





# How to Delete Everything

The Clean-Slate Approach to Technical Strategy

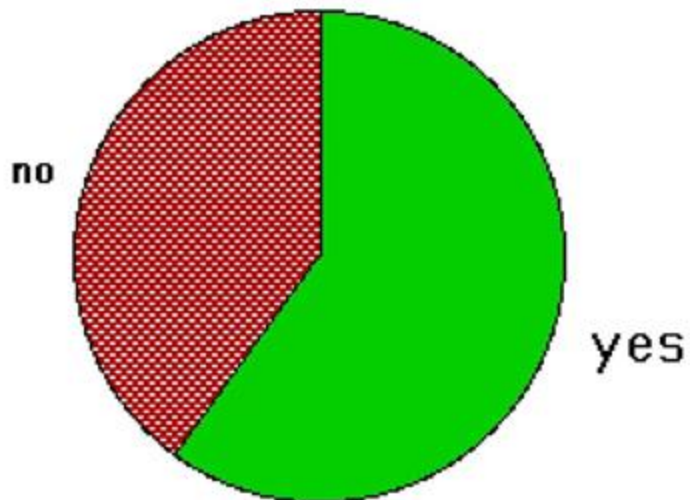


Why do we  
want to delete  
everything?



Worksheet 1 Chart 1

Will the code you are writing today still be in  
use 10 years from now?



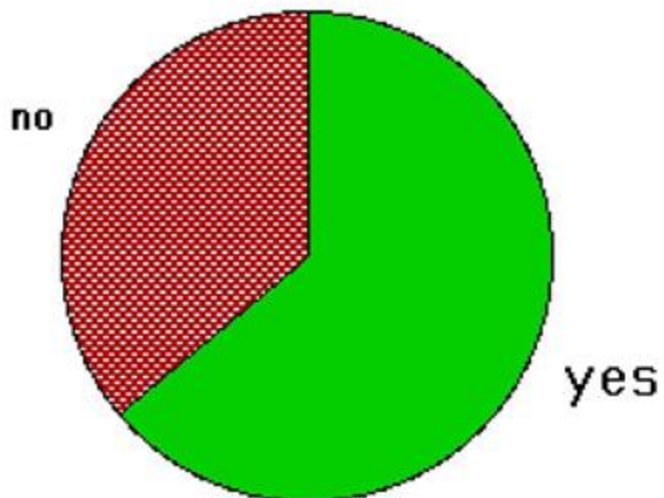
p.gif



Worksheet 1 Chart 1

Worksheet 1 Chart 2

**Have you rewritten a piece of code in the last six months instead of debugging it?**



Worksheet 1 Chart 1

Jenga.jpg



He in the last  
giving it?

