REQUIREMENTS ANALYSIS

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Use Case 1: Working on a task for a project and having a break

• Primary Actor:

Worker

• Preconditions:

Super user has already assigned tasks TaskMaster account has been initialized Base features have been enabled

Main Flow:

User receives a task list [S1] and begins to work on the first task. The user is prompted to take a break [S2]. User is prompted to resume work [S3]. The user is feeling unmotivated so the user clicks the "Motivate me" button [S4].

• Subflow:

[S1] Super user generates and assigns task using the TaskMaster GUI. TaskMaster pushes the tasks to the user.

[S2] TaskMaster starts a Pomodoro timer when the user receives the task list. When the timer reaches 0, the user is prompted to take a break. User confirms.

[S3] TaskMaster starts a Pomodoro timer when the user confirms a break. When the timer reaches 0, a sound alert is played and the user is prompted to resume work. User confirms.

[S4] TaskMaster detects a "Motivate me" button click. It generates a motivational message and displays it to the user.

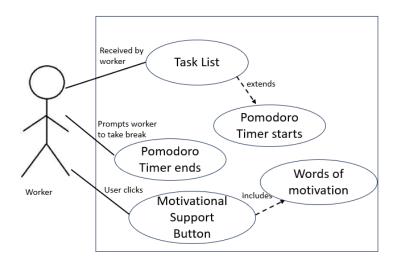
Alternative Flows:

- [E1] User is ill and does not attend work
- [E2] Client requests meeting
- [E3] Super User pauses TaskMaster
- [E4] Network is down

Postconditions:

Worker has taken a break and is back to work with hopefully more motivation.

Model 1:



Use Case 2: Manager assigning tasks

• Primary Actor:

Manager

Secondary Actor:

Workers 1, 2, 3, ..., n

• Preconditions:

Manager has a superuser account.

Manager has already generated tasks.

All workers are assigned to the manager and have configured accounts.

Main Flow:

The manager loads the list of tasks into the assignment board [S1] and assigns tasks to each worker one by one or by group [S2]. After the initial assignment, the manager is asked to confirm the list and push it to the workers [S3].

Subflow:

[S1] The manager navigates to the task screen and either uploads a CSV or spreadsheet, or creates tasks manually.

[S2] The manager either drags a task or group of tasks to a worker or group of workers, or uses a select menu to distribute tasks.

[S3] After double checking the created task lists for each worker or group of workers, the manager resubmits the assigned tasks to the workers.

Alternative Flows:

[E1] Manager is has no tasks to assign to workers

[E2] System is offline and cannot push tasks

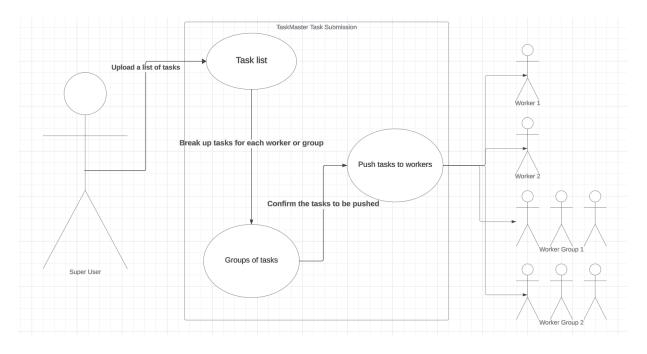
• Postconditions:

Each worker or group of workers has a set of tasks assigned.

The manager still retains the ability to push more tasks.

Workers can begin to work on tasks.

Model 2:



Use Case 3: Worker finishes task list

Primary Actor:

Worker

Secondary Actor:

Manager

• Preconditions:

Worker was assigned tasks by the manager.

The worker and manager have accounts already setup.

Main Flow:

The worker has just completed the last task he had been assigned [S1]. The manager is notified of this and assigns more tasks [S2]. The worker sees this and resumes work [S3].

• Subflow:

- [S1] The worker after completing the task goes to his checklist and checks it off.
- [S2] The manager receives a pop up notification that the worker has completed all tasks, and the manager is given the option to assign more tasks.
- [S3] The worker receives a notification that the task list has been added to.

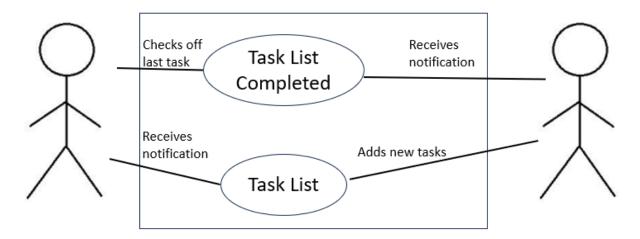
• Alternative Flows:

- [E1] Manager is out of tasks to assign worker
- [E2] Worker did not actually finish the initial tasks
- [E3] It has reached the end of the work day

Postconditions:

Worker has different and new tasks on the task list.

Model 3:



Worker Manager

Use Case 4: Manager monitoring employee activity

Primary Actor:

Manager

• Secondary Actor:

Employee below the manager

• Preconditions:

The manager and employee have TaskMaster accounts.

The employees whom the manager can track are configured with their toggles.

Main Flow:

The manager suspects that an employee is getting distracted and not doing work as efficiently as possible, so the manager finds the toggle for the employee and turns it on [S1]. The manager can see the screen activity of the employee and catch them slacking [S2]. The manager can send a message to the slacking employee [S3].

Subflow:

[S1] The manager clicks a button that expands the screen with employee toggles. The manager turns a toggle on for the employee by clicking it.

[S2] The manager can watch the activity of the employee and receive written updates on sticky notes if they do not have the tracking screen pulled up at all times. Slacking is indicated if the employee is not focusing on the task and instead clicking on other pages, or if the employee is frozen on an unnecessary screen for a long time.

[S3] The manager clicks a button next to the employee's toggle to send a warning. The employee receives the warning on a red sticky note.

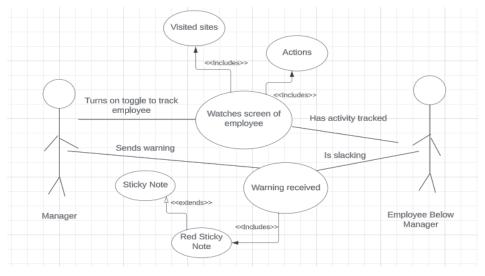
Alternative Flows:

- [E1] The system is down so the toggle will momentarily not allow tracking.
- [E2] The employee is not slacking, showing signs of activity committed to their task.
- [E3] The manager can send praise on the sticky note, although this is not conventional.

Postconditions:

The manager has a level of awareness about the employee's activity.

Model 4:



Use Case 5: Worker ending break and going back to work

• Primary Actor:

Worker

Secondary Actor:

Manager

• Preconditions:

Both the manager and employee have TaskMaster accounts. The project's TaskMaster program is initialized and running. Worker is initially on break, and their break timer has hit 0s.

Main Flow:

A worker currently on break has their break end [S1]. The worker can select whether they want to extend their break [S2]. Additional extensions flag the manager for approval [E1]. Upon the break ending, the manager regains monitor access to the worker [S3].

• Subflow:

- [S1] Worker break flag cleared, extension prompted, active status enabled if rejected.
- [S2] The worker selects whether they want to extend their current break or go active.
- [S3] Managers monitor access and task assignment flags for the worker re-enabled.

• Alternative Flows:

[E1] Send push to manager asking for extension approval.

Postconditions:

Worker is eventually set back to work, setting their status as active, which allows for the manager to access monitor controls and view the workers activity again.

Model 5:

