

Research directions

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<rewind>

Needfinding

- We watched panels of experts workers and requesters talk about their practice
- Workers need to find tasks that result in payment and maintain reputation, by identifying reputable requesters
- Requesters want to easily create HITs, get them accepted, and receive high quality results...all quickly

Brainstorming

- How Might We? questions
- Dark horse ideas

Crowdsourcing research

- History
- Crowd algorithms
- Incentives and quality
- Crowd-powered systems
- AI for HCOMP
- Complex work

Milestone 3

- Brainstorm research ideas to address workers' and requesters' needs
- Goal: synthesize them today to point more specifically toward our next directions

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Today

- Themes in your research proposals
- Focusing and flaring
- Milestone 4
- Overview of crowdsourcing research

We do research in the open.

- We share ideas.
- This is how we produce the best research!
- We win together, or not at all.
- The way crowd research works is that we share, discuss, debate, and iterate together.
- If anyone mistakenly takes credit, we have records in Slack, Wiki, etc.

Foundations

- A new high-level approach to organizing our crowd platform to improve *trust* and *power*
- Examples:
 - Workers review all tasks before posting and make all payment decisions
 - Workers organize themselves into collectives

Features

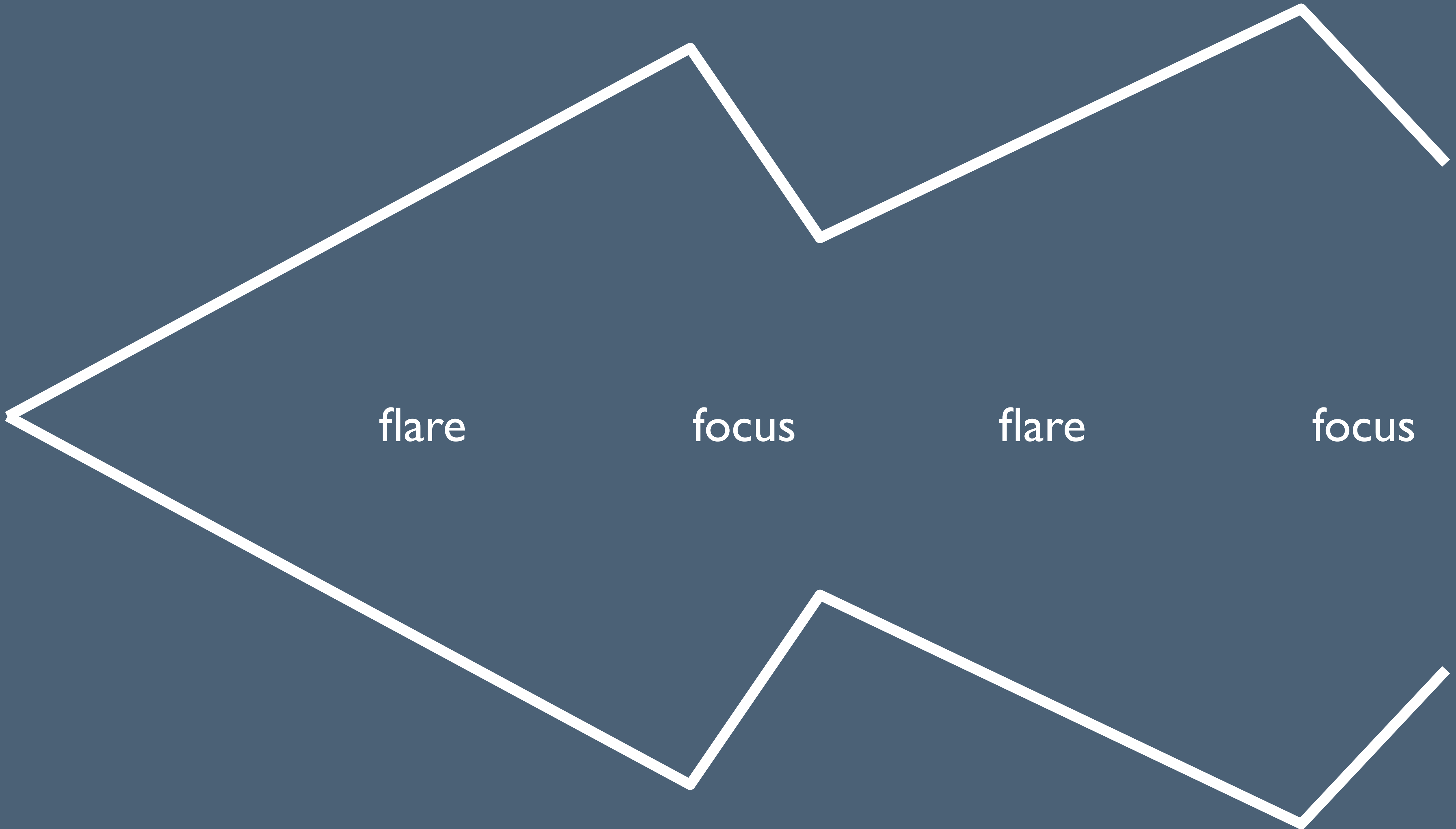
- Ideas which improve the strength of *any* platform but aren't holistic or don't give it a high-level purpose
- Examples:
 - Task recommender systems
 - Mediation strategies
 - Specific feedback mechanisms