yes



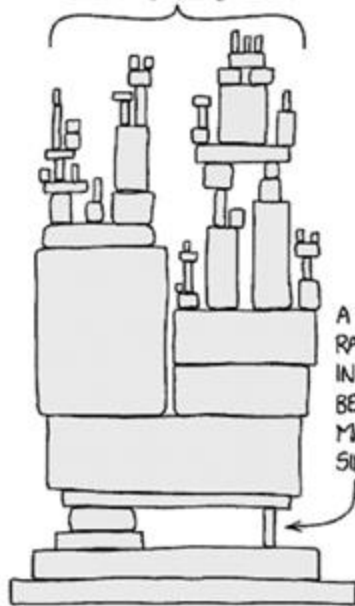
Worksheet 1 Chart 1

jenga.jpg



xkcd\_2347.gif

ALL MODERN DIGITAL  
INFRASTRUCTURE



A PROJECT SOME  
RANDOM PERSON  
IN NEBRASKA HAS  
BEEN THANKLESSLY  
MAINTAINING  
SINCE 2003

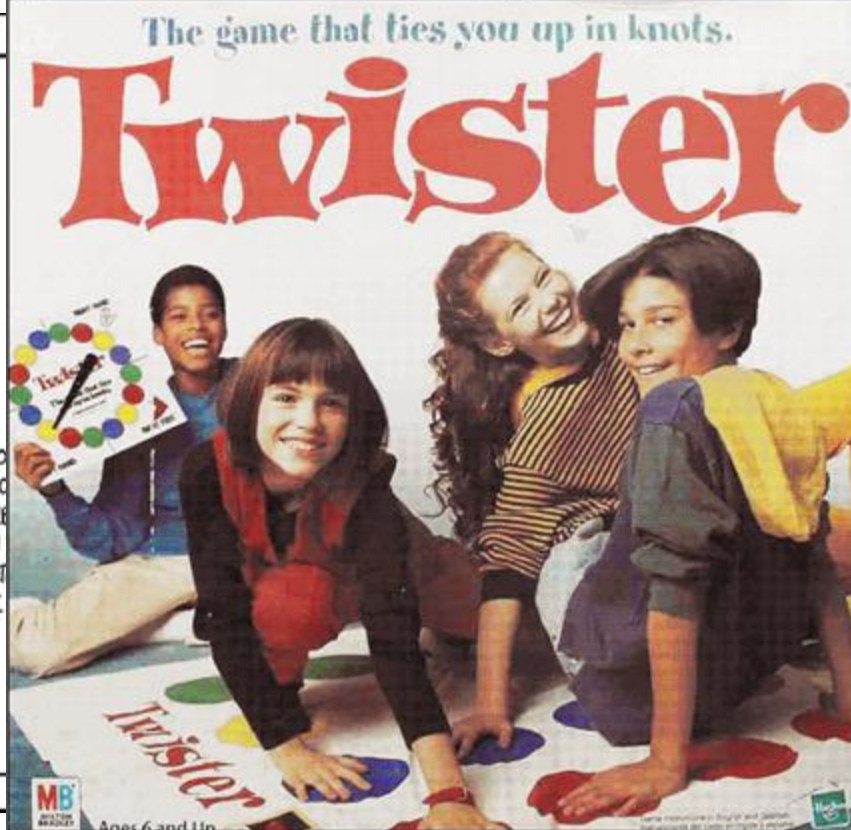


Worksheet 1 Chart 1

jenga.jpg



twister.jpg



Worksheet 1 Chart 1

jenga.jpg



twister.jpg



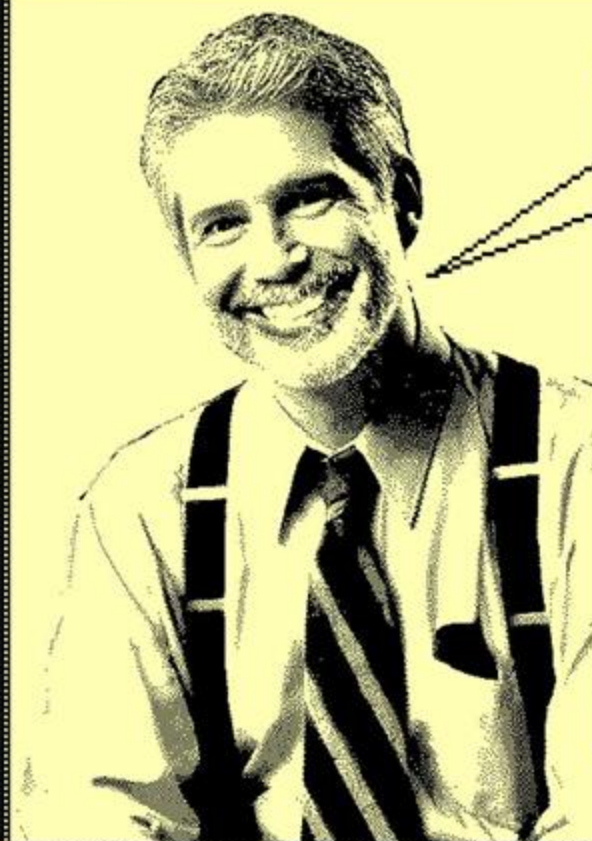
There are 5 time-sensitive features due this month. Are you sure you want to start a ground-up refactor now?

Cancel

OK



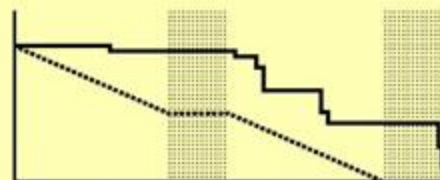
## Agile Trail



"The price calculation function in the checkout API was a little wonky, so I am going to write a clean function that also incorporates the new tax considerations. It will take an extra day but shouldn't go much beyond that, and it will make testing easier so we should still be on target."

## Standup

June 16, 1993



## Burndown

Estimated: 30 pts.  
Remaining: 15 pts.

