

## Using games to aid tester creativity

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Recently Claire Moss blogged about potty training and how this came about from a card game called **Disruptus** I introduced to the Atlanta Testing meet up while I was in the USA. This reminded me that I was going to blog about how I use this tool in a workshop and in my day to day testing to improve upon my own and teams testing ideas. The workshop is a creative and critical thinking and testing workshop which I intend to deliver at the London Tester Gathering in Oct 2014 – early bird tickets available.

The workshop is based upon a series of articles that I have written on creative and critical thinking part 1 here. As part of the workshop I talk about using tactile tools to aid your creative thoughts, having objects you can hold and manipulate have been shown to improve creativity (Kinesthetic learning). One part of the workshop introduces the game of Disruptus, which has very simple rules. You have about 100 flash cards which have drawings or photographs on and you choose a card at random. They even include some spare blank cards for you to create your own flash cards. An example of some of the cards can be seen below:



You then have a selection of action cards which have the following on them:

### **IMPROVE**

- Make it better: Add or change 1 or more elements depicted on the card to improve the object or idea
- EXAMPLE From 1 card depicting a paperclip: Make it out of a material that has memory so the paperclip doesn't distort from use.

### **TRANSFORM**

- Use the object or idea on the card for a different purpose.
- EXAMPLE From 1 card depicting a high heel shoe: Hammer the toe of the shoe to a door at eye level and use the heel as the knocker.

### **DISRUPT**

- Look at the picture, grasp what the purpose is, and come up with a completely different way to achieve the same purpose.
- EXAMPLE From 1 card depicting a camera: Wear special contact lenses that photograph images with a wink of the eye.

### **CREATE 2**

- Using 2 cards take any number of elements from each card and use these to create a new object or idea.

### **JUDGES CHOICE**

### **PLAYERS CHOICE**

For the purpose of this article I will only be looking at the first three. You can either choose which action card you wish to use or use the dice that is provided with the game. The rules are simple you talk about how you have changed the original image(s) in accordance with the action card and a judge decides which is the best to decide the winner. When I do this we do not have winners we just discuss the great ideas that people come up with, to encourage creativity there are no bad ideas.

The next step in the workshop is applying this to testing. Within testing there are still a great many people producing and writing test cases which are essentially checks. I am not going to enter into the checking vs testing debate here, however this game can be used if you are struggling to move beyond your 'checks' and repeating the same thing each time you run your regression suite. It can be used to provide ideas to extend your 'checks' into exploratory tests.

Let us take a standard test case:

*Test Case: Login into application using valid username/password Expected result: Login successful, Application screen is shown.*

Now let us go through each of the action cards and see what ideas we can come up with to extend this into an exploratory testing session

**IMPROVE** - Make it better: (Add or change 1 or more elements depicted on the card to improve the object or idea.)

Using the action described above can you think of new ways to test by taking one element from the test case?

Thinking quickly for 1 minute I came up with the following:

- How we do start the application? Is there many ways? URL? Different browsers? Different OS?
- Is the login screen good enough or can it be improved (disability issues/accessibility)
- What are valid username characters?
- What are valid password characters?
- Is there a help option to know what valid username/passwords are?
- Are there security issues when entering username/password?

Can you think of more? This is just from just stepping back for minute and allowing creative thoughts to appear. (Remember there are no bad ideas)

Let us now look at another of the action cards.

**TRANSFORM** - Use the object or idea on the card for a different purpose.

What ways can you think of from the example test case above to transform the test case into an exploratory testing session?

Again we could look at investigating:

- What alternatives are there to logging in to application? Fingerprint, Secure token, encrypted key?
- Can we improve the security of the login code?
- What security issues can you see with the login and how can you offer improvements to prevent these issues

It takes very little time to come up with many more ways in which you can transform the test case into something more than a 'check'

Now for the next (and final for the purpose of this article):

**DISRUPT** - Look at the picture, grasp what the purpose is, and come up with a completely different way to achieve the same purpose.

I may have already touched upon some of the ideas on how to disrupt in the previous two examples, that is not a bad thing since if an idea appears in more than one area it could be an indication of an idea that may very well be worth pursuing.

Some ideas on disrupting could be:

- Do we need a login for this?
- Is it being audited?
- Is it an internal application with no access to the public?

I hope from this article you can see how such a simple game can help to improve your mental ability and testing skills, as Claire mentioned in her article.

*Since software testing is a complex mental activity, exercising our minds is an important part of improving our work.*

This is just a small part of the workshop and I hope you have enjoyed the article, if so I hope to see some of you soon when I run the full workshop.

PS – I intend to run a cut down version of the workshop for the next Atlanta Testing Meet Up whilst I am here in the USA. Keep a watch here for announcements in the near future.