Amazon Mechanical Turk

Crowdsourcing and Human Computation

Instructor: Chris Callison-Burch

Website: crowdsourcing-class.org

amazonmechanical turk

REQUESTER



Categorization

Choose the best category for this image



- kitchen
 living
 bath
 bed
- Ooutside

You must ACCEPT the HIT before you can submit the results.

View Instructions↓

Select the room location in home for this picture. Seating areas outside are outside not living. Offices or dens are living not bedrooms. Bedrooms should contain a bed in the picture.

Data Collection

Find the Website Address for this Restaurant

- For this restaurant below, enter the website address for the official website of the restaurant
- Include the full address, e.g. http://www.thecheesecakefactory.com
- Do not include URLs to city guides and listings like Citysearch.

Restaurant Name: Olive Garden

Address: 310 Strander Blvd Tukwila, WA 98188

Phone Number: (206) 241-4899

Website Address:

HIT

You must ACCEPT the HIT before you can submit the results.

Image Moderation 9/8/13/11:42 AM HIT HIT

9/8/13 11:42

Select all images containing adult content

Guidelines for flagging an image as adult content. Flag the image if you consider any of the following to be true.

- Does the image contains nudity?
- Does the image portray hate or hate crimes?
- Does the image contain bloody violence?
- Does the image contain offensive gestures?



Sentiment

9/8/13

Pick the best sentiment based on the following criterion.

Select this if the item embodies emotion that was extremely happy or excited toward the Strongly positive topic. For example, "Their customer service is the best that I've seen!!!!" Select this if the item embodies emotion that was generally happy or satisfied, but the **Positive** emotion wasn't extreme. For example, "Sure I'll shop there again." Pick the best sentiment less a Neutral topic. For example, "Yeah, I guess it's ok." or "Is their customer service open 24x7?" Select this if the item embodies emotion that was extremely happy or excited toward the Strongly positive Select this is the deex amples diase a costion to at is corrective the and seen up setting toward Negative the topic, builded the extrement of the search of the the was benerally happy the search of the second of the seco don't trust the wasn't extreme. For example, "Sure I'll shop there again." Select this fight the book of the book of the second of th Neutral extreme. Popice Fameramate "Seally sales set and " NO's their quatore salving area shot? there Strongly negative Select this if the item embodies emotion that is perceived to be angry or upsetting toward Negative again!!!" the topic, but not to the extreme. For example, "I don't know if I'll shop there again because I don't trust them." Judge the sentiment expressed by it he fellowing it's negative thought the topic that can be perceived as extreme. For example, "These guys are teriffic... NOTTTT!!!!!!" or "I will NEVER shop there

If you loved Firefly TV show, grind zing Amazon price for entire series: about \$27 BlueRay & \$17 DVD.





- 1. What is your gender?
- 🔘 Male 🔘 Female
- 2. What is your age?

3. Which of the following best describes your highest achieved education level?

Some High School ‡

4. What is the total income of your household?

Less than \$12,500 \$12,500 - \$24,999 \$25,000 - \$37,499 \$37,500 - \$49,999

- 5. What is your favorite type of food?
 - 🔵 Italian

9

Image tagging

Provide 3 tags for this image.

Instructions:

- You must provide 3 tags for this image.
- Each tag must be a single word
- No tag can be longer than 25 characters
- The tags must describe the image, the contents of the image, or some relevant context.

Image:



Tag 1:

Tag 2:

Tag 3:

HIT

9/8/1

Transcription

Transcribe the text contained in the image

- Look at the receipt and copy the number of items purchased.
- Provide the dollar amount for tax.
- Provide the dollar amount for the total sale.
- Do not use dollar signs (\$) but make sure you have two decimal points. (ie 4.35)

Image:

HIT

CHECK #3 TRAY	89369-1 # 1 £ \$2.59	
TAX	\$0.25	
SUB-TOTAL	\$2.84	
TAX	: \$0.25	
TOTAL	\$2.84	
TAKE	AWAY	
Time: 13:11	1 CUSTOMER	
Store ID	: 0117	

Number of items on receipt



Tax amount



Total spent on all items

Writing

Write a brief description of a website.

- Write short article summarizing what a website is about and their products and services.
- Click the link below to review the website and browse the products and services.
- Your submission must be at least 50 words long but no more than 100 words.
- No award will be given for submissions of less than 50 words.
- Your writing must be original and can not simply be a copy of part of the website.

Website name: The Website Name Here

Website link: http://www.linktowebsitehere.com

You must ACCEPT the UIT before you can submit the results

Any HTML form

1. This is an example of a multiple choice question, select only ONE of the following:

Choice 1

Choice 2

2. This is an example of a free text answer, use this when you only need workers to enter a line of text:

3. This is another example of a multiple choice question, select only ONE of the following. A drop down list saves more screen real estate than radio buttons (see Question 1) but may require more keystrokes for the Worker to select the answer they want.

Choice 1 💲

4. This is an example of a question where you can select one or more of these options:

selection 1 selection 2 selection 3 selection 4

5. This is another example of a question that can have multiple answers (select all that apply):

Option 1

Option 2

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Home		Create	Manage	Developer	Help	
<u>Overview</u>	Tour	Case Studies	Business Solutions			We're Hiring! Learn More

Sentiment Rating Simplified

The Mechanical Turk **Sentiment App** makes it simple to collect and understand sentiment on your data!

- Quick and easy HIT design
- Tailor your sample size from 1 to 20
- Start receiving results in minutes

Create a Sentiment Project

Work Distribution Made Easy

Mechanical Turk gives businesses and developers access to an on-demand, scalable workforce



Categorization on Mechanical Turk

The Mechanical Turk Categorization App makes it simple to get fast, accurate results on your Categorization Project!



Sentiment Rating Simplified

The Mechanical Turk Sentiment App makes it simple to collect and understand sentiment on your data!



Your business can use Mechanical Turk to:

amazonmechanical turk REQUESTER

Home Create	Manage Developer	Help	
New Project New Batch with an Exis	sting Project		Create HITs individually
Your New Project			How does it work?
Sentiment Project	Project		
Create Project	What would you like to call your	project?	
Provide Instructions	Obama sentiment 9/13		
Upload Data File		J	
Preview			
Checkout	Sentiment Question		
	What do you want Workers to ju (see examples)	dge attitude towards?	President Obama
	How the Workers will see your que	stion:	
	Judge the sentiment expressed by	the following item towards: Preside	ent Obama
	{Placeholder for your items to be	udged. You will be asked to upload	them at a later step}
	Strongly Negative Neutr negative	al Positive Strongly positive	
			Next »

Obama sentiment 9/13 - Judge the sentiment expressed by the following item toward: President Obama

How does it work?

