Project Name: Time Tracking System

Customer Session 1

Date: Nov 12, 2015
Time: 2:00PM
Duration: 1 hour
Location: Telephone conference

Unique ID: *Customer_12112015_1400*

Stakeholder:	*Name: Adam Whipple* *Title: Small Business Owner* *Employer: Acme Inc* *Email:awhipple@utexas.edu* *Phone: 512-965-5859* *Viewpoint: Product Manager*	***Stakeholder:***	*Name:* *Title:* *Employer:* *Email:* *Phone:* *Viewpoint:*
Requirements Engineer:	*Name: Robert Pate* *Email: robert.pate.gmail.com* *Phone: 512-827-8137*	**Scribe:**	*Name: Gregory Williams* *Email: greg@gmail.com* *Phone: 512-720-0555*

Session Goals and Desired Outcomes

Goal	Description
Topics for goals may include:	• *Understand the customer perspective* • *Understand specific functional requirements and considerations* • *Gather any non-functional requirements*

Outcomes and Products	Description
Outcomes and Products may include:	• *Q&A Transcript* • *Enough information to represent the requirements for this user* • *Additional information required to formulate Vision Document.* • *Additional scope (functional).* • *Stakeholder expectations (nonfunctional, project)* • *Detailed process diagrams from this user's perspective.* • *Expanded detail of data - Data dictionary.* • *Stakeholder Analysis for Accounting / HR SME.*

Input to Guide Requirements Acquisition Session

Portion of System under Discussion	Purchase, Key Scenarios
Guiding Scenario (if used)	n/a

| Reference Documents | n/a | | |

Action Items or Outstanding Issues/Requirements from Previous Sessions (if necessary)

Previous Session Date	n/a	Previous Meeting Purpose	n/a
Number	**Description**	**Assigned To**	**Status**

Planned Questions

Question #	Description
1	What is the core problem you're trying to solve?
2	Understand current state of company. How many projects? How many roles?
3	What differentiates roles
4	How much time is currently spent on timekeeping?
5	How much time will be saved in an ideal scenario?
6	Normal workflow for an employee?
7	Rank exporting formats in order of priority?
8	Clarify how reviewer roles will deal with time?
9	Frequency of interaction?

Notes:

- What will your interaction be with the software?
  - Initially as a purchaser, I will oversee the implementation; champion of the roll out of this new system.
- What is the core problem you are trying to solve?
  - The core problem we are trying to solve is to find an effortless way to track tasks against different projects, and be able to context switch between tasks without an over burdening amount of "secretarial work" also looking for administrative tools that report out various pieces of data, including QuickBooks data exporting and ADP data support.
- How many projects are your employees working on at any given time?

- Usually one, but E.g. UX dev.'s will work on many, anywhere from 1 to 4 or 5. Different roles also will be able to work on multiple projects, we would like role to be able to track time against multiple projects (codes).
- The codes would delineate both roles (at a very granular level e.g. UX dev).
- What differentiates the roles?
  - Cost centers, titles. The roles are very granular (Project Req. Engineer, vs. Acquisition Req. Eng.)
- How much work do dev.'s currently do to keep track of projects currently?
  - Est. Each employee spends 30min to 1 hr. PER DAY currently on time tracking. Includes recording activity and uploading that data into the system.
- How much time would be saved in the "ideal scenario"?
  - Ideally I'd like them to be spending no time! If the system could record their time based on minimal interaction (push a button) and keep a record, that would be great! There would have to be validation by the dev. and project managers of course, but we expect the system to drop our current time investment significantly.
- As a dev., what is the ideal path/workflow for this system?
  - For any user, any employee, I would like the workflow to look like this;
    - Device: laptop/smartphone/wearable.
    - Select the task (from a list of available tasks)
    - It starts a timer.
    - Triggers: done working or move on to another task
    - After that the system would record the time spent.
    - Administrators would (account mgmt.; HR) populate the list of projects, and assign users to the tasks to populate users "Available tasks" list.
  - automating these features would be great!
- What would that look like?
  - If a user was fired, or removed from a project, after internal process we would mark a project as "Not-active" which would remove the project's tasks from employee's available tasks.
  - We want separation between billable and non-billable projects. There are also going to be PTO/Holiday/Comp time Entries that could count towards an employee's hours.
  - Depending on the user, the billable/non-billable split will vary.
- Rank the exporting formats according to user effortlessness and priority?
  - All formats should be effortless (push a button) and part of the system.
  - Accounting systems would be the highest priority format for us that's Quicken, but there are other systems. For instance, a new gov't account will force us to use another accounting system (Deltek) I want to make sure that this system has the ability to export to many accounting systems.
- When it comes time to review time-on-projects, how will this work?
  - Typically, the user will record all the activities they take on.

