Emails from a Menace

Rebecca Turner

As a student at Brandeis University, I send my colleagues, professors, and the faculty many horrible emails. Here they are, collected for your pleasure.

Annotations, when necessary, are provided in the form of footnotes and margin notes.

Contents

Infrastructure

Sent   Sat, Mar 3, 2018 at 6:11 PM
From   Rebecca Turner
To   Jamele Adams, Dean of Students

Dean Jamele Adams,

We have a nearly-billion dollar endowment. Why is our infrastructure Like This?

(Outside Upper Usdan)

Sincerely,
— Rebecca Turner, who carefully avoids puddles

Re: Infrastructure

Sent   Mon, Mar 5, 2018 at 5:45 PM
From   Jamele Adams
To   Rebecca Turner

Rebecca, thank you for your email. I imagine this has been addressed,[1] but I ask you to continue to let myself or anyone in facilities know (just as you have) if ever there is anything of a duplicate nature or relative, particularly when we have weather conditions like we just experienced. (Nor'easter). Again, thank you.

J. Adams
Dean of Students
Brandeis University

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[1] It had not; the drain was finally cleaned 2 months later

Campus map

Sent   Tue, Jan 9, 2018 at 9:33 pm
From   Rebecca Turner
To   Kerri Lebel, Executive Administrator of the Dean of Students Office

Dear Ms. Lebel,

I'll cut to the chase: the campus map is bad. A map should allow someone unfamiliar with an area to navigate that area, and the Brandeis map doesn't facilitate that. On a college campus, the primary task a map is used for is to translate between locations and building names.

1. People unfamiliar with the campus who need to find their way around need to be able to find the physical location given a building name.

2. People lost on campus who don't know where they are but can read building names and identify distinct buildings or geographic need to be able to identify their location from those names and features.

For the first group maps typically use an alphabetized list of names, where each building / location name is matched to a rectangular portion of the map.

For the second group, maps often employ actual drawings of the buildings and geographic features. The Brandeis map does have illustrations! But they're not actually useful, because a location on the map cannot be reliably associated with a name. Find, for example, U20. What building is that? Well, go look at the "Upper Campus" list of names and... they're organized alphabetically, not by number, so you'll have to filter through the names manually. The Tufts map, for example, avoids this by having the numerical and alphabetical orderings of the locations be identical — 1 is the first name alphabetically and the lowest number.

Side-note: the numbers on the map aren't arranged with any specific ordering. Also, mysteriously, L28, L32, U23, U24, U29, U43, U44, U49, and U54 are missing despite having numbers lower and higher than them.

What about the people lost on campus who have a building name and need to find its location? (Or the students finding buildings for their classes?) An alphabetic lookup is impossible on the map as well, because — even though each section is ordered alphabetically — names are split into three sections (lower campus, upper campus, and athletic), so determining a building's location requires — ironically — that you already know its location.

Compare our map with, for example, MIT's, Tufts', or Smith's.

To see how difficult the Brandeis map is to use, try finding Kosow-Wolfson-Rosensweig on the it[2] and then McConnell on Smith's map. Try finding the name of the U-shaped building next to the track at Tufts.

All this to say: is there some way we can get the map re-labelled? I'm willing to open Illustrator and do it myself if you're willing to distribute it. This Brandeis map, strangely found on the New England Complex Systems Institute's website, is a good alternative, but it's missing — among other things — the Mandel Center for the Humanities and the Carl J. Shapiro Science Center. (Side-note: the Brandeis map, despite being named "Campus Map 2015.pdf", notes that the Mandel Center "Opens Fall 2010".)

Sincerely,

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[2] Sic.; read "...on the Brandeis map and then..."

— Rebecca Turner

Re: Campus map

Sent   Wed, Jan 10, 2018 at 9:04 am
From   Kerri Lebel
To   Rebecca Turner and Stephanie DeBoer, Digital Content Specialist at the Office of
            Communications

Hi Rebecca,

Thank you for your email. I personally am not connected to the creation of the campus map, but I have cc'd Stephanie DeBoer from Communications on this email, and I'm hoping she might be able to point you in the right direction.

Best,
Kerri

Re: Campus map

Sent   Wed, Jan 10, 2018 at 2:09 pm
From   Stephanie DeBoer
To   Rebecca Turner and Kerri Lebel

Hi Kerri and Rebecca,

Thank you for sending along this thoughtful and valuable feedback.[3] I have circulated it to my colleagues[4] in Communications for follow-up.[5]

Best,
Stephanie

Re: Campus map

Sent   Wed, Jan 10, 2018 at 3:31 pm
From   Rebecca Turner
To   Stephanie DeBoer and Kerri Lebel

Dear Kerri and Stephanie,

Thank you for your prompt and kind replies! I hope to be in touch with you and your colleagues.

