Online Experiment Platform

for Representations in Distributed Cognitive Tasks

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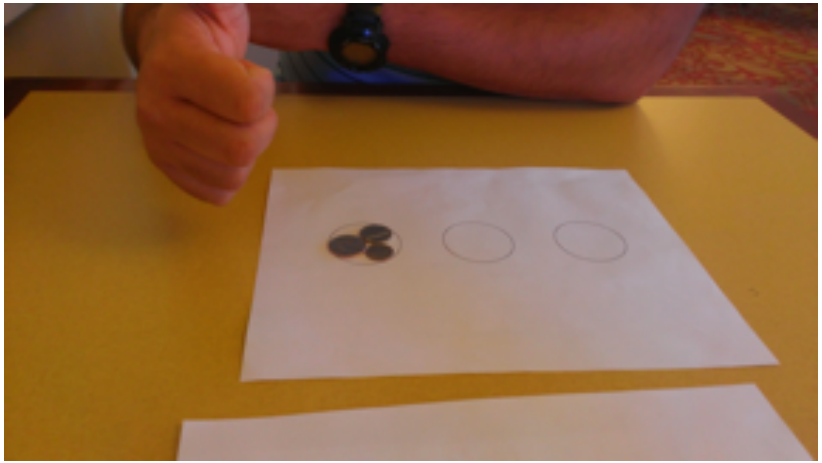
04-29-2015

Review : Replicate Zhang & Norman Experiment(s)

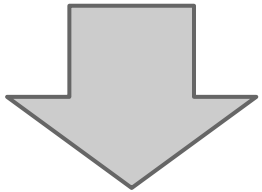
Three coins version --
All three are internal rules (Already Deployed)



Tower of Hanoi Version --
Two internal rules and one external rules

Review : Replicate Zhang & Norman Experiment(s)

Replicate Zhang & Norman Experiment(s)



Scale and Revise Zhang & Norman Experiment(s)

How ?

- Implement web application
  - Free Server On Google
  - Free Storage On Google
- Question to be answered
  - Which one is easier to learn ?

  Specifically, how external and internal representation influence the speed of learning ?

Technical details

1. **Timer** -- Record how long user spend to finish task
2. **Add a ranking system** -- Ranking will motivate users to play as more as possible.
3. **User Account System** -- Gmail or other account login (Create user identification)
4. **Server** -- Google App Engine offer free service for limit usage of resources
5. **Database System** -- Store and organize well-structure data for our experiment

Others:

1. Pre-quiz to make sure that most of users understand the rules
2. Two Kinds of experiments could be randomly assigned a user
3. It could be played as many time as they want.

Demo and Simple Testing

Step -1: https://newpriceline.appspot.com/
Step 0: saying “Current Version is still not perfect

Step 1: Login Testing (Incognito Window)

Step 2: Rule Reviews and Prequiz Testing

Step 3: Game Rules and Timer Testing

Step 4: DataBase Testing

Details about User Interface

- Gif **Vs** Static Image
- Font A **Vs** Font B
- Position A **Vs** Position B
- What you are going to display?

Always feel like there is better one!

Font Selection

Coin Adventure

Your objective is to move your three coins into another circle. During the process, you have to follow the three rules below