- At the end of the payroll period, they must commit their time. Currently this is a "button click"
- The project/functional manager will review the time. Currently the employee signs off, then the manager signs off. We need the manager to have some visibility into the budget/what people are working on. Proj. Managers typically have the closest view of whether the billed work was actually done. Then the data is reported to HR, where it is pulled into various accounting formats.
- How often are employees expected to push their time cards, how often are managers signing off on time cards?
  - This is project dependent, and the system should support multiple formats. The individual will turn in time each day, regardless of reporting schedule. Reports will be run ad hoc. According to our rules, the submission needs to be done weekly, in practice this ends up being done right before payroll.
- Who pushes the "Second submit button"; the link to HR and accounting?
  - The employee submits->manager approves->admin is signaled that both have signed off.
  - Only people who "own" that time can edit. Managers can "reject", but the owner of the time must change the actual hours. "Projects" follow this rule, but internal (non-billable) projects should be editable by those up the chain (HR/Managers).
- We talked about multiple projects, exporting priorities, and reporting. Are there any reports that use want in the system?
  - I want to select a project and a time window and see all the data in a number of ways (total cost/breakdown by role/breakdown by cost, etc.)
  - Or
  - Select a cost center (what do my req. eng cost me?) and generate reports based on that.
- How will this data be accessed? By whom?
  - NO technical users, Managers, Admins, HRs. I want to have the ability to schedule reports. Canned reports + the ability to create reports, and I don't care how that works. Ideally not me.
- This sounds like there will be a lot of sensitive data shared, where do you want this stored?
  - I want the employees to log in, and have the system appear to be home-grown (apps/websites/etc. all the same look-and-feel) regardless of where the data is actually stored. I want customers, contractors, and other interacting with this system to get my company's look.
- Will gov't interaction introduce restrictions?
  - When you do federal gov't contracting, there are rules for time tracking. DCAA regulation apply for the most part. As long as I can self-certify DCAA, and can conceivable defend against a DCAA audit, I should be OK.
- Are these standards broadly achievable or are these standards strict?
  - I'm not a guru on this subject, but I do know some. If I could toggle a switch that then gave me DCAA compliance, that would be an excellent feature. Keeping DCAA compliant will require additional

work by my employees, so I'd like to be able to turn that on/off PER PROJECT.
- Projects will have DCAA compliance, a list of users assigned to it, Name, Client (for external projects), start/end dates, relative size (S,M,L), est. proj budget, Contract Type (how are these billed)
- Should these needs be baked in or extensions?
  - Extensible would be nicer.
- Would PTO exist in a project, or exist separately.
  - PTO would be a separate type of hour.
- Do you have performance expectations for the system?
  - Currently my CO. has 55 employees, we operate 9-5 across time zones. I want the system to be snappy, "have good performance" during these business hours at these loads.
- Are there any additional features you'd like to see?
  - The end user should be able to see how they are tracking against the rest of the CO.
  - i.e. What percent of my time is billable vs. the rest of the company?
- What is the upper limit on the load time?
  - Instantaneous! I expect the system to load very quickly. I would have more patience on the desktop, but apps/wearable must be extremely responsive.
- Should time be tracked in a central time zone?
  - I would assign a time zone to the employee, but what I really want the HOURS of an employee. On a by-project-basis or maybe a by-client-basis I want a ¼ hour granularity for the time spent. But some customers could want more granular levels.
- Once the manager submits the hours on a payroll period, what's the HR work-flow?
  - I would have you talk to HR, but I'd imagine…
  - HR person combs the data, pulls the necessary reports and imports that into QuickBooks, where invoicing and billing occurs, and then the data is pushed to ADP, either by the system or by QuickBooks.
- Do you have any legacy system interactions that are required?
  - I see this system starting fresh, so there will be some process change. I would have to figure out how to get the current system's data pulled out and imported in. I would expect to be able to purchase a service (SaaS) that would help with this transition period.
  - It does not need to interact with older legacy systems, but I do expect help migrating to the new system.
  - I also want to know that any UX changes would be communicated to me BEFORE the updates are pushed, but I do want updates to exist; they would happen online.
- If significant changes happen, would you like approval?
  - If this is possible, it would be nice, but do I have a choice?
  - Ideally I want CONSISTENCY; any UI changes that are drastic worries me. But the user base is fairly tech-savvy. release note would be nice. Access to some account "guru" to get us going fast