## Deadline

Pace: Steady



enga

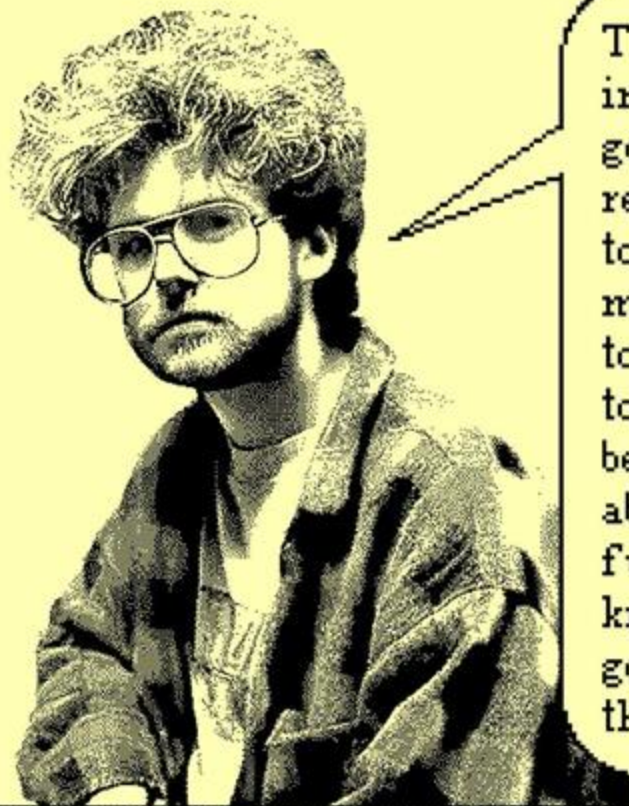


rister



Trash

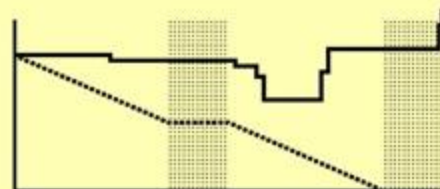
## Agile Trail



The coupons service is inextensible. We've got to do a ground-up refactor and I'll need to work with the merchandising team to update all of their touchpoints as well before we can think about the referral functionality. I don't know how long it's going to take but there's no other way.

## Standup

June 16, 1993



## Burndown

Estimated: 30 pts.

Remaining: ??? pts.

## Deadline

Pace: Slow



enga




rister



Trash

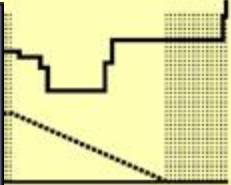
Agile Trail



The coupons service is inextensible. We've got to do a ground-up

# Standup

June 16, 1993



**An engineer has proposed a refactor.**

Oh No

about the referral functionality. I don't know how long it's going to take but there's no other way.

**Shutdown**

Estimated: 30 pts.  
Remaining: ??? pts.

**Deadline**

Pace: Slow



Worksheet1			
	A	B	C
1		Nick	Joe
2	Scope	Small	
3	Teams needed	1	
4	Timeline	OK	
5	New features?	Yes	
6			
7			



Worksheet1			
	A	B	C
1		Nick	Joe
2	Scope	Small	All
3	Teams needed	1	???
4	Timeline	OK	At risk
5	New features?	Yes	No
6			
7			



## Worksheet1

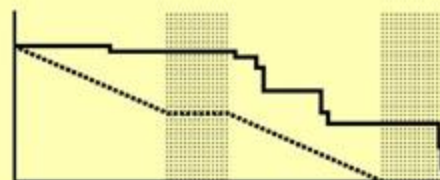
## Agile Trail



The deadline next week is non-negotiable. A refactor is off the table. We've been using the coupon service for four years, how bad can it be if it's been fully meeting our needs all this time?

## Standup

June 16, 1993



## Burndown

Estimated: 30 pts.  
Remaining: 15 pts.

## Deadline

Pace: On track...?