Crowd Admins & Daemo Governance

- **Crowd Admins:** work with you to figure out how to make crowd research succeed.
- **Daemo Open Governance:**
 - Daemo issues, not about the crowd collaboration process
 - Deploying the guild structure on Daemo
 - Guild evaluation based on real Workers and Requesters using the platform, posting tasks, and discussing the issues about Daemo governance (100 tasks per week Trigger)

Themes

- Task authorship
- Task ranking
- Open gov



I. Task Quality Design

- **New pricing model**
 - Requesters pay more for experienced worker to ensure high quality results OR take a risk and pay less for less experienced worker who might still give 'good' results
- **Analyze failure**
 - If a person doesn't complete a task, find task properties that led to failure (language, questions, quantity,...)
- **More content-rich task creation**
 - Tools to let requesters create graphic-rich instructions for tasks with better styling. ~@nalinc

2. Worker / requester matching

- **Account for worker interest in Boomerang** ~@vrinda1994, @witty123
- **Add filters to task feed** ~Team SneakyLittleHobbitses
- **Subscriptions**
 - Worker can "subscribe" to a requesters and notified when ever requester posts work ~@vinyoshy
 - Requesters can trusted workers to "early access" other subscribers
- **Rate workers by skill category** ~@dhankie, @dineshd
 - Workers might have higher rating in one category than another. This protects
 - The requester can find workers with high ratings in a specific category
 - Workers reputation overall reputation is more protected because a requester can only rate according to a specific category ~Team Duka

3. Governance

- Committee moderate community, review ratings, and task rejections
- Insurance System and Guilds
 - Negotiation of wages, work rules, complaint procedures, rules governing hiring, firing and promotion of workers, benefits, workplace safety and policies. ~Team EU
- System clearinghouse
 - Requester and worker go through an intermediary, who holds payment until work is completed and task is verified ~@atinmittra
- A Holacratic World Team Despicables
 - Address each entity personally and with a way to address the global concerns, all entities in the system do not feel like just computers, but actual human beings
- Groups
 - Group workers who are “working on the same task for the same requester”
 - Greater sense of community, security, and connection between requesters and workers