would be great, and I do want training. I don't want to be combing through forums. I want direct access to experts that can help me immediately. Click-to-chat? Live-chat?
- Would you expect your users day-to-day need this?
  - Initially anyone. Over the long haul, this would be most useful to admins - higher level people that have questions.
- Any last words?
  - Demographic info:
    - 55 employees, growing, nation wide with 3 offices.
    - Currently do $15M in revenue, looking to do $20M next year.
    - Own a server, have Rackspace subscription, but prefer a hosted solution

Action Items

Action Number	Description	Assigned To	Due when
1.	**Convert the transcription to this document**	**Adam**	2015-11-14
2.	**Represent requirements based on this document**	**Adam**	2015-11-14
3.	**Gather more requirements on outstanding items (account acquisition and management, reporting, workflow and approvals, user record management, and export file formats)**	**Adam**	TBD

Agreements and Approvals

On the delivery date listed, I agree to deliver notes documenting this requirements session to the Stakeholder's listed below.

Requirements Engineer Name   **Requirements Engineer Signature**   **Delivery Date**

Robert Pate

The above requirements session report accurately reflects the session for which I served as an expert on the dates indicated above.

Stakeholder Name   **Stakeholder Signature**   **Approval Dates**

Requirements

- **SCENARIOS**
  - Time Entry (Key Scenario)
    - Log into system through device
    - Select a task from a list of available tasks to record time against
    - Start timer
    - Stop timer when done or when switching to a different task.
  - HR - End of period
    - User shall submit time.
    - A manager shall Review all time entries
    - An admin shall Print reports
    - An admin shall Export data
  - Analogous Project Estimation
    - An admin or manager shall Search projects based on parameters
    - An admin or manager shall Review hours by role
  - Ongoing Project Reporting
    - An admin or manager shall Select project
    - An admin or manager shall View time and other project factors ($)
    - An admin or manager shall Sort by role, employee, etc.
  - Forecast month
    - An admin or manager shall Request forecast / Reminders
    - Time entry users shall Enter monthly forecast & submit
    - An admin shall Synthesize company forecasts
    - An admin or manager shall Create reports
- **FUNCTIONAL**
  - BUSINESS REQUIREMENTS
    - FUNCTIONALITY
      - Acquire software
        - Need to gather more requirements on how the end user will acquire software for use on mobile and wearable devices.
        - Need more requirements on how the end user will establish an account.
        - Need more requirements on payment and user access.
      - Account management
        - Need to gather more requirements on how the customer will manage their account to have access to the system as a service.
      - Login & Authentication
        - Any user shall have the ability to log into the system.
      - Set up a Project
        - An admin shall set up a project record.
      - Select from a list of available projects
        - A time entry user shall select a project from a list of projects to track time against.
      - Select "Start" to begin timer against project
        - Upon selecting a project to track time against, time entry user will have the option to begin timer (stop clock style).
      - Select "Stop" to cease accruing time against project
        - While the timer is running, the time entry user will have the option to stop timer (stop clock style).

