

# Focusing our research vision

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# Lost? Check #announcements

If you've been gone, always start there.

<rewind>

# Milestone 4: Write a paper intro

- We've synthesized some of the most popular ideas for each area. Grab at least one area, and an idea (not necessarily yours), and develop it further into a concrete research proposal!

# Outline of a systems intro

- What's the problem you're solving?
  - *Specific* problem! Not just “crowdsourcing”. More like how trust and power are broken.
- Related work
  - What else have people tried, and why haven't they worked?
- What's the high-level insight?
  - This is the general idea, and what other platforms would want to replicate
- What's the system?
  - How might this idea look or work as a running system?

# Outline of a science intro

- What's the phenomenon you're interested in?
  - *Specific* phenomemon! Not just “crowdsourcing”. More like what makes teams of workers effective.
- The Puzzle
  - What observation can't we account for yet?
- The experimental design
  - Who are you recruiting? What are the conditions? What are you measuring? What statistical procedure will you use?
- The result
  - What (do you imagine) would happen?

# Examples

  Guilds

  Authoring effective tasks

  Task feed ranking

</rewind>



# Today

- Focusing our research vision based on Milestone 4
- Milestone 5
- Design test flight

# Research directions

# Internal conference deadlines

Ten days before the full deadline

# Research foci

# Themes

- Task authorship
- Task ranking
- Open gov

# Task Authorship

- Experiment on task quality and price (e.g. non-experts do a task and then experts revise it is cheaper than if only experts do a task) ~@ahmednasser
- [Experiment] Release task to specific domain of workers at lower price. If task is not accomplished in time frame, increase price of task OR open task to larger domain ~@beingcooper
- [Experiment] Allow workers and requesters to provide feedback to each other via surveys ~@dcthompson

# Task Authorship (cont.)

- [Experiment] Certification tests to define proficiency of user (intermediate, expert); Sentiment analysis of worker feedback on tasks; gold test ~@TeamUXCrowd
- [Experiment] Examine how task quality is influenced by requester experience. Examine how novice and experienced participants respond to poor tasks ~@Team BPHC
- [Experiment] Test effectiveness of adding categorical tags and time frame estimations to tasks ~@presrini

# Synthesis

- Experiment: how much variation is there, really, in task authorship?
- Secondly, what kinds of interventions can help?

