59 Sunday) that the manager is responsible for. The email should provide a drilldown or link to a drilldown as well as a speedy way to approve all entries.

- Priority: high
- Stability: unstable

5.4 Feature: Associate Employee Time Entry With Company Projects

An employee should be able to associate any given time entry to any company project. If possible, this project should be linked to the project entity in the ticketing system (JIRA). This feature and the resulting association should be accessible and visible at all times.

- Priority: high
- Stability: unstable

5.5 Feature: View Project Time Chart

A user of the system should be able to view time entries they are eligible to view grouped by associated projects in a historical presentation of some kind. If possible, this will include ticket level information as well. The Project Time Chart should be exportable in a consumable report format.

- Priority: medium
- Stability: stable

6. Key Use Cases

6.1 Use Case: Employee creates time entry

Brief Description

An employee creates time entry either manually or through the timer interface.

Preconditions

Employee must be logged in.

Normal Flow of Events

Single thread described as steps

1. Employee logs in
2. Employee starts timer
3. Employee stops timer
4. Employee adds project information
5. Time Entry is submitted

Alternative Flows

Alternative Flow 1 – Manual entry

3. Employee adds start and end times
4. Employee adds project information
5. Time Entry is submitted

Alternative Flow 2 – Employee logs out

3. Employee logs out
4. System cancels time entry creation

6.2 Use Case: Manager Accepts Time Entry

Brief Description

A manager accepts a time entry after being notified of its creation via email.

Preconditions

Time entry must exist and the notification must be sent on the following Monday morning.

Normal Flow of Events

1. System sends email notification to manager
2. Manager inspects the time entry
3. Manager accepts time entry

Alternative Flows

Alternative Flow 1 – Manager rejects time entry

3. Manager rejects time entry
4. System sends notification to employee

7. Other Product Requirements

7.1 Applicable Standards

A later version of this system could also address timekeeping requirements for government contractors in accordance with DCAA (Defense Contract Audit Agency - http://www.dcaa. mil/DCAAM_7641.90.pdf). However, this is out of scope for the first release.

7.2 System Requirements

- Must have access to a web browser.
- All functionality will be available online via access to the company network.
- Preferred cloud backend

7.3 Licensing Installation

There were no licensing requirements acquired

7.4 Performance Requirements

- There can be no loss of time entry submissions
- Notification emails must be sent Monday morning