- Review time for period
  - Once a time record has been created, the user will have the ability to review that and all uncommitted records and shall have the ability to edit the time recorded.
- Commit time
  - Upon reviewing the time record, a time entry user will have the ability to "commit" all uncommitted records, changing the state of the record from uncommitted to committed.
  - Once this takes place, the user no longer has the ability to alter the time record.
- Handle comp time / overtime
  - Any time billed against a billable project above the monthly maximum shall be treated as comp time.
  - The system shall calculate that amount at .25 hour intervals and allow the time entry user to choose how to allocate that time between comp time or overtime.
    - If comp time, the user's record will "bank" the time up to an allotted maximum (40 hours) for later use.
    - If overtime, the additional time will be recorded in the employee's payroll for that pay period.
- Review all hours for all employees by period, project, or client / category.
  - The admin and manager roles shall have the ability to review all committed hours.
  - The admin shall have the ability to select a time period to review, and
  - shall be able to sort and filter the data by period, project, client / category, or employee.
- Send time back to an employee.
  - From the review screen, the admin or manager role shall have the ability to change a time record (for a period of time for a given employee) from committed to uncommitted.
    - When this happens, the admin or manager shall have the ability to enter a note to the employee explaining why the time has been sent back and requesting a change.
    - The note will be emailed to the employee and cc'd to the admin or manager.
- Export company file
  - Once fully reviewed, the admin shall have the ability to export data from the payroll system into a variety of formats.
    - Formats shall include: Quickbooks, ADP, CSV, and XML.
  - The admin shall have the ability to select a time period for export.
  - The admin shall have the ability to select employees to be included / excluded from the export along with the ability to "select all" and "select none"
  - The admin shall have the ability to select the file path destination for the export file.
- Reporting
  - A user shall have the ability to review reports.
    - An admin shall have the ability to select which reports are viewable by which user types. (Data)
    - The system shall have canned reports
    - The system could have specialized reports that users can set up?
- Setup workflow (approvals? by role?)

- ○ By role, set time entry users.
- ○ By role, select whether a certain role must have time approved by any other role.
  - ■ If a record must be approved, for instance if there is a manager role who must approve time from employee and vendor users, that would be set up on the workflow.
  - ■ Each role changes the state of a time record so if there is one manager who must approve time, then the state of a time record is "uncommitted", "Pending Manager Approval" and "Committed"
  - ■ A company may have multiple workflows
  - ■ Each project may have a different workflow.
- ■ DATA
  - ● User record
    - ○ Need to gather requirements about how the system will manager user records: login ID, passwords, forgotten password management, security, email authentication.
  - ● Client record
    - ○ Contains
      - ■ Name of Client (String)
      - ■ Active / Inactive (Boolean)
      - ■ Notes (String)
      - ■ Company size (Pre set? Combo Box? TextString?)
      - ■ Industry (Combo Box from a list?)
      - ■ Company Contact
        - ● Name (First Last)
        - ● Address
        - ● Phone
        - ● Email
    - ○ Associations
      - ■ Project (many to many)
  - ● Project record
    - ○ Contains
      - ■ Name (String)
      - ■ Start Date (Timestamp)
      - ■ End Date (Timestamp)
      - ■ Contract Type (Combo Box)
        - ● Fixed Bid
        - ● Time and Materials
      - ■ Budget (String or Float?)
    - ○ Associations
      - ■ Employee (many to many)
        - ● Relation: Role
          - ○ Types of Role
            - ■ Requirements Engineer (BA)
            - ■ Developer
            - ■ QA
            - ■ Project Manager
            - ■ Program Manager
  - ● Employee record contains
    - ○ Contains
      - ■ Name (First Last)
      - ■ Email

- - - ■ Address
      - ■ Phone
      - ■ Billing Rate
    - ● Vendor record contains
    - ● Time
      - ○ States: Pending, Committed (additional states by workflow)
    - ● Export File
      - ○ QuickBooks export/ file format?
      - ○ XML
      - ○ CSV
  - ■ TIMING
    - ● When the timer is running, counting time against a project, every 45 minutes, the system shall alert the user
- ● **NON-FUNCTIONAL**
  - ○ ATTRIBUTES
    - ■ Responsiveness
      - ● Responsive Web Design
      - ● Immediate response via all applications
        - ○ The end user should have no perceivable wait to interact with the system.
    - ■ Maintainability
    - ■ Supportability
  - ○ PROJECT
    - ■ Video Demos every iteration
    - ■ Follow best practices in development
    - ■ 4 Months of Development
- ● **INSTALLATION / INFRASTRUCTURE**
  - ○ Server
    - ■ Web Application (SaaS)
      - ● Common web browsers
    - ■ Mobile Application
      - ● iOS
      - ● Android
    - ■ Wearable Application
      - ● Apple / iOS
      - ● Samsung / Android
    - ■ Versions for all software and hardware are unspecified. Requires more market research data to determine the appropriate deployment version strategy.
  - ○ Language
    - ■ Angular JavaScript (JS)
    - ■ C#.NET as web API on backend