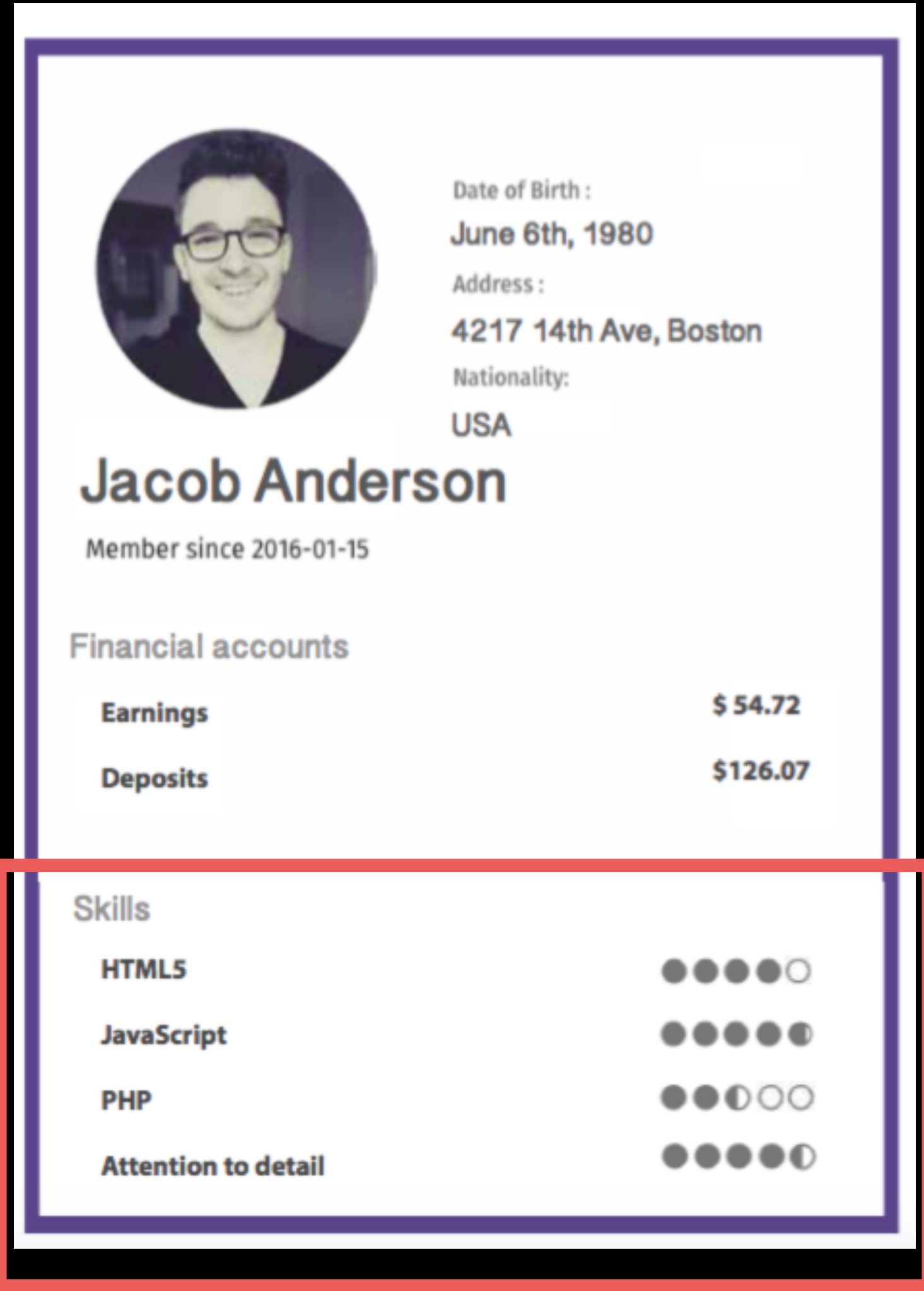



# Task Ranking

- [System] Categorize tasks according to skills, task difficulty and match workers to tasks ~Team Bits, ~@namitjuneja
- [System] Timing. Post tasks by patterns of workers & requesters ~@sarahmasud
- [System] Modify Boomerang to account for worker's interests, skills, and tasks recently performed ~@vrinda1994, @witty123
- ^(above) + requesters can see top ranked workers in a specific category and vice versa ~@dineshd, dhankie @dnayak, @kanwar\_arora

# Task Ranking (cont.)

- [Experiment] New pricing model: Requesters set base price, then depending on other factors such as experience, rejection rate, geography, a worker can earn higher wages ~@dnayak, @kanwar\_arora
- [Experiment + System] Workers assess each other's contributions before it is submitted to requesters ~@Team I
- [Experiment] Determine if accounting for worker interest improves task result quality ~@vaastav




 Date of Birth :  
**June 6th, 1980**  
 Address :  
**4217 14th Ave, Boston**  
 Nationality:  
**USA**

**Jacob Anderson**  
 Member since 2016-01-15


**Financial accounts**

<b>Earnings</b>	<b>\$ 54.72</b>
<b>Deposits</b>	<b>\$126.07</b>

**Skills**

<b>HTML5</b>	●●●●○
<b>JavaScript</b>	●●●●●
<b>PHP</b>	●●●○○
<b>Attention to detail</b>	●●●●●

## Prototype with tags



[My Tasks](#)
[Task Feed](#)
[My Projects](#)
[Sophie](#)

**Task Feed**

40 min ☰ 1 available task

**\$4.00** **Android Apps API** Android Admin API Google alessandro.merletti de palo ●●

40 min ☰ 1 available task

**\$4.00** **Map location** GPS .net alessandro.merletti de palo ●●

☰ 1 available task

**\$1.00** **Pop up notification** iOS alert C++ angela.richmond-fuller ●●●

☰ 1 available task

**\$34.00** **XML problem** XML yash.sherry ●●○

☰ 1 available task

**\$10.00** **Accessing 2D array** C++ Arrays Matrix namit.juneja ●●○

☰ 1 available task

@parsis @sophiesong @hizai

# Synthesis

- Interactive task feed — what would it look like?
- What data would feed it? Algorithm or ML?

# Open Gov

- [Experiment] Group up workers working for the same requester and allow them to interact with one another so they can resolve issues without the requester. ~@edotrajan
- [Experiment] Open governance system with Worker Group and Requester Group, each focusing on the worker and requester needs, respectively ~@yashovardhan
- [Experiment] Leadership board consist of selecting workers, requestors and Daemo platform engineers. ~@dilrukshi

# Open Gov (cont.)

- [System] Peer evaluation, workers can evaluate each other's work & give feedback since requesters cannot scale help ~@hamdur.rahman
- [Experiment] Worker Union to avoid unfair payment and balance the power between requesters and workers ~@Dubs
- [Experiment] System clearinghouse: payment is handled through intermediary ~@attinmittra
- A/B test different organizational structures (e.g. guilds) ~@Trygve