•

Sentiment Project								
	Instructions for Wo	Instructions for Workers						
Create Project	For each point on	For each point on the scale, define the criteria Workers should follow when selecting it. We have						
Provide Instructions	provided sample in	rovided sample instructions that you can customize below.						
Upload Data File		Select this if the item embodies emotion that was extremely happy or excited						
Preview	Strongly positive:	trongly positive: toward the topic. For example, "Their customer service is the best that I've seen!!!!"						
Checkout			8					
	Positive:	Select this if the item embodies emotion that was generally happy or satisfied, but the emotion wasn't extreme. For example, "Sure I'll shop there again."	ź					
	Neutral:	Neutral: Select this if the item does not embody much of positive or negative em toward the topic. For example, "Yeah, I guess it's ok." or "Is their custor service open 24x7?"						
	Negative:	Negative: Select this if the item embodies emotion that is perceived to be angry or upsetting toward the topic, but not to the extreme. For example, "I don't know if I'll shop there again because I don't trust them."						
	Strongly negative:	Select this if the item embodies negative emotion toward the topic that can be perceived as extreme. For example, "These guys are teriffic NOTTTT!!!!!!" or "I will NEVER shop there again!!!"						
			1					
	Number of Respon	2 Number of Responses 3						
	How many Workers	s do you want to rate sentiment for each item? (Help me choose)	4 75 6					
			7 8					
			9					

amazonmechanical turk REQUESTER

Home	Create	Manage	Developer	Help			
New Project Ne	ew Batch with ar	Existing Project				Create HITs individually	
Obama sent	iment 9/13	 Judge the sentime 	nt expressed by the	following item toward: F	resident Obama	How does it work?	
Sentiment Proj	ect						
Create Project		Upload Data	File				
Provide Instructi	ions	Please provide	a .csv file of your d	ata so that we can creat	e your work items. (learn more)		
Upload Data Fi	le	Don't have on	e? You can view a s	ample.			
Preview		Choose Fi	le	tweets.csv		Upload	
Checkout		After your file	s uploaded, you can	specify which columns	to show Workers.		
					L	eave feedback for this page.	
Help Contact Us	Help Contact Us Policies Press Inquiries Blog Careers						

MTurk.com Requesters Workers Developers

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Home	Create	Manage	Developer	Help		
New Project	New Batch with an E	xisting Project				Create HITs individuall
Obama sen	timent 9/13 2	 Judge the sentim 	ent expressed by t	ne following item toward: Pre	sident	Obama How does it work?
Sentiment Pro	iect					
Create Preject	Joor	Upload Data F	ile - Choose Field	S		
Provide Instruc	tions	Each column fr	om your .csv file is	shown as a field below. Tell	us whic	ch fields you want to show Workers
Upload Data F	File	and whether the	e rielas contain tex	i, a link to an image, or a link	to a w	ebsite.
Preview		Optionally, you want to add a k	can add a label to	appear next to your data. Fo	r insta	nce, if the field is a "tweet," you might
Checkout		want to add a k	aber of Tweet.			
		Field	Show Workers?	Type of Data		Label
		Tweet	۷	Text	\$	Tweet
		user		Text	\$	username
		If this doesn't loo	ok right, you can uplo a	d a different file.		
						Next »
						Leave feedback for this page
Help Contact Us	s Policies Press Inc	uiries Blog Careers				E Follow Us on Twitter
MTurk.com Reg	uesters Workers D	evelopers				Become a Fan on Faceboo

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Obama sentiment 9/13 — Judge the sentiment expressed by the following item toward: President Obama

How does it work?

Sentiment Project

Provide Instructions

Create Project

Preview of Work Items

This is what Workers will see.

Upload Data File	Instructions
Preview Checkout	Instructions↓ Pick the best sentiment based on the following criterion. Strongly positive Select this if the item embodies emotion that was extremely happy or excited toward the topic. For example, "Their customer service is the best that I've seen!!!!"
	Positive Select this if the item embodies emotion that was generally happy or satisfied, but the emotion wasn't extreme. For example, "Sure I'll shop there again." Neutral Select this if the item does not embody much of positive or negative
	Judge the sentiment expressed by the following item toward: President Obama Tweet: Obama Gives Money To Syrian Rebels Who Behead Innocent Christians // http://t.co/wSKkzUFXjY http://t.co/pQiUfwOXpm Strongly Negative Neutral Positive Strongly negative positive
	You must ACCEPT the HIT before you can submit the results. Preview 1 of the first 5 items
	« Go back and edit Continue »
	Leave feedback for this

Home	Create	Manage	Developer	Help						
New Project	New Batch with an	Existing Project				Create HITs individually				
Obama ser	Obama sentiment 9/13 — Judge the sentiment expressed by the following item toward: President Obama How does it work?									
Sentiment Pro	oject	Checkout								
Create Project	t	Oneckout								
Provide Instru	ctions	Number	of Items			1,000				
Upload Data F	File	Number	of Workers per Ite	m	Х	5				
Preview Checkout		Number	of Worker Submis	sions	=	5,000				
		Reward	per Submission (de	etails)	Х	\$0.020				
		Total Wo	orker Rewards		=	\$100.000				
		Total Me	chanical Turk fees	3 (details)	+	\$45.000				
		Total co	st		=	\$145.000				

amazonmec	hanical tur	k REQUESTE	R				
Home	Create	Manage	Developer	Help			
New Project N	ew Batch with an	Existing Project			Create HITs individually		
Sentiment Proj	ect	Congratulatio	ons				
Create Project		Thank you for	Thank you for publishing your project with Mechanical Turk. Your items are being published for Workers to				
Provide Instructions		complete. Thi	complete. This may take a few minutes, depending on the size of your project. You will receive an email when Workers have completed your project				
Upload Data File	9		when workers have completed your project.				
Preview		You can cheo	k on your project sta	atus by clicking her	e.		
Checkout							
					Leave feedback for this page.		
Help Contact Us	Policies Press I	nquiries Blog Career	3		G Follow Us on Twitter		

MTurk.com Requesters Workers Developers

Follow Us on Twitter
 Become a Fan on Facebook

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Number of workers

Input file tweets.csv



Input file tweets.csv

Building your own HIT

- Set the parameters of your HIT
- Optionally, specify requirements for which Turkers can complete your HIT
- Design an HTML template with \${variables}
- Upload a CSV file to populate the variables
- Pre-pay Amazon for the work
- Approve/reject work from Turkers
- Analyze results

HIT Parameters

- title
- description
- keywords
- reward amount
- max time allotted for work
- auto approval time