Best,
— Rebecca

Author's note: No further correspondence was recieved.

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[3] "Never email me ever again"   [4] "You are the new inside-joke"   [5] "I'm never thinking about this again"

Happy Holidays from Brandeis University

Sent   Tue, Dec 19, 2017 at 4:39 PM
From   Ron Liebowitz, University President
To   Rebecca Turner
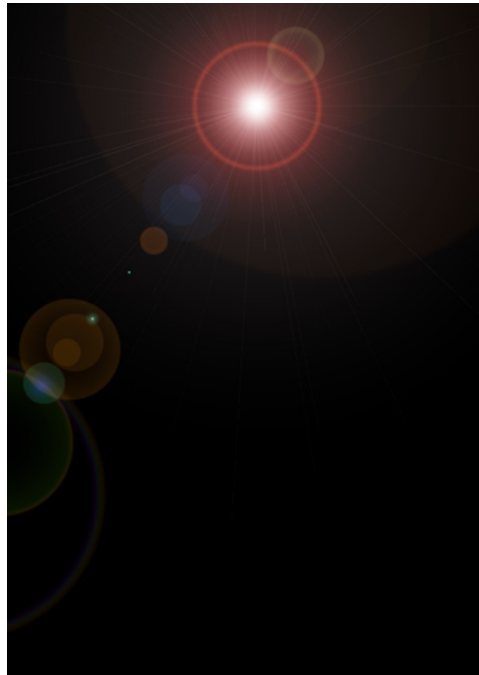

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Re: Happy Holidays from Brandeis University

Sent   Wed, Dec 20, 2017 at 12:46 AM
From   Rebecca Turner
To   Ron Liebowitz

Looks familiar, somehow... 🥴

The card's photo had been doctored to include the decades-old default Photoshop lens flare, a well-known and extremely-early-2000s trope among graphical artists.

Happy holidays! ;~)

Hall lights in Reitman

Sent   Sat, Feb 10, 2018 at 1:18 AM
From   Rebecca Turner
To   Lusi Wang, Area Coordinator for North Quad

Ms. Wang,

I understand you have bigger things on your plate at the moment (arson), but the hall lights have bothered me and my friends since we moved in: they are too bright.

During the day it's fine, but at night it's jarring, uncomfortable, and wasteful to have bright lights on at all times — especially if your room is on the dimmer side as mine is. Would it be possible to install motion sensors or some schedule to dim some or all of the lights during the night / quiet hours? (It might be a useful way to signal when quiet hours are in effect as well!)

Best,
— Rebecca Turner

A day before I sent this email an unknown individual lit our "hall rules" poster, which was taped to the wall directly below a fire alarm, on fire.

Re: Hall lights in Reitman

Sent   Tue, Feb 13, 2018 at 12:09 PM
From   Lusi Wang
To   Rebecca Turner

Hello Rebecca,

Thanks for bringing this to my attention. I'm actually not sure if this is something that we can do, but I have reached out to Facilities for more information and will let you know what I find out.

Best,
Lusi

Re: What does the myRandomSeed exact do? I am kind of confused.

Sent   Sun, Oct 15, 2017 at 11:28 pm
From   Rebecca Turner
To   cosi 12b via the class q&a forum

tl;dr: If you set the seed of two random number generators like `java.util.Random` to the same value, they will generate the same sequence of numbers; this is useful for making sure that the behavior of a random-looking program can be recreated on demand and tested, to make sure that it's not broken without relying on a human verifying that it *looks right*.

Long answer: When you `import java.util.Random` and create a `new Random()`, you're creating a *pseudo-random number generator*, or prng — because computers are (mostly) incapable of generating true randomness, they use mathematical formulas[6] that generate numbers that look random.

Anyways, one of the advantages of using a mathematical formula rather than a source of true randomness such as radioactive decay or atmospheric noise is that the output of a prng is purely deterministic — that is, the output is decided according to hard rules, with no true randomness involved. The important thing to know is that **there's no true randomness in the output of a prng even if the numbers themselves may be indistinguishable from a sequence of truly random numbers** (sometimes, the output of a prng can be predicted from previous prng output — this can cause problems if the prng is being used for security-critical purposes; see php's `rand()` function, which has had several security problems over the years).

Why is this important? A prng generates numbers from a *state* (usually some numbers attached to the prng; *fields* in Java terminology) and an *algorithm* (the code or math used to generate new numbers from the state; these algorithms change the prng's state) and nothing else — **two prng's with the same state and algorithm asked to generate a new random number would generate the same random number.** And so on with the next number, and the number after that, forever.