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

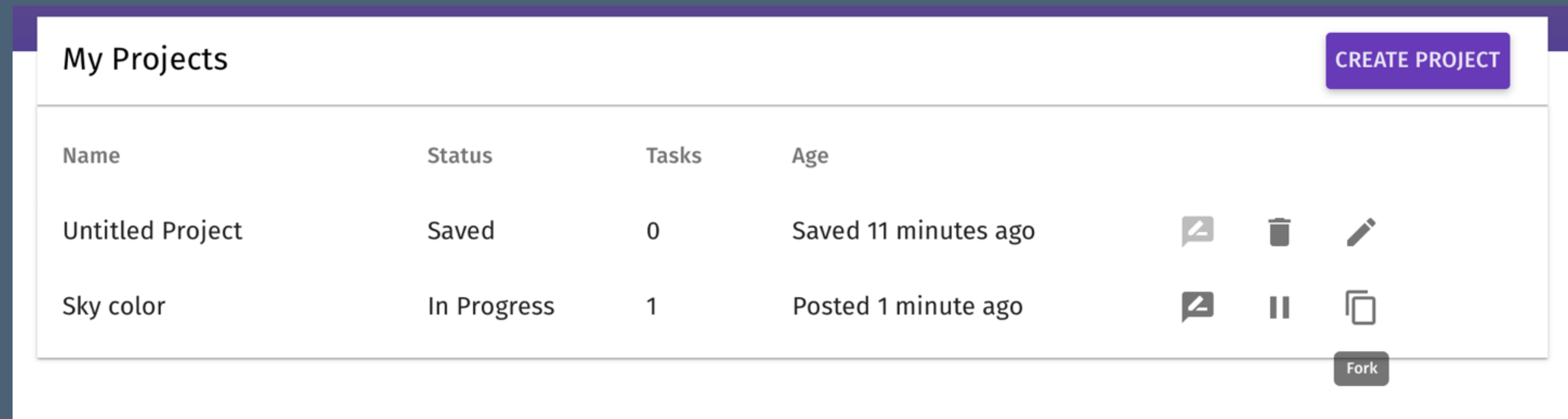
  Authoring effective tasks

  Task feed ranking







Usability Test Flight Ideas

UX Improvements

- **Terminology / Icons:** e.g “Why does it say fork instead of copy?”
 - Use universally understood terms like “Copy” to reduce ambiguity



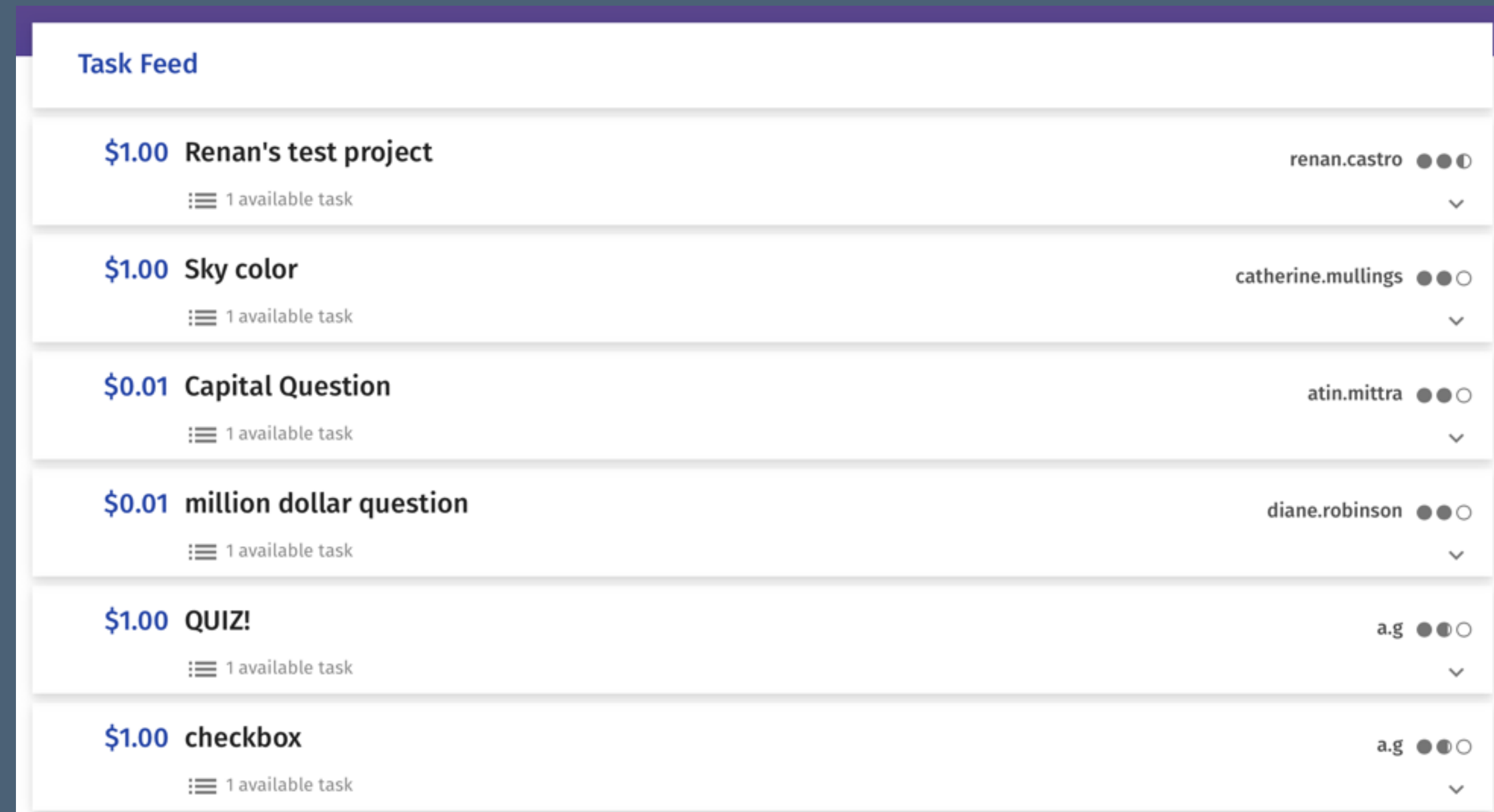
The screenshot shows a user interface titled "My Projects" with a purple header bar. In the top right corner of the header, there is a purple button labeled "CREATE PROJECT". Below the header is a table with the following columns: "Name", "Status", "Tasks", "Age", and a column of action icons. The table contains two rows of project data.