Enter Prop	erties ② Design	n Layout	3 Preview and Finish
Project Name:	Reading Comprehe	nsion Test	This name is not displayed to Workers.
Describe your	HIT to Workers		
Title	Write questions and	l answers fo	or a reading comprehension test
	Describe the task to Workers.	Be as specific as	possible, e.g. "answer a survey about movies", instead of "short survey", so Workers know what to expect.
Description	Read an article and	then write	5 questions and 5 example answers that test a reader's comprehension
	Give more detail about this ta:	sk. This gives Wo	rkers a bit more information before they decide to view your HIT.
Keywords	reading, comprehen	nsion, writin	ng, questions, answers, research
	Provide keywords that will help	Workers search	for your HITs.
	This project may co	ontain potenti	ially explicit or offensive content, for example, nudity. (See details)
Setting up you	ur HIT		
Powerd per sec	lanmont	\$ 0.25	
Reward per as:	signment	Tip: Consider	r how long it will take a Worker to complete each task. A 30 second task that pays \$0.05 is a \$6.00 hourly wage.
Number of ass	ignments per HIT	How many un	nique Workers do you want to work on each HIT?
Time allotted po	er assignment	2 Maximum time	Hours
		Maximum une	a worker has to work on a single task. De generous so that workers are not rushed.
HIT expires in		14	Days ‡
		Maximum time	your HIT will be available to Workers on Mechanical Turk.
Results are aut	tomatically approved in	7	Days ‡

After this time, all unreviewed work is approved and Workers are paid.

Purpose of redundancy

- MTurk lets you set the number of assignments per HIT
- That gives you different (redundant) answers from different Turkers
- This lets you conduct surveys (num assignments = num respondents)
- Also, lets you take votes and do tie-breaking, or do quality control
- Redundancy >= 10x incurs higher fees on MTurk

Artificial Artificial Intelligence Your Account HITs Qualifications available	Chris Callison-Burch 2,292 HITs ailable now
All HITs HITs Available To You HITs Assigned To You	🔲 for which
Find HITs Containing reading comprehension that pay	at least \$ <mark>0.00 </mark> 🔲 require M
HITs containing 'reading comprehension' 1-2 of 2 Results Sort by: Time Allotted (most first) \ddagger . Show all details Hide all details	
Write questions and answers for a reading comprehension test	View a HIT in this group
Requester: Chris Callison-Burch HIT Expiration Date: Sep 22, 2013 (1 week 6 days) Rev	ward: \$0.25
Time Allotted: 2 hours HIT	s Available: 14
Description: Read an article and then write 5 questions and 5 example answers that test a reader's	comprehension
Keywords: reading, comprehension, writing, questions, answers, research	
Qualifications Required: Your Value	
Total approved HITs is not less than 50 1082 You meet this qualification requirement	
HIT approval rate (%) is not less than 80 98 You meet this qualification requirement	
Location is US US You meet this qualification requirement Co	ntact the Requester of this HIT
Reading Across Genre Project Not Qualified to work on this HIT (Why	(?) View a HIT in this group
Requester: Shi Feng HIT Expiration Date: Sep 11, 2013 (2 days 12 hours) Rewa	ard: \$5.00
Time Allotted: 1 hour 30 minutes HITs	Available: 3
Description: Subjects are to read some texts and answer some questions	
Keywords: reading, texts, comprehension	
Qualifications Required: Your Value	
Masters has been granted none Request Qualification	

Worker Requirements

Advanced	
For the best quality, Master Workers are currently selected to complete your work. (What is a Master Worker?)	Worker requirements «
Worker requirements: Require that Workers be Masters to do your HITs ‡	
Only Workers who qualify to do my HITs can preview my HITs. • Yes No	

Worker Requirements

dvanced					
	Worker requirements «				
Worker requirements: Customize Worker Requirements +					
Specify ALL the qualifications Workers must meet to work on your HITs: Location + is + UNITED STATES + remove UNITED STATES + remove					
HIT Approval Rate (%) for all Requesters' HITS greater than or equal to 80 Flemove Number of HITs Approved greater than or equal to Very set of HITs Approved					
(+) Add another criterion (up to 5)					
IV Workers who qualify to do my HITs can preview my HITs. Yes 🔘 No					

Masters

Masters are elite groups of Workers who have demonstrated accuracy on specific types of HITs. Workers achieve a Masters distinction by consistently completing HITs with a high degree of accuracy across a variety of Requesters. Masters must continue to pass our statistical monitoring to remain Mechanical Turk Masters. Because Masters have demonstrated accuracy, they can command a higher reward for their HITs. You should expect to pay Masters a higher reward.

Masters

- Amazon now nominates a subset (21k workers, estimated at 10% of all Turkers) of senior / good workers as "Masters"
- Amazon charges 25% commission for Masters versus their normal 20% rate
- They have now implemented this as the default qualification for new Requesters
- Why?

Masters: Pros

- People who use the Web UI are often newcomers who do not know to implement quality control.
- Masters will not touch badly designed and ambiguous tasks.
- Masters will not touch tasks paying less than minimum wage.

Masters: Cons

- There are many fewer Masters workers.
 - There is now a significant lag in the task being picked by workers.
 - The tasks now take much longer to complete.
- There is an increased cost because Masters demand decent wages.
- It is not clear in what tasks the Masters are tested and how a new worker can become a master.

Premium Qualifications

Blogger Born 1918 to 1960 (Age 55 or older) Born 1961 to 1971 (Age 45-55) Born 1972 to 1981 (Age 35-45) Born 1982 to 1986 (Age 30-35) Born 1987 to 1991 (Age 25-30) Born 1992 to 1999 (Age 18-25) Borrower - Auto Loans Borrower - Business Loan Borrower - Credit Cards Borrower - Home Mortgage Borrower - Personal Loan Borrower - Student Loan Car Owner **Current Residence - Owned** Current Residence - Rented Daily Internet Usage - 1 to 4 hours Daily Internet Usage - 5 to 7 hours Daily Internet Usage - 7+ hours Employment Industry - Banking & Financial Services **Employment Industry - Education** Employment Industry - Food & Beverage Employment Industry - Government & Non-Profit **Employment Industry - Healthcare** Employment Industry - Manufacturing Employment Industry - Media & Entertainment Employment Industry - Retail, Wholesale & Distribution Employment Industry - Software & IT Services Employment Sector - Non-Profit Employment Status - Full time (35+ hours per week) Employment Status - Part time (1-34 hours per week) Employment Status - Unemployed Exercise - Every Day Exercise - Four Plus Times a Week Exercise - Not at All Exercise - Once a Week Exercise - Two to Three Times a Week Facebook Account Holder