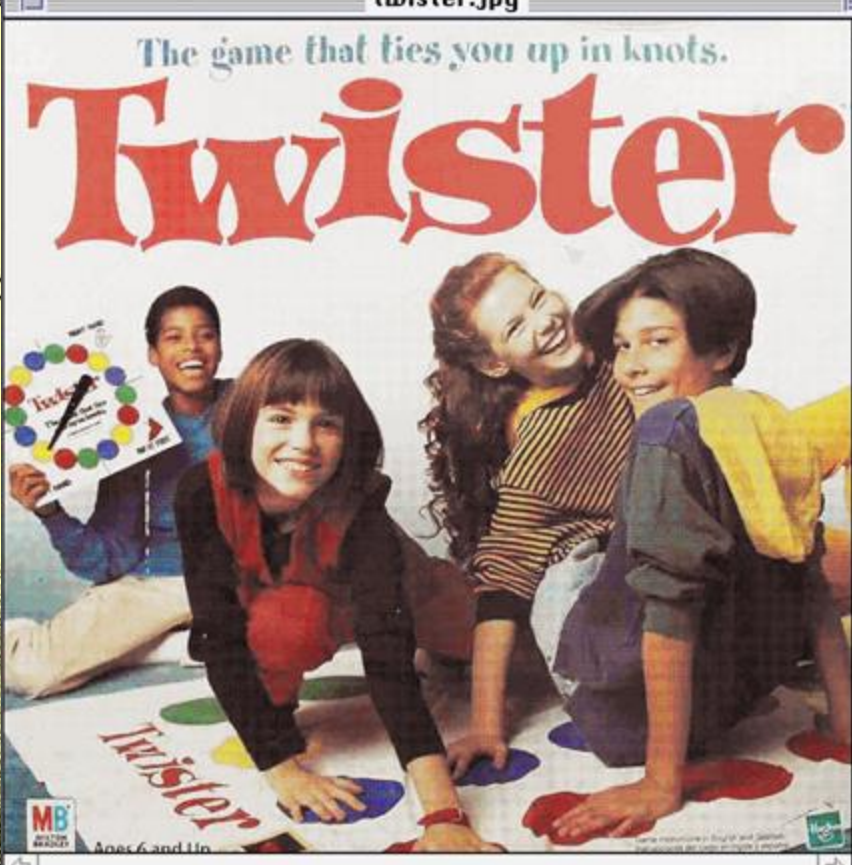

Worksheet1

Boile Trail

twister.jpg

The game that ties you up in knots.

# Twister



MB  
AGES 6 AND UP

Adup  
6, 1993

down  
30 pts.  
g: 15 pts.

dline  
On track...?

enga  
cluster  
rister

Trash

Worksheet1

Boile Trail

twister.jpg

The game that ties you up in knots.

# Twister

adup  
6, 1993

enga  
cluster  
rister

down  
30 pts.  
g: 15 pts.

deadline  
On track...?

Trash

1

2


3

4

5

6


7




A refactor is the only way to fix the system, but your deadline is next week. How do you want to proceed?

Fix the System

Hit the Deadline





MB  
ACTION  
READY

Twister

Ages 6 and Up

Small text: Some instructions in English and Spanish. Instructions for both languages are included.

they're already there =>



jenga



twister



Trash

The system is  
working and  
exists already,  
so therefore it's  
the right thing.

already there =>



jenga



twister



Trash

The system is working and exists already, so therefore it's the right thing.

Refactors are expensive and don't produce a lot of immediate value, so we should avoid even thinking about them.



jenga



twister



Trash

The system is  
working and  
exists already  
so the  
the right

Refactors are  
expensive and



Deleting this will have absolutely no  
impact on anything because this all  
hypothetical. Do you want to continue?

Yes

Heck Yes

should avoid even  
thinking about  
them.