Name	Status	Tasks	Age	Actions
Untitled Project	Saved	0	Saved 11 minutes ago	  
Sky color	In Progress	1	Posted 1 minute ago	  

Below the table, there is a button labeled "Fork" with a dark background and white text.

UX Improvements (cont.)

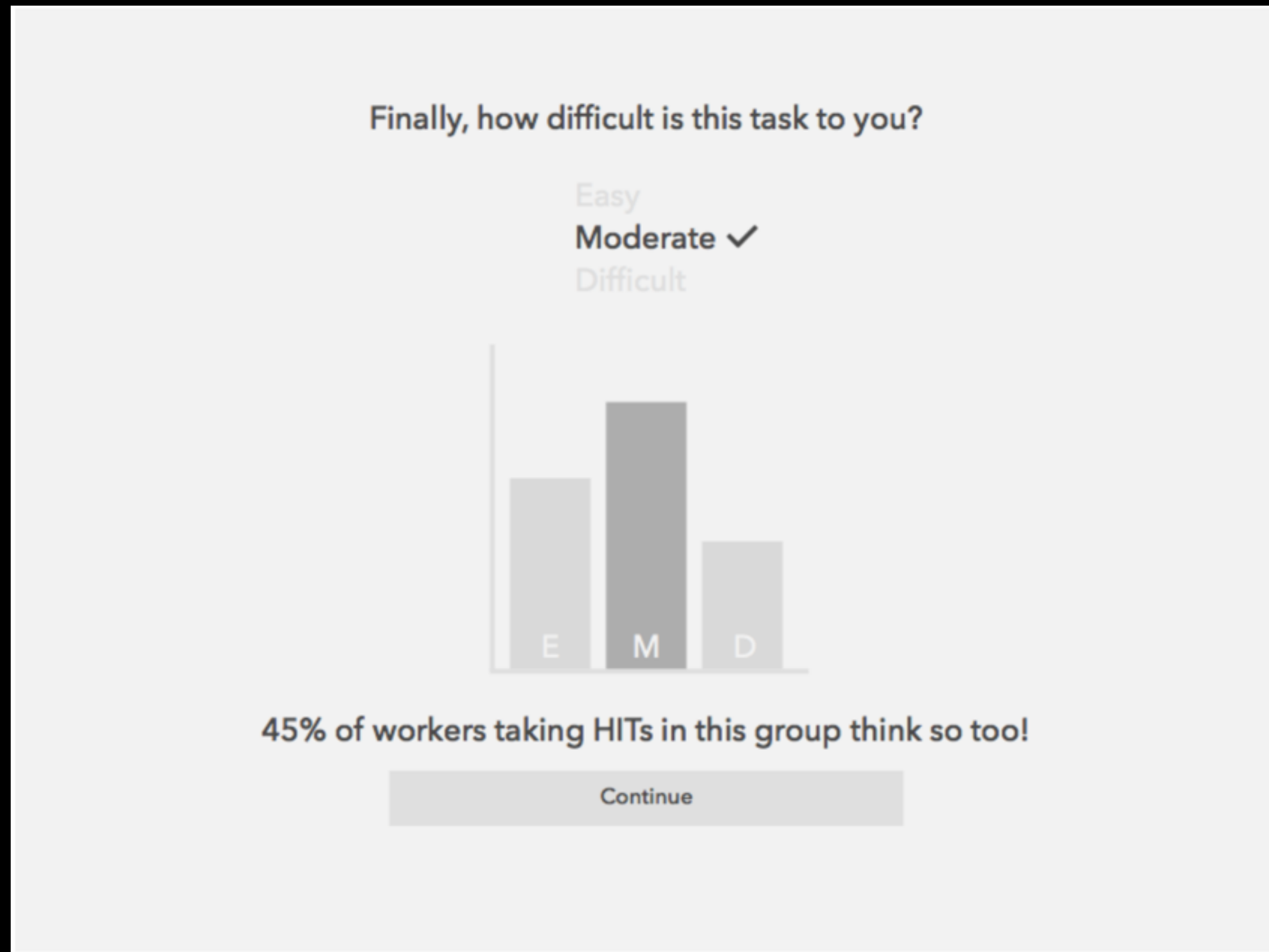
- User understanding: e.g. “How have tasks been ordered?”
 - Sort task by payment, recent, alphabetically
 - Filter by preferences