The starting state of a prng is referred to as the *seed*.[7] Any number of prngs with the same seed and algorithm will all generate the same sequence of random numbers in the same order, so if you run your program twice using the same seed (and the prngs have been used and seeded properly), you will get the same output. This can be useful for testing random-looking programs to ensure that their output doesn't change or is consistent with pre-computed values, or to ensure that different users entering the same input will receive the same output (Minecraft uses seeds to let users share levels without having to copy the state of every block in the world).

For a long and mostly-accessible article on prngs, see tifu by using Math.random() by Betable cto Mike Malone on Medium.

I hope this helped!

Following confusion about random number generation, I posted this on the class q&a forum; it's reprinted here for context but is not necessary for understanding the content of the following emails.

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[6] If you're curious what these algorithms look like, the Mersenne Twister is one of the most popular, and you can see a Java implementation here; although dense, the code itself is quite short.   [7] Typically, if left blank, the prng will fill in the seed for you, using some source of true randomness or, in dubious implementations, a constant.

Forum posts

Sent   Mon, Oct 16, 2017 at 2:01 AM
From   Ryan Marcus, COSI 12B TA
To   Rebecca Turner

Hi Rebecca,

Thanks for your complete and insightful forum post. I was surprised to learn that the Java PRNG uses something as advanced as MT[8] and not a standard LCG[9]…

I hope you aren't too bored with 12b![10] If you're ever looking for a challenge, let me know and I'll make sure you are suitably entertained.

By the way, I found a GitHub account containing a lot of COSI 12b assignments, some complete with Gradle build scripts and unit tests! It's definitely above and beyond. Sadly, the University requires me to report such posts as potential sources of cheating, but unfortunately I couldn't figure out who 9999years belonged to, so I forgot about it.[11] However, if Olga[12] stumbled on it, she might do a bit more investigating, and it would be a shame for a clearly talented coder to get in trouble for something as silly as a GitHub repo. Since we only search for assignments online the day before the due date, whoever has this GitHub account would be totally safe if they waited until after the due date to push. Just thought you'd find that interesting.

Thanks,

Ryan

P.S. if you activate GitHub for students using your Brandeis email address, you'll get free unlimited private repositories!
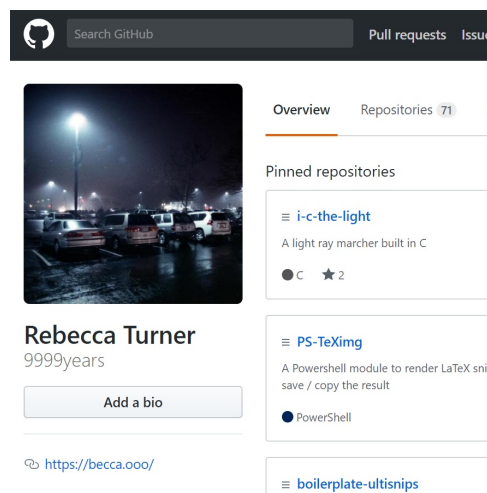

Figure 1: How `github.com/9999years` appeared at the time of the email.

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[8] Mersenne Twister, "by far the most widely used general-purpose PRNG" (Wikipedia).   [9] Linear congruential generator, a low-quality but fast type of PRNG   [10] I was.   [11] See fig. 1   [12] The professor

Re: Forum posts

Sent   Mon, Oct 16, 2017 at 10:30 AM
From   Rebecca Turner
To   Ryan Marcus

Hi! `java.util.Random` actually does use an LCG; I pointed to the MT because it was the first thing that came to mind and I'm aware they're fairly common (and the java.util.Random implementation isn't, AFAIK, public). Thanks for the tip with the repo, I'll see if I can get in contact with the owner and have them take care of that.

Best,
Rebecca

Like our new OneSearch look?

Sent   Sat, Apr 14, 2018
From   Library & Technology Services
To   Rebecca Turner

Please give us your feedback on the new interface for Brandeis OneSearch! Tell us what you like, what you don't like, what you find confusing, or any suggestions you might have on how we can improve OneSearch.

Required

What is your comment, question, or suggestion? *

Following Ex Libris' redesign of the Primo Library system, a flashy bubble reading "like our new look?" was placed in the margin of the search results. Clicking it led to this Google form...

No

Sent   Sat, Apr 14, 2018
From   Rebecca Turner
To   Librare & Technology Services

It's horrible. It takes 10 seconds and 4.1 MB in 64 (!!!!) requests to load a single column of static content. The links are faked, which makes it hard to navigate and share, and content (again, static, unchanging content that should be rendered server-side) is rendered entirely in Javascript making the site literally unusable without running untrusted code. If you tried to propose this 15 years ago — and nothing here would be hard 15 years ago, there's no moving images, all the animations only serve to slow down using the website — any respectable web developer would have you shot out of a cannon into a volcano for proposing something so unweildy and ridiculous. This terrible redesign is slow and contributes to the death of an accessible and fast internet that prioritizes usability.