jenga

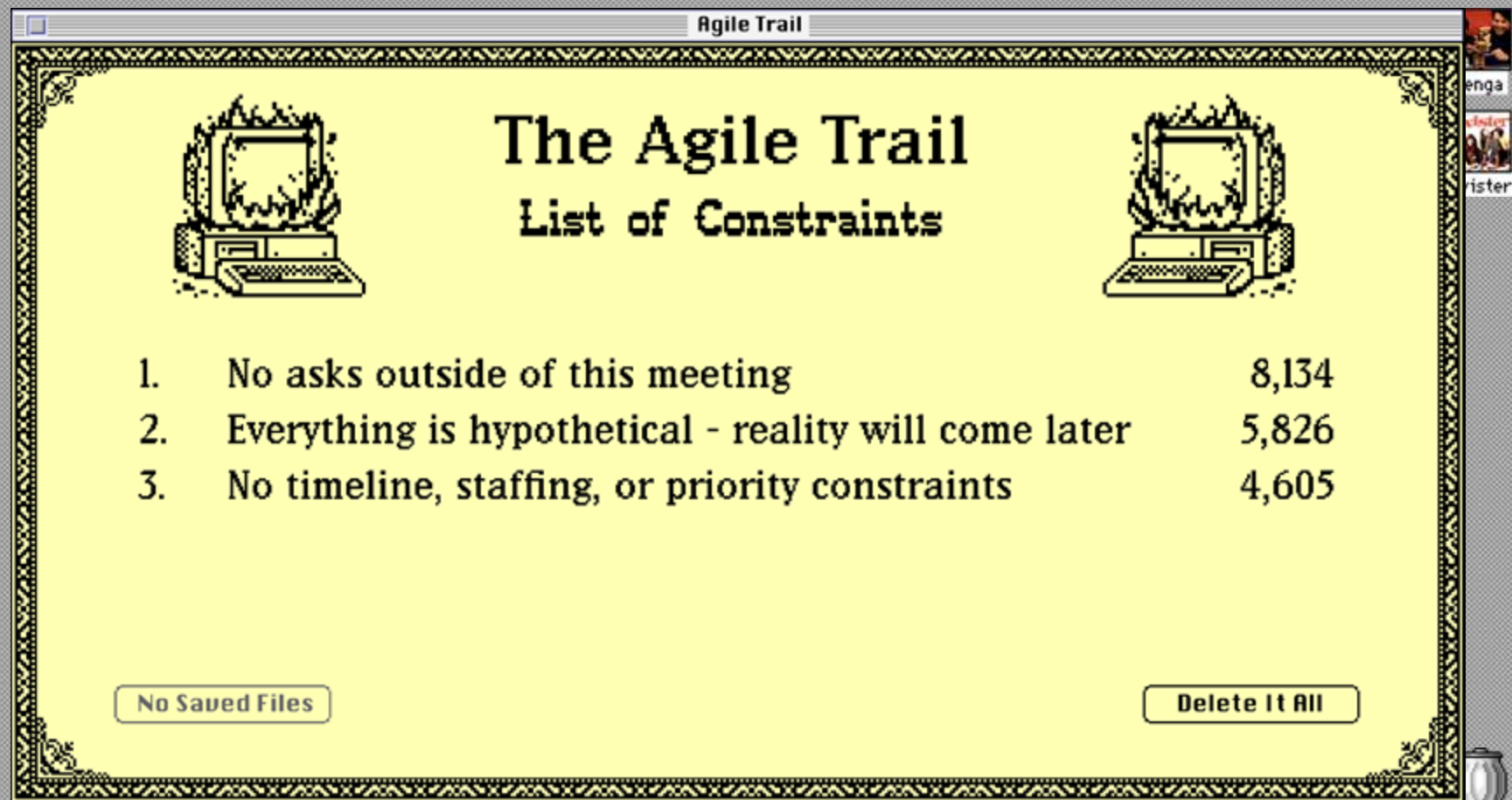


twister



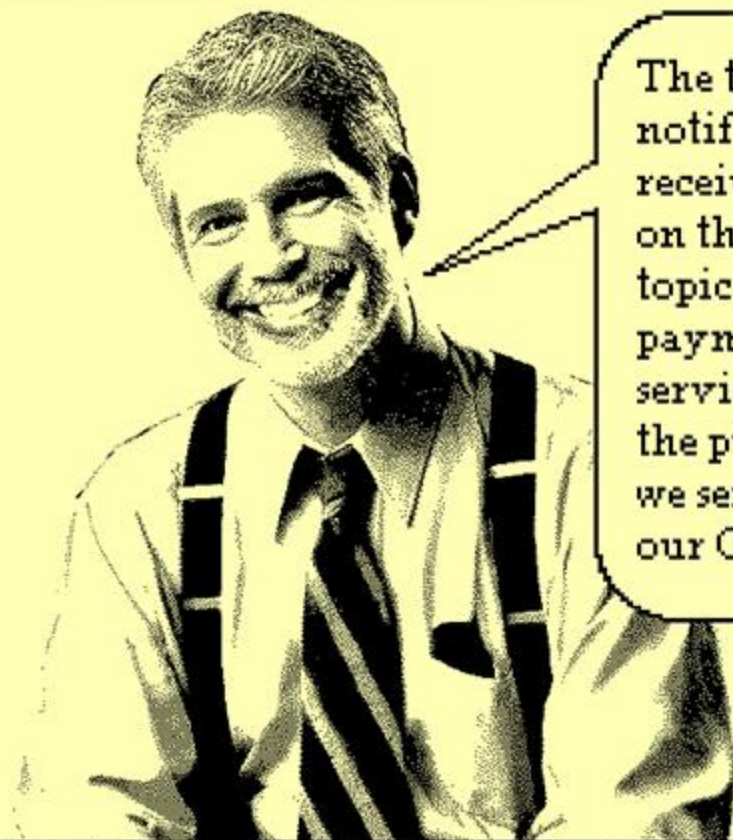
Trash







## Agile Trail



The transactional notifications service receives kafka events on the notifications topic from our payment and order services to determine the push notifications we send to users via our CRM vendor.