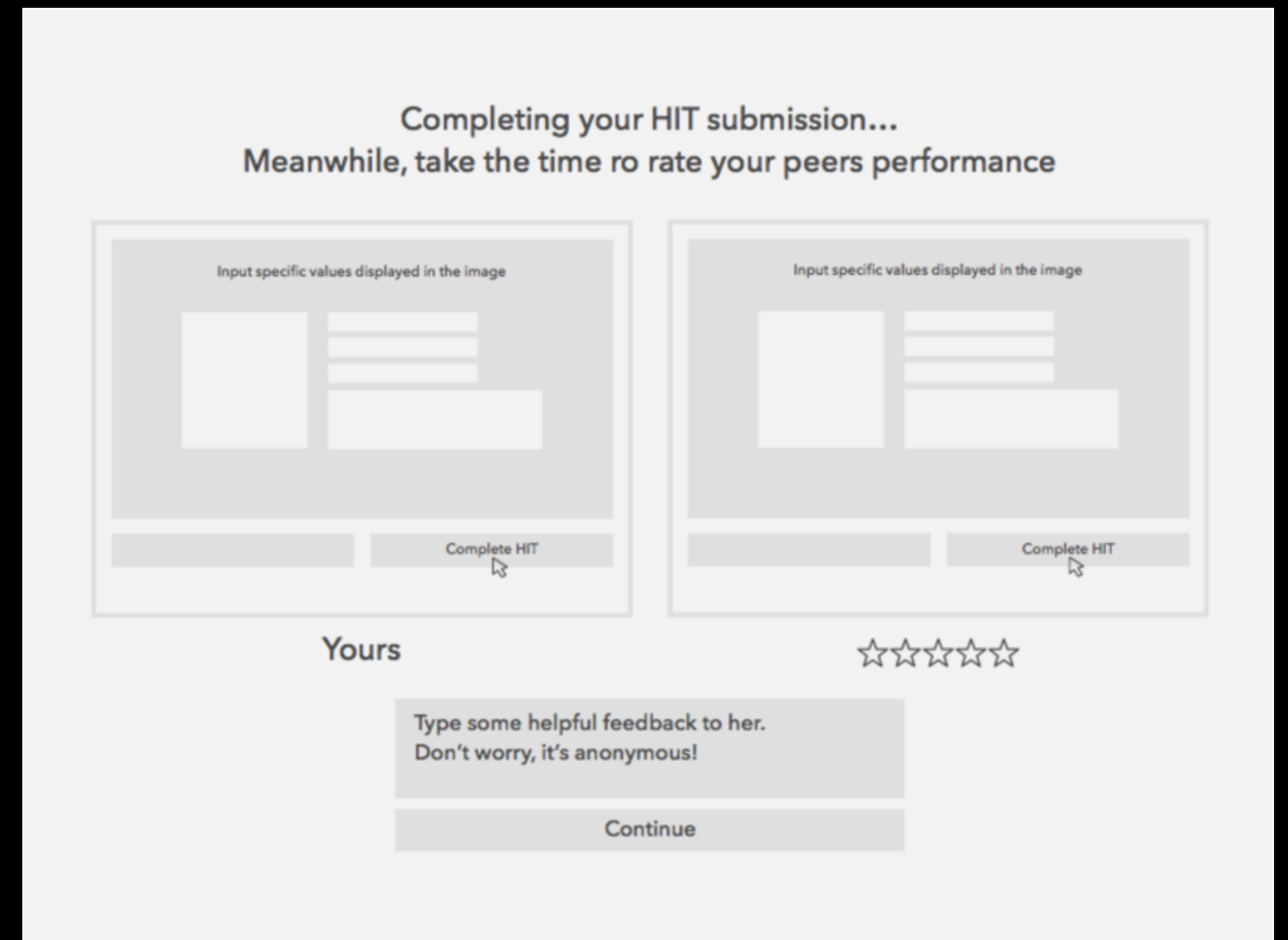
New features

- Add a home page
- Integrate external scripts such as Turkopticon
~@raymondsum3
- Forum
- Chat

New features (cont.)



Task difficulty



Anonymous, peer feedback

Where we are
going

So far: UIST

- With UIST, we showed that we can take on the world, and that crowd research is producing real results.
 - UIST is a top-tier research venue
 - Work-in-progress papers are ~50% acceptance rate and are mostly an advertisement that we're working on something
 - It is “non-archival” and does not formally count as a top-tier publication, just an indication that good work will likely lead to one

Today: Platform is online

- Task creation, including Prototype Task foundation
- Task feed and task submission
- Task review

- Our first workers (skunkworks)
- Our first work (skunkworks)

April 13: UIST paper

Late May: CSCW paper

- This is the outcome that will be central to those of you who want to apply to graduate schools
- This outcome proves to the world that we exist, and that we matter. This is the launchpad to our success.

Growing

- We agree that the project is doing research currently.
- However, we agree that as the platform gets real work on it (which will be hard to do, but very rewarding!), it will need to reconsider its position.
- At that point we should transition into an organization.
 - Let's retain the research DNA even after this point

Let's make a trigger

- A trigger will be our formal criteria for beginning that transition.
- We want something that is a strong indicator we are achieving liftoff and will succeed.
- **Our trigger: 100 projects completed per week**
 - Fine print: from at least 15 different requesters — this can't just be just Rajan spending his savings to post work to the platform

Design test flight

Design chat/message platform

- Join a hangout with Michael on Wednesday morning!
9am Pacific