Premium Qualifications

Gender - Female Gender - Male Google Account Holder Handedness - Left Handedness - Right Household Income - \$100,000 or more Household Income - \$25,000 - \$49,999 Household Income - \$50,000 - \$74,999 Household Income - \$75,000 - \$99,999 Household Income - Less than \$25,000 Insurance Policyholder - Auto Insurance Insurance Policyholder - Healthcare Insurance Insurance Policyholder - Home Owners Insurance Insurance Policyholder - Life Insurance Insurance Policyholder - Renters Insurance Job Function - Accounting & Finance Job Function - Administrative Job Function - Arts & Design Job Function - Education & Training Job Function - Engineering Job Function - Information Technology Job Function - Management Job Function - Marketing, Sales & Business Development Job Function - Operations Language Fluency (Basic) - Brazilian Portuguese Language Fluency (Basic) - Chinese Mandarin Language Fluency (Basic) - French Language Fluency (Basic) - German Language Fluency (Basic) - Spanish LinkedIn Account Holder Marital Status - Divorced Marital Status - Married Marital Status - Single Military experience Myspace Account Holder

Primary Internet Device - Desktop Primary Internet Device - Laptop Primary Internet Device - Smartphone or Tabl Primary Mobile Device - Android Primary Mobile Device - iPhone Primary News Source - Online News (News V Primary News Source - Podcasts Primary News Source - Print (Newspapers & Primary News Source - Radio (AM/FM, Intern Primary News Source - Social Media Primary News Source - TV (Late Night Come Primary News Source - TV (Local/Cable News Primary News Source - Word of Mouth Reddit Account Holder Single Family Home Resident Smoker Tablet Owner Tumbir Account Holder Twitter Account Holder US Bachelor's Degree US Graduate Degree US High School Graduate **US Political Affiliation - Conservative** US Political Affiliation - Liberal Vacation Frequency - Every Few Years Vacation Frequency - Every Month Vacation Frequency - Every Quarter Vacation Frequency - Every Year Vacation Frequency - Never Voted in 2012 US Presidential Election Voted in 2016 US Presidential Election YouTube Account Holder

Custom Qualifications

- In addition to the built in qualifications (masters, location, approval rate, min HITs completed), you can also create and manage your own qualifications
- These can be managed through the web interface or the API

Custom Qualifications

Home	Creat	te	Manage	Developer	Help	
Results	Workers	Qualific	ation Types			We're Hiring! Learn More

Manage Qualification Types

Below is a list of your Qualification Types and the corresponding number of Workers.

Create New Qualification Type 💽

Qualification Types									
	Name 🔻	ID	Workers who have this Qualification	Creation Date	Description				
☺	Trusted researc	2GJ7Q67051QKTXPQMYHC7XMGI4AEYR	7	Thu Jun 20 17:35:18 UTC 2013	This qualification is granted to grad students and researchers. We use it it limit the participation in our pilot runs of experiments.				
⊗	Temporal Master	2YG46UXFCD45EMCI7IJNZKIN3WJVTB	0	Fri Mar 23 09:46:47 UTC 2012	This qualification is granted to Turkers who have demonstrated a high level of competency in temporal relations.				
8	Presidential Su	279YQ4J3NAB6SPK4ZTPYOT1TJI6QDJ	0	Sat Nov 03 18:33:24 UTC 2012	This qualification was given to people who responded to the political survey before the election. We'll allow them to answer some follow up questions after the election.				
0	Monolingual		6	Tue Jul 02	Granted to Workers who have demonstrated good skills at doing the				
Qualification Tests

- The API also allows you to set up qualification tests that Workers must pass before doing your tasks
- What effects do you think qualification tests have?

HTML Template

,	· · · ·							
① Enter Properties	Design Layout	3 Preview and Finish						
Project Name: Reading Con	nprehension Test	This name is not displayed to Workers.						
Frame Height 500 He	Frame Height 500 Height in pixels of the frame your HIT will be displayed in to Workers. Adjust the height appropriately to minimize scrolling for Workers.							
Format Heading 1 - Font	 ▼ <u>U</u> 	I B 🖫 · · · · · · · · · · · · · · · · · ·						
Reading comprehension test								
Please do the following:								

- Read the short newspaper article.
- Write reading comprehension questions about it
- Give sample answers for each of your questions.

Good reading comprehension questions:

- Ask about why something happened or why someone did something.
- Ask about relationships between people or things.
- Should be answerable in a few words.

Poor reading comprehension questions:

- Ask about numbers or dates.
- Only require a yes/no answer.

<u>\${url}</u>

HTML Template

Format ▼ Font ▼ Ent U I B Tar ♀ ♡ E E E E Ø Edit HTML Source
<hl>Reading comprehension test</hl>
Please do the following:

Read the short newspaper article.
Write reading comprehension questions about it
Give sample answers for each of your questions.
Good reading comprehension questions:

Ask about why something happened or why someone did something.
Ask about relationships between people or things.
Should be answerable in a few words.
Poor reading comprehension questions:

Ask about numbers or dates.
Only require a yes/no answer.
\${url}
<iframe height="400" id="pageFrame" src="\${url}" width="80%"></iframe>
Question 1: <input id="Q1" name="Q1" size="80" type="text"/>
Answer 1: <input id="A1" name="A1" size="20" type="text"/>
Question 2: <input id="Q2" name="Q2" size="80" type="text"/>
Answer 2: <input id="A2" name="A2" size="20" type="text"/>
Question 3: <input id="Q3" name="Q3" size="80" type="text"/>
Answer 3: <input id="A3" name="A3" size="20" type="text"/>
Question 4: <input id="Q4" name="Q4" size="80" type="text"/>
Answer 4: <input id="A4" name="A4" size="20" type="text"/>
Question 5: <input id="Q5" name="Q5" size="80" type="text"/>
Answer 5: <input id="A5" name="A5" size="20" type="text"/>
Please provide any comments that you have about this HIT. We appreciate your input!
<textarea cols="80" name="comment" rows="3"></textarea>

Writing Instructions

- Be sure to be as specific as possible in your instructions so that there's no confusion. For example, when asking workers to extract text from an image, ask workers to type the text exactly as shown in the image including capitalizations, spaces and punctuation.
- Include an example of a right answer, and a wrong answer
- Clarify what you expect if the HIT is not doable because of missing data or other problems

How to populate a HIT with data

- Using the web interface, you communicate data with MTurk via Comma Separated Value (CSV) files
- Each column header gives a \${variable} name
- Each row gives one screen's worth of data
- You may have more columns than are used in the HIT - useful for bookkeeping

Special characters in the CSV spec

- There are several special characters that are reserved in the CSV format
- I recommend using Python CSV module, or exporting CSV from Excel
- HTML reserve characters also need special treatment since the \${variables} get inserted as strings into your template
- Also be careful if you're using javascript

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Your project was successfully saved.