# Synthesis

- Refine the guild structure to something testable by CSCW

# Design Test Flight: Messenger Designs



# Collapsible Sidebar Design

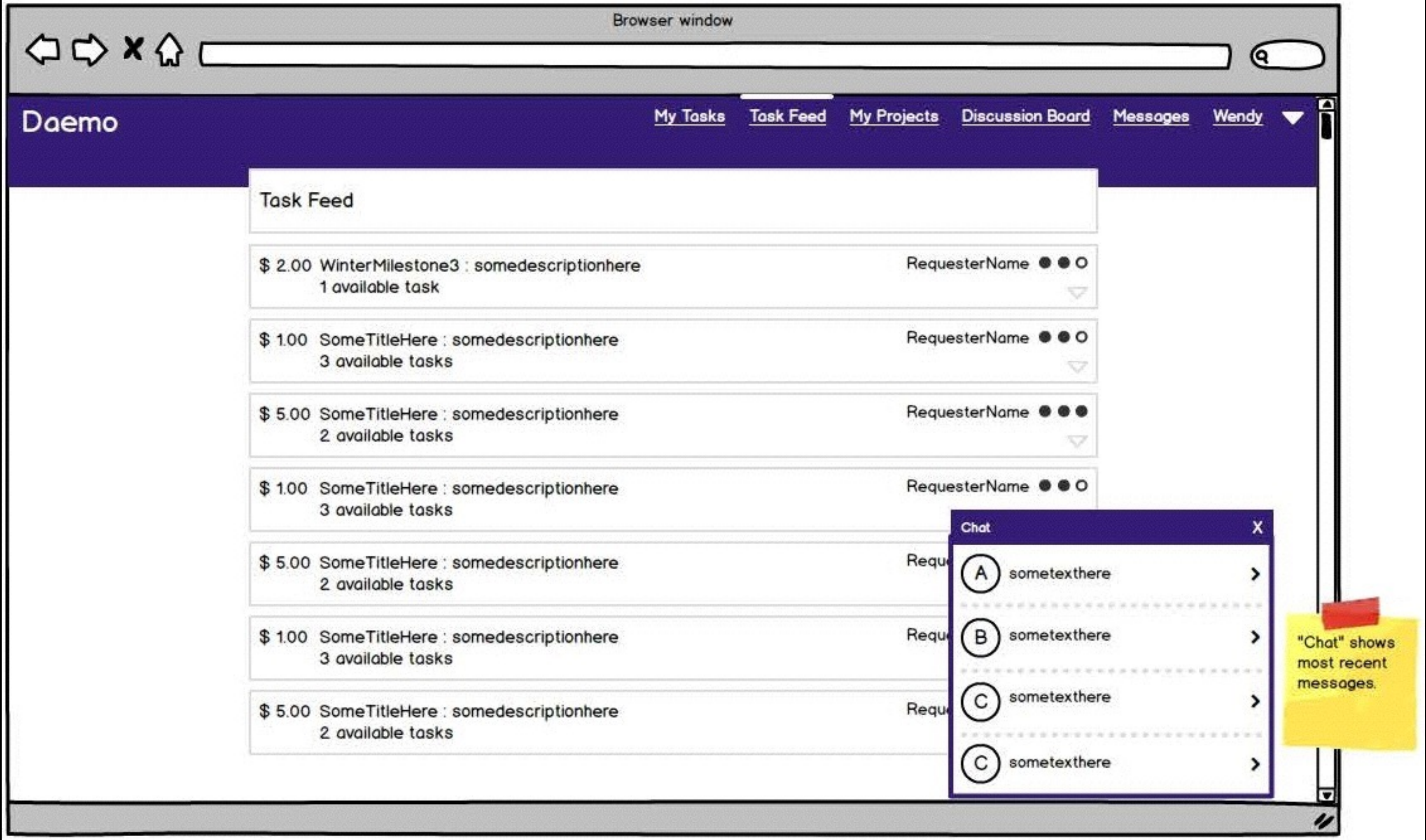
The screenshot shows a web application interface with a purple header bar containing navigation links: "My Tasks", "Task Feed", "My Projects", and "Raymond". The main content area is split into two panels. The left panel, titled "Task", displays "Task #87 (WinterMilestone IV: We Are Daemon)" with a poll question: "Would you like to use this playground for delivering milestones?". The poll options are "Yay!", "Nay..", and "Maybe for just one milestone and then let's see how it goes.". Below the poll is a URL: "http://crowdresearch.stanford.edu/w/index.php?title=WinterMilestone\_IV\_Template". At the bottom of the task panel are buttons for "SUBMIT", "SAVE", and "SKIP". A red number "1" is placed to the right of the task panel. The right panel, titled "Instant Message", shows a message from "John M." asking for clarification on instructions. Below the message is an "OK" button. A red number "2" is placed to the right of the message panel, with a right-pointing arrow indicating the collapse action. Below the message panel is a "Message Inbox" section listing three messages: "Proofreading Passages From...", "Research Study", and "College Student Survey".