enga

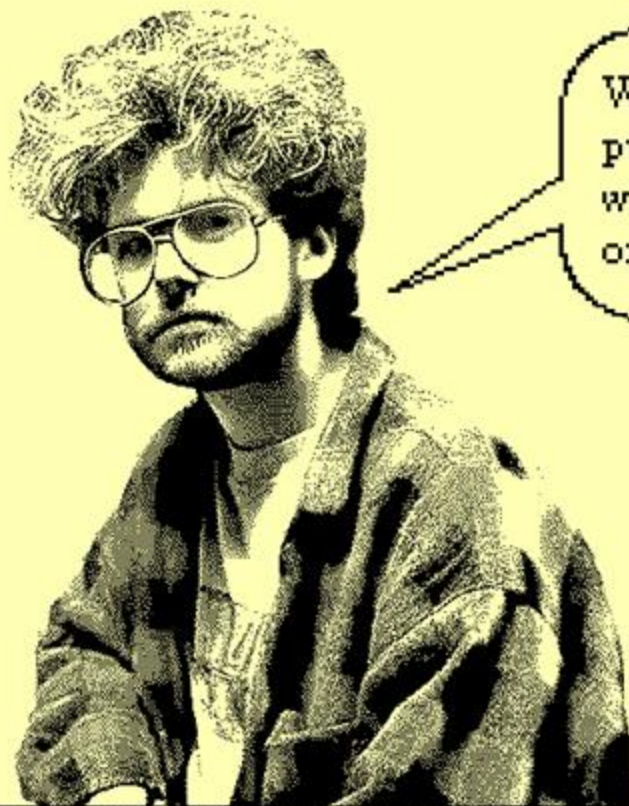


rister



Trash

## Agile Trail



We need to send users  
push notifications  
when payment and  
order events happen.



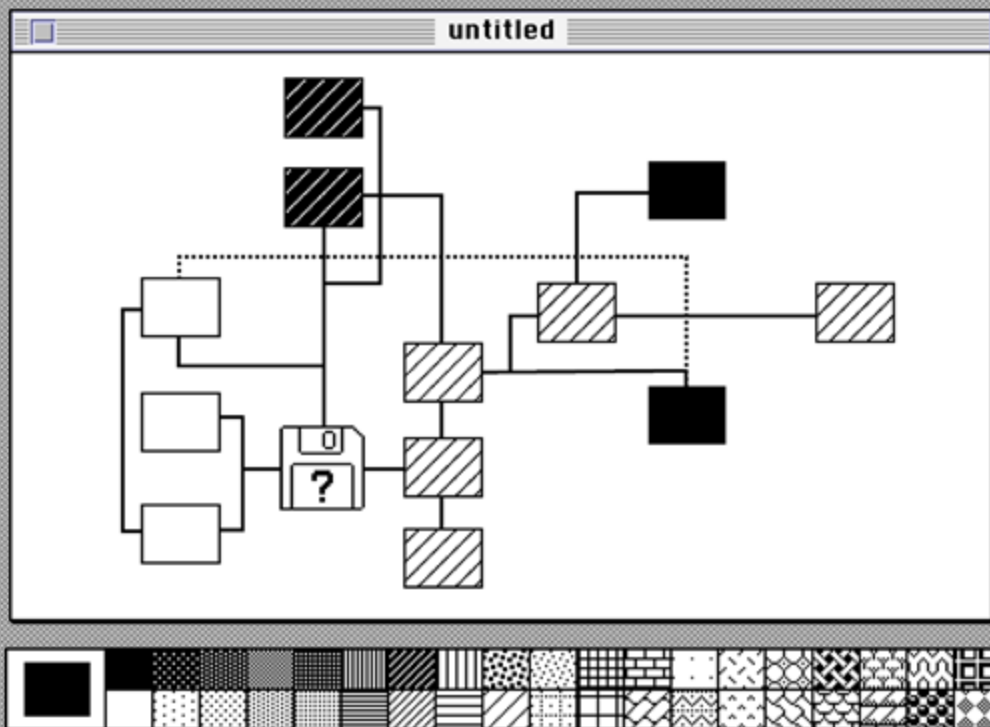
enga