Start a New Batch with an Existing Project

Project Name	Title	Creation Date V				
Reading Comprehension Test	Write questions and answers for a reading comprehension test	September 8, 2013	New Batch	Edit	Сору	Delete
Obama sentiment 9/13	Judge the sentiment expressed toward: President Obama	September 8, 2013	New Batch	Edit	Сору	Delete
Compression HIT - grammar/meaning	Judge the quality of similar sentences		New Batch	Edit	Сору	Delete
Grade Word Alignment	Grade Word Alignment	July 1, 2013	New Batch	Edit	Сору	Delete
Word Alignment - open to All Turkers	Word Alignment	June 21, 2013	New Batch	Edit	Сору	Delete
Word Alignment - Trusted Workers	Workers Word Alignment		New Batch	Edit	Сору	Delete
Report Linking	Link events across two news stories	May 24, 2013	New Batch	Edit	Сору	Delete

amazonmechanical turk REQUESTER

Home	Create	Manage	Developer	Help		
New Project <u>Ne</u>	w Batch with a	n Existing Project			Create HITs individually	

Your project was successfully saved.

art a New Batch with an Existi	ng Project					
New B	atch			×		
Project Name Choos	se a .csv file with the variab	les you specified in y	our project.			
Reading Comprehension	noose File	urls.csv	Upload	t	Сору	Delete
Obama sentiment 9/13	Judge the sentiment expressed toward: President Obama	September 8, 2013	New Batch	Edit	Сору	Delete
Compression HIT - grammar/meaning	Judge the quality of similar sentences	July 3, 2013	New Batch	Edit	Сору	Delete
Grade Word Alignment	Grade Word Alignment	July 1, 2013	New Batch	Edit	Сору	Delete
Word Alignment - open to All Turkers	Word Alignment	June 21, 2013	New Batch	Edit	Сору	Delete
Word Alignment - Trusted Workers	Word Alignment	June 20, 2013	New Batch	Edit	Сору	Delete
Report Linking	Link events across two news stories	May 24, 2013	New Batch	Edit	Сору	Delete

Reading comprehension test

Please do the following:

- · Read the short newspaper article or blog post linked below (if it doesn't load in the frame then open the link in another window)
- · Write reading comprehension questions about it
- Give sample answers for each of your questions.

Good reading comprehension questions:

- · Ask about why something happened or why someone did something.
- Ask about relationships between people or things.
- Should be answerable in a few words.

Poor reading comprehension questions:

- · Ask about numbers or dates.
- · Only require a yes/no answer.

http://blogs.wsj.com/digits/2012/11/04/how-the-journal-tested-googles-search-results/





Cancel

Next

Reading Comprehension Test

		Batch Summary				
Batch Name: Reading Comprehension Test 4		Description: Read an article and then write 5 questions and				
Batch Properties						
Title:	Write questions	and answers for a reading comprehension test				
Description:	Read an article	and then write 5 questions and 5 example answers that test a reader's comprehension				
Batch expires in:	14 Days					
Results are automatically approved after:	7 Days					
Workers must meet the following Qualification to work on these HITs:	Location score	s UNITED STATES				
	HIT Approval R	HIT Approval Rate (%) for all Requesters' HITs score greater than or equal to 80				
	Number of HITs	Number of HITs Approved score greater than or equal to 50				
HITs						
Number of HITs in this batch:	14					
Number of assignments per HIT:	x 10					
Total number of assignments in this batch:	140					
Cost						
Reward per Assignment:	\$0.2	50				
	x 1	40 (total number of assignments in this batch)				
Estimated Total Reward:	\$35.0	00				
Estimated Fees to Mechanical Turk:	+ \$3.5	00 (fees paid to Mechanical Turk) (fee details)				
Estimated Total Cost:	\$38.5	00 (this is the amount that will be deducted from your Available Balance when you click "Publish HITs")				

Reading Comprehension Test 4

View the latest status of this batch, make changes, or get results.

Read an article and then write 5 questions and 5 example answers that test a reader's comprehension

Status						Cancel this batch
Status: In Progress		% published				
Assignments Completed:	0 / 140	Average Time per Assignment:	Not yet available	Average Hourly Rate:	Not Yet Available	
Creation Time:	September 08, 2013 6:18 PM PDT	Estimated Completion Time:	Not yet available			

Results Settings Results **Reading Comprehension Test** Assignments pending review: 0 Assignments approved: 0 Read an article and then write 5 questions and 5 example answers Description: Assignments rejected: 0 that test a reader's comprehension Keywords: reading, comprehension, writing, questions, answers, research Qualification Requirement: Location is UNITED STATES (Required for preview) Cost Summary HIT Approval Rate (%) for all Requesters' HITs greater than or \$35.000 equal to 80 (Required for preview) Estimated Total Reward: Number of HITs Approved greater than or equal to 50 (Required for Estimated Fees to Mechanical Turk: \$3.500 (fee details) preview) \$38.500 Estimated Total Cost: Number of Assignments per HIT: 10 These costs are only an estimate until all of the Reward per Assignment: \$0.250 assignments have been submitted and reviewed. Input File: urls.csv

HIT expires on: Not yet available Assignment duration: 2 hours

Auto Approval Delaw, 7 dovo

amazonn	nechanic	al turk	REQUE	STER		
Home	Crea	ate	Manage	Developer	Help	
Results	Workers	Qualific	ation Types			Manage HITs individually

Manage Batches

Click on the name of the batch to see more details

V Batches in progress (2)

Reading Comprehension Test 4			Results Cancel this batch
Created:	September 08, 2013	Assignments Completed:	16 / 140
Time Elapsed:	about 11 hours	Estimated Completion Time:	September 12, 2013 10:43 PM PDT (Thursday)
Average Time per Assignment:	9 minutes 20 seconds	Effective Hourly Rate:	\$1.607
Batch Progress:	11% submitted	100% published	

Compression HIT - grammar/mea	Results Cancel this batch		
Created:	July 04, 2013	Assignments Completed:	2,468 / 2,468
Time Elapsed:	1 day	Estimated Completion Time:	COMPLETE
Average Time per Assignment:	3 minutes 40 seconds	Effective Hourly Rate:	\$4.091
Batch Progress:	100% submitted	100% published	

Reading Comprehension Test 4

Customize View Filter Results

Upload CSV Download CSV

16 of 16 assignments (FILTER APPLIED: only show assignments that are in 'Submitted' status)