- Rule 1: Player can only move a coin in one time

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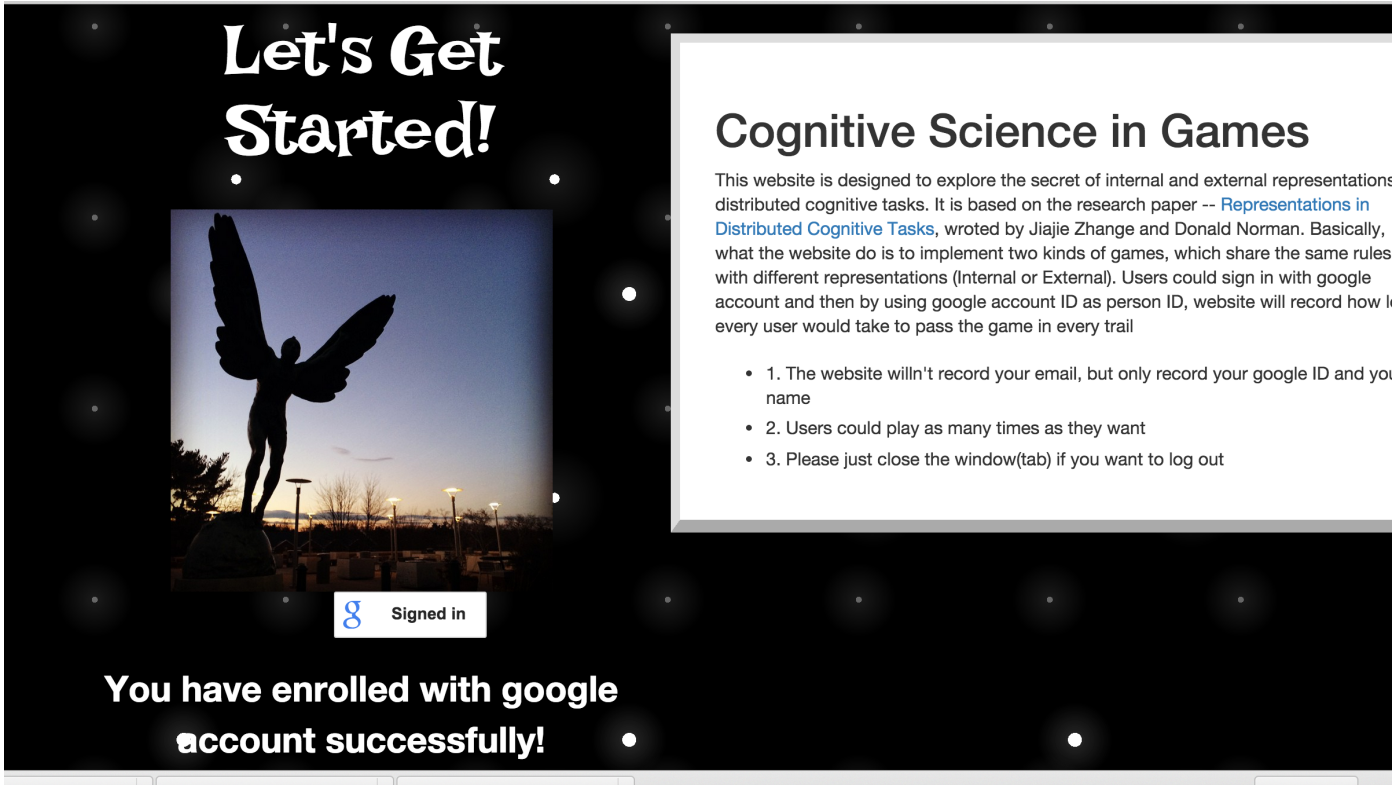
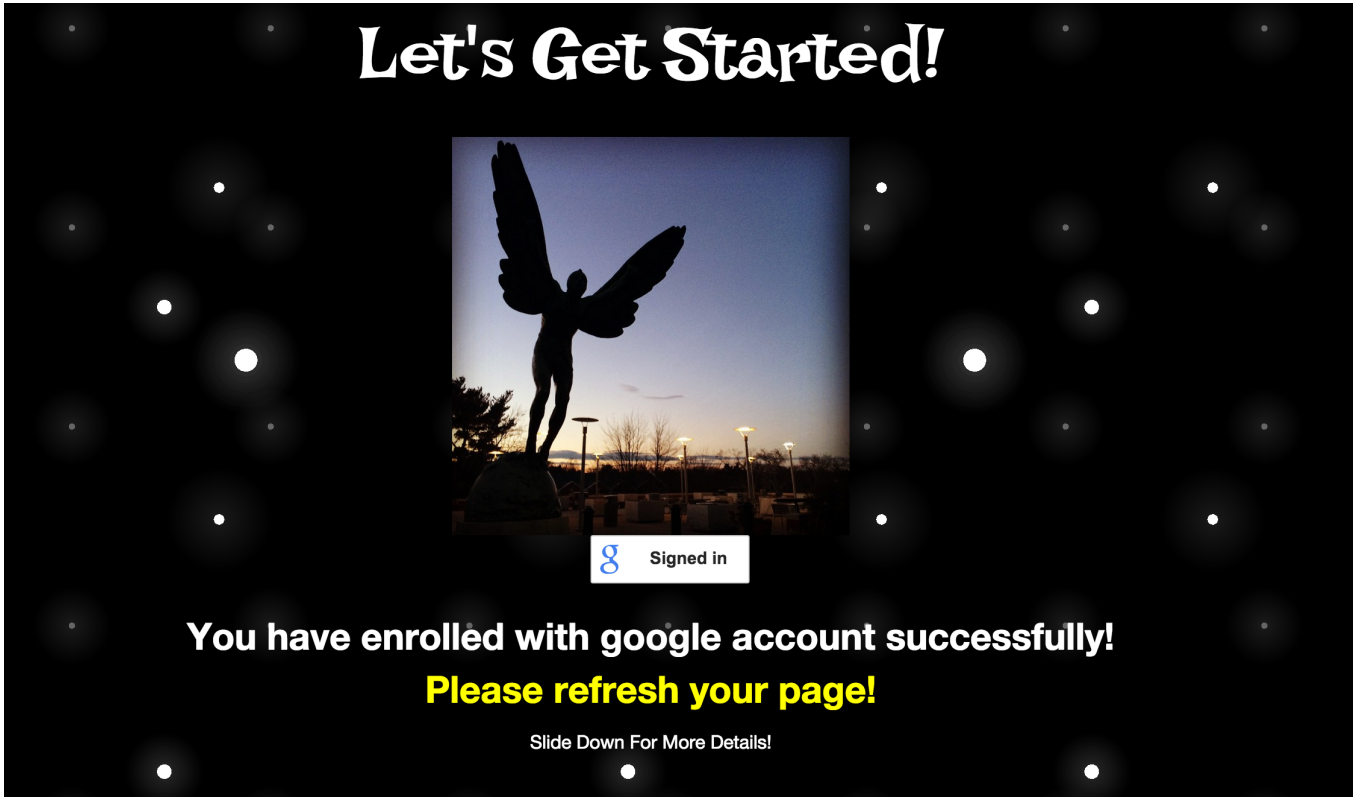
Position