Worker's Task View

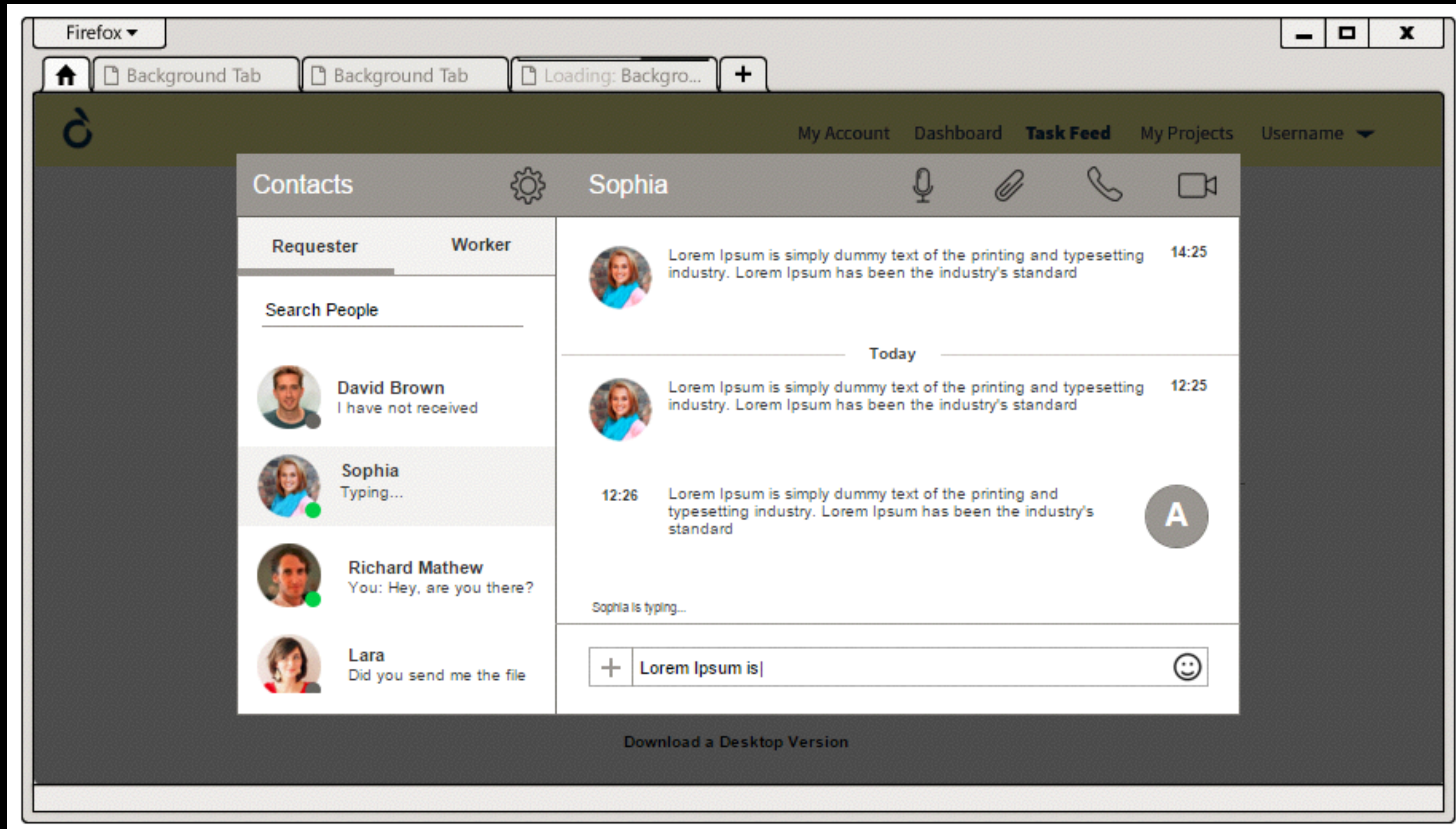
1. Instant Message overlay side-by-side with task.

2. Hide message panel with one click on the arrow or on the white space.

# Chat box Design



# Modal Window Design



# Inbox Notification Design

The screenshot shows a navigation bar with a logo on the left and tabs for 'My Messages', 'My Tasks', 'Task Feed', 'My Projects', and 'Dilrukshi'. The 'My Messages' tab has a red notification bubble with the number '2'. Below the navigation bar is a 'Task Feed' section containing five task entries. Each entry includes a monetary value, a task title, a '1 available task' indicator, and a sender name with a status indicator (three circles, the first being filled). A starburst callout points to the first task.

Value	Task Title	Sender
\$2.00	Compare these pictures	dilrukshi.gamage
\$2.00	Project with two tasks	hamdur.rahman
\$1.00	Why did you join Daemo?	angela.richmond-fuller
\$0.01	million dollar question	diane.robinson
\$1.00	checkbox	a.g

**Worker log later and see two messages for the sent msg**

@dilrukshi

# Research engineering