Input.Url	Q1	A1	Q2	A2	Q3	A3	Q4
ttp://www.bloodletters.com/2011/03/turkish-del	What does the writer dislike about the previous	The cover doesn't suit the book's contents and	According to the writer, why is proofreading im	Encountering errors jerks the reader out of the	Why did the writer decide not to hire a profess	A profession proofreader would have cost hundre	What problems of the writer f with the Mech
ttp://www.bloodletters.com/2011/03/turkish-del	How does the author feel about the cover?	Not happy.	At what pace are the realities of self-publishi	At a fast pace.	How many times does the author typically read a	Three times.	Why woul be an imposition ask your frien
ttp://mrshri.sharedby.co/share/2bpKT2	What will improve about smartphones in the near	predictive texting.	How well do voice and text commands work if the	Not well.	What do twitches and blinks create?	Unintended words.	For whom this technologic advance be b
ttp://mrshri.sharedby.co/share/2bpKT2	What do software packages in today's phones oft	texts and voice commands	What does Augmented and Alternative Communicati	They help disabled people to communicate	Keith Vertanen was from which institution?	Montana Tech	Where did Vertanen a Kristensson seek help from?
p://mechanicalturk.typepad.com/blog/2012/07/	Why is it important to establish a style guide?	To create consistency in the quality of	What two types of qualification	Writing and editing.	How much should you aim to pay for	At least minimum wage.	How can make tasks easier for workers to

Approving / rejecting

- The MTurk web interface gives you a way of manually reviewing the Turkers results
- After reviewing a Worker's submission, you can
 - approve it (worker gets paid)
 - reject it (worker does not get paid)
 - block the worker (worker is banned from working on any of your HITs, and may get blacklisted from MTurk)

Customize View Filter Results

Upload CSV Download CSV

18 of 18 assignments (FILTER APPLIED: only show assignments that are in 'Submitted' status)

	Approve Reject						
۷	Worker ID	Lifetime Approval Rate	Input.Url	Q1	A1	Q2	A2
۷	A2NP0GV3WST630	0% (0/0)	http://www.bloodletters.com/2011/03/turkish-del	What does the writer dislike about the previous	The cover doesn't suit the book's contents and	According to the writer, why is proofreading im	Encounteri errors jerk: the reader out of the
2	A3I2YF0MXB7P0B	0% (0/0)	http://www.bloodletters.com/2011/03/turkish-del	How does the author feel about the cover?	Not happy.	At what pace are the realities of self-publishi	At a fast pace.
2	A3I2YF0MXB7P0B	0% (0/0)	http://mrshri.sharedby.co/share/2bpKT2	What will improve about smartphones in the near	predictive texting.	How well do voice and text commands work if the	Not well.
2	A1LR1FHCZICP9N	0% (0/0)	http://mrshri.sharedby.co/share/2bpKT2	What do software packages in today's phones oft	texts and voice commands	What does Augmented and Alternative Communicati	They help disabled people to communica
2	A3PYW2CPW9ZZIY	0% (0/0)	http://www.convinceandconvert.com/blogging- and	What is one strategy that BlissPR and Bailey Ga	They are blog focused	What two sites were listed as examples of ways	Facebool and Slideshare
۷	AP4OBLUBXOC6G	0% (0/0)	http://mechanicalturk.typepad.com/blog/2012/07/	Why is it important to establish a style quide?	To create consistency in the	What two types of qualification	Writing an editing.

Semi-automating the approval process with CSV

- A lightweight version of the API is available by uploading a graded CSV
- You can download the results as a CSV file, grade it (manually or automatically), and upload your approve or reject decisions
- A quick and easy thing to do if you have a HIT with gold standard controls, and if you learn python's CSV module

Reading Comprehension Test 4

.

Customize View Filter Results Download CSV Download CSV							
1	8 of 18 assignments (FIL	TER APPLIE	Review Results Offline	×			
	Approve Reject)	You can review your results offline and approve assignments.	or reject the			
	Worker ID	Lifetime Approval Rate	 APPROVE ASSIGNMENT: Indicate which a approve by putting an "x" under a column ti 	A1	Q2	A2	
	A2NP0GV3WST630	0% (0/0)	 REJECT ASSIGNMENT: Indicate which ass by putting your reject feedback under a colu "Reject". Please select your modified CSV file for uplo 	The cover doesn't suit the book's contents and	According to the writer, why is proofreading im	Encounteri errors jerk: the reader out of the	
	A3I2YF0MXB7P0B	0% (0/0)	Upload CSV or Cancel			At what pace are the realities of self-publishi	At a fast pace.
0	A3I2YF0MXB7P0B	0% (0/0)	http://mrshri.sharedby.co/share/2bpKT2	What will improve about smartphones in the near	predictive texting.	How well do voice and text commands work if the	Not well.
	A1LR1FHCZICP9N	0% (0/0)	http://mrshri.sharedby.co/share/2bpKT2	What do software packages in today's phones oft	texts and voice commands	What does Augmented and Alternative Communicati	They help disabled people to communica
	A3PYW2CPW9ZZIY	0% (0/0)	http://www.convinceandconvert.com/blogging- and	What is one strategy that BlissPR and Bailey Ga	They are blog focused	What two sites were listed as examples of	Facebool and Slideshare

Recommendation for approval thresholds

- If using controls to approve/reject assignments automatically, I recommend using 3 values
- 1) ~80% correct = approve all work from this Turker
- 2) <80% but >chance = approve assignments proportional to accuracy on the controls
- 3) <= chance, reject all assignments

The Sandbox

- Amazon provides a `sandbox' where Requesters can develop and deploy HITs at no cost
- requestersandbox.mturk.com mimics the behavior of requester.mturk.com
- When you post to the requestersandbox the HITs become available on workersandbox.mturk.com

amazonmechanical turk REQUESTER



Work Distribution Made Easy

Mechanical Turk gives businesses and developers access to an on-demand, scalable workforce

- Flexibility: Scale your workforce up and down quickly
- Accuracy: Get high-quality, cost-effective results
- Speed: Start receiving results in minutes

Get Started



Work Distribution Made Easy

Mechanical Turk gives businesses and developers access to an on-demand, scalable workforce



Categorization on Mechanical Turk

The Mechanical Turk Categorization App makes it simple to get fast, accurate results on your Categorization Project!



Sentiment Rating Simplified

The Mechanical Turk Sentiment App makes it simple to collect and understand sentiment on your data!