Let's Get Started!
Signed in
You have enrolled with google account successfully!
Cognitive Science in Games
This website is designed to explore the secret of internal and external representations distributed cognitive tasks. It is based on the research paper -- Representations in Distributed Cognitive Tasks, wroted by Jiajie Zhange and Donald Norman. Basically, what the website do is to implement two kinds of games, which share the same rules with different representations (Internal or External). Users could sign in with google account and then by using google account ID as person ID, website will record how l every user would take to pass the game in every trail
1. The website willn't record your email, but only record your google ID and you name
2. Users could play as many times as they want
3. Please just close the window(tab) if you want to log out

Position

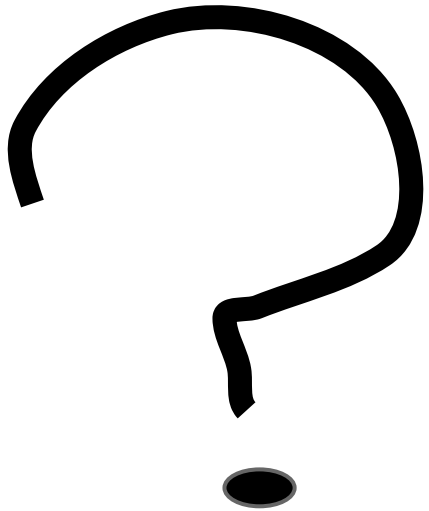

Let's Get Started!
Signed in
You have enrolled with google account successfully!
Please refresh your page!
Slide Down For More Details!

User’s Feedback Matters

1. Font Change
2. No Hint
3. What’s your goal

…….

Difficulties

- First time to design a website from scratch
- DataBase and Google APP Engine

  Official Docs has examplations but few simple examples
- Practice design mind in details
- Time…...