Your business can use Mechanical Turk to:

amazonn	nechani rtificial Artificia	cal turk	Your Accou	Int HITS	Qualifications	C 280,754 HITs available now	hris Callison-Burch	Account S	ettings Si	gn Out Hel
			A	HITs HITs Availab	e To You H	ITs Assigned To Yo	ou o			
	UT-	•	_			that are at least	for	which you ar	e qualified	0
Find	1115	containing				that pay at least	\$ 0.00 C IC		adimention	00
All HITs 1-10 of 2278	Results									
Sort by: HITs	Available (mos	t first) 🗘	GO!	Show all details	Hide all deta	ils		1	L <u>2 3 4 5</u> → <u>N</u>	<u>ext</u> ≫ <u>Last</u>
Tag LFP 1							Request Qualifica	tion (Why?)	View a HIT	in this group
Requester:	LFP Requeste	<u>r</u>		HIT Expiration Date:	Dec 5, 2013	(12 weeks 3 days)	Reward:	\$0.00		
				Time Allotted:	60 minutes		HITs Available:	16442		
DEV: Write me	DEV: Write me something awesome									
Requester:	CrowdSource	1		HIT Expiration Date:	Sep 9, 2014	(52 weeks)	Reward:	\$0.01		
				Time Allotted:	50 minutes		HITs Available:	15130		
DEV: nate test	- all fields								View a HIT	in this group
Requester:	CrowdSource	1		HIT Expiration Date:	Sep 9, 2014	(52 weeks)	Reward:	\$0.00		
				Time Allotted:	60 minutes		HITs Available:	12945		
Find the count	of comments	on a website							View a HIT	in this group
Requester:	SDG Develop	ment		HIT Expiration Date:	Sep 12, 2013	(2 days 23 hours)	Reward:	\$0.10		
				Time Allotted:	10 minutes		HITs Available:	11277		
SANDBOX: Re	SANDBOX: Review a Live Video Stream for 20 Seconds to Determine Quality (US)									
Requester:	CrowdSource			HIT Expiration Date:	Sep 9, 2014	(52 weeks)	Reward:	\$0.10		
				Time Allotted:	20 minutes		HITs Available:	9963		,
SANDBOX: Re	SANDBOX: Review a Live Video Stream for 20 Seconds to Determine Quality (CA) Not Qualified to work on this HIT (Why?) View a HIT in this group									
Requester:	CrowdSource			HIT Expiration Date:	Mar 26, 2014	(28 weeks 2 days)	Reward:	\$0.10		
				Time Allotted:	20 minutes		HITs Available:	9963		
SANDBOX: Re	view a Live Vi	deo Stream for	20 Seconds to I	Determine Quality (GB)		Not Qualif	fied to work on this	HIT (Why?)	View a HIT	in this group

HITs can use any HTML or javascript

- Highlight word in sentence
- Word alignment HIT
- Randomize order of things
- Geolocation

The art of designing good HITs

Crowdsourcing works for tasks that are

- Natural and easy to explain to non-experts
- Decomposable into simpler tasks that can be joined together
- Parallelizable into small, quickly completed chunks
- Well-suited to quality control (some data has correct gold standard annotations)

Crowdsourcing works for tasks that are

- Robust to some amount of noise/errors (the downstream task is training a statistical model)
- Balanced and each task contains the same amount of work
 - Don't have tons of work in one assignment but not another
 - Don't ask Turkers to annotate something occurs in the data <<10% of the time

Example HIT design: Reading Comprehension to evaluate Machine Translation systems

Evaluating Machine Translation

- There are many MT systems available for each language pair
- How do we know which one is best?
- There is an active field of research focused on evaluating MT automatically
- Reasoning: manual evaluation requires humans and is therefore too time consuming and expensive

HOME

Heather Locklear Arrested for driving under the influence of drugs



Heather Locklear Photo by: Santa Barbara County Sheriff's Department

SPONSORED LINKS

The actress Heather Locklear, Amanda of the popular series Melrose Place, was arrested this weekend in Santa Barbara (California) after driving under the influence of drugs. A witness viewed her performing inappropriate maneuvers while trying to take her car out from a parking in Montecito, as revealed to People magazine by a spokesman for the Californian Highway Police. The witness stated that around 4.30pm Ms. Locklear "hit the accelerator very violently, making excessive noise while trying to take her car out from the parking with abrupt back and forth maneuvers. While reversing, she passed several times in front of his sunglasses." Shortly after, the witness, who, in a first time, apparently had not recognized the actress, saw Ms.

Why was Heather Locklear arrested?

- She was arrested on suspicion of driving under the influence of drugs.
- Why did the bystander call emergency services?
 - He was concerned for Ms. Locklear's life.
- Where did the witness see her acting abnormally?
 - Pulling out of parking in Montecito

 Why was Heather Locklear arrested?



- She was arrested on suspicion of driving under the influence
- Why was Heather Locklear arrested in Montecito?



- Because she was driving under the influence of drugs
- What was Heather Locklear arrested for?



Driving under the influence of drugs

Why was Heather Locklear arrested in Montecito?



- Because she was driving under the influence of drugs
- Where was Locklear arrested?
 - In a parking lot in Montecito



Was arrested actress Heather Locklear because of the driving under the effect of an unknown medicine



Heather Locklear Photo by: Santa Barbara County Sheriff's Department

SPONSORED LINKS

The actress Heather Locklear that is known to the Amanda through the role from the series "Melrose Place" was arrested at this weekend in Santa Barbara (Californium) because of the driving under the effect of an unknown medicine. A female witness observed she attempted in quite strange way how to go from their parking space in Montecito, speaker of the traffic police of californium told the warehouse `People'. The female witness told in detail, that Locklear pressed `after 16:30 clock accelerator and a lot of noise did when she attempted to move their car towards behind or forward from the parking space, and when it went backwards, she pulled itself together unites Male at their sunglasses'. A little later the female witness that did probably

Why was Heather Locklear arrested?

Driving while medicated

Why did the bystander call emergency services?

There was a lot of noise

Where did the witness see her acting abnormally?

In a parking lot

. Medikamentes unknown have the effect of a fahrens under actress heather locklear arrested



Heather Locklear Photo by: Santa Barbara County Sheriff's Department

SPONSORED LINKS

In Santa. One is, melrose place the series of the role of the 'remember the locklear actress the heather this weekend, because of the fahrens Barbara (California) in effect unknown medikamentes arrested People 'magazine. The traffic police California, spokesman for the auszufahren montecito reported in its way from tried parklücke type strange right, you have seen as a witness. . In some Zeitung, as and when they tried to a great deal of 30 p.m., witness the detail of history locklear after 16: that durchdrückte peddle noise and its progress was made parklücke for the car or moving backwards, they had they times of their sonnenbrille '. The first was probably recognised that locklear a nearby road and anhielt, had not, with the witness to the car off

Why was Heather Locklear arrested?

Why did the bystander call emergency services?

Where did the witness see her acting abnormally?

Heather Locklear Arrested for driving under the influence of drugs



Heather Locklear Photo by: Santa Barbara County Sheriff's Department

SPONSORED LINKS

The actress Heather Locklear, Amanda of the popular series Melrose Place, was arrested this weekend in Santa Barbara (California) after driving und influence of drugs. A witnes: viewed her performing inappropriate maneuvers where trying to take her car out fro parking in Montecito, as rev to People magazine by a spokesman for the California Highway Police. The witnes stated that around 4.30pm M Locklear "hit the accelerator violently, making excessive poise while trying to take her car c from the parking with abrupt and forth maneuvers. While reversing, she passed several times in front of his sunglass Shortly after, the witness, wh a first time, apparently had n

recognized the actress, saw



Why was Heather Locklear arrested?

She was arrested on suspicion of driving under the influence of drugs.

Driving under the influence

Driving while medicated

DUI

Driving while using drugs



			ADOUNE S
	HOME NEWS PHOTOS	• Why was Heath	
Heather driving	System	Correct Answers	d? n z under
	Reference	94%	ugs.
	Google	80%	nfluence
1	RBMT5	77%	ated
	Geneva	63%	
	Tromble	50%	
	and forth maneuvers. W	hile	drugs
Heather Lockie Photo by: Santa I Sheriff's Departm	ear reversing, she passed s Barbara County times in front of his sung nent Shortly after, the witness a first time, apparently h	everal glass s, wh ad n	

recognized the actress, saw

SPONSORED LINKS



SPONSORED LINKS

a first time, apparently had no recognized the actress, saw

Guidelines for your own tasks

- Simple instructions are required
- If your task can't be expressed in one paragraph + bullets, then it may need to be broken into simpler sub-tasks

Guidelines for your own tasks

- Quality control is paramount
 - Measuring redundancy doesn't work if people answer incorrectly in systematic ways
 - Embed gold standard data as controls
- Qualification tests v. no qualification test
 - Reduce participation, but usually ensures higher quality
Analyzing the MTurk Marketplace

Methodology

- Crawl the list of HITs once per hour
- Record the
 - RequesterID
 - Number of HITs available
 - Reward amount
 - Title, description, keywords
 - Qualifications required

Top Requesters

Requester ID	Requester Name	#HIT groups	Total HITs	Rewards	Type of tasks
A3MI6MIUNWCR7F	CastingWords	48,934	73,621	\$59 <i>,</i> 099	Transcription
A2IR7ETVOIULZU	Dolores Labs	1,676	320,543	\$26,919	Mediator for other requesters
A2XL3J4NH6JI12	ContentGalore	1,150	23,728	\$19,375	Content generation
A1197OGL0WOQ3G	Smartsheet.com Clients	1,407	181,620	\$17,086	Mediator for other requesters
AGW2H4I480ZX1	Paul Pullen	6,842	161,535	\$11,186	Content rewriting
A1CTI3ZAWTR5AZ	Classify This	228	484,369	\$9 <i>,</i> 685	Object classification
A1AQ7EJ5P7ME65	Dave	2,249	7,059	\$6,448	Transcription
AD7C0BZNKYGYV	QuestionSwami	798	10,980	\$2 <i>,</i> 867	Content generation and evaluation
AD14NALRDOSN9	retaildata	113	158,206	\$2,118	Object classification
A2RFHBFTZHX7UN	ContentSpooling.net	555	622	\$987	Content generation and evaluation
A1DEBE1WPE6JFO	Joel Harvey	707	707	\$899	Transcription
A29XDCTJMAE5RU	Raphael Mudge	748	2,358	\$548	Website feedback

Number of HITs and Total Value

- From January 2009 April 2010:
 - 165,368 HIT groups
 - 6,701,406 HITs total
 - 9,436 requesters
 - The total value of the posted HITs was \$529,259

A few requesters offer most of the rewards

Q-Q Plot: % of rewards vs % of requesters



Percent of requesters

Revards by keyword #HITs 8,282 milduidse

		•		•	•	
data	\$192,513	casting	∧ vandte	\$ 98,988	produ articles	\$2
collection	\$154,680	cw	listings	\$48,853	data category	3,559,4952
easy	\$93,293	podcast	article	\$ 48,3 37	categ flower	\$2
writing	\$91,930	transcri	research	\$48,301	shoppi ng_{bs}	3,086,96 9 2
transcribe	\$81,416	english	shopping	\$ 48,58 8	mercl crowd	\$2
english	\$78,344	mp	categorization	\$44,439	collecti golores la	abs 599,91§2
quick	\$75,755	writing	simple	\$ 49,480	easy crowdflo	wer \$2
product	\$66,726	questio	fast	\$40,330	categorizetores	2,047,07§2
cw	\$66,486	answer	categorize	\$ 38,705	quick dolores	\$2
castingwords	\$66,111	opinion	email	\$32,989	websitedeloresla	abs ^{, /62, /2} \$2
podcast	\$64,418	short	merchandise	\$ 32,287	categ entry	\$2
mp	\$64,162	advice	url	\$31,819	image tag	1,588,58 9 2
website	\$60,527	easy	tagging	\$ 30, 420	searcl video	\$2
search	\$57,578	article	web	\$29,309	fast editing	1,372,468 ₂
image	\$55,013	edit	photo	\$2 8,7131	shopz classify	\$2
builder	\$53,443	researc	review	\$28,707	tagginganswer	1,028,80 <mark>3</mark> 2
mobmerge	\$53,431	quick	content	\$2 8,389	cloudsort	1,018,455
		survey		8,265	classify	1,007,173
		editing		7 854	listings	962 009

11,420 coffectho _10,909 réatew 8,282 milpuidse \$27,8405 webssie 95526,68554 mistings \$26,71.348 transscrip 6\$26,71,200 apphotes \$26,71,1745 separagenvie 15/26,61,8745 btobes \$26,9,8743 and the 7\$26,6,8731 sipupleer \$26,9,543 amovers 2\$26,9,175 in pistove \$25,6445 retransc 8925,52280 willer \$25,5,000 infate 6824,7,9993 covernme \$24,0348 confina 0\$23,8358 voreenta 55 4,218 email 4,140 V 09 1085 differen

14,198 famage

HITs by price



Posting and completion rates

Figure 4: The posting (left) and completion rate (right) on AMT as a function of the day of the week.



Completion times

CDF of completion times for HIT Groups



Completion time for HITgroup (in hours)

Rewards over past 5 years



Rewards over past 4 years



HITs over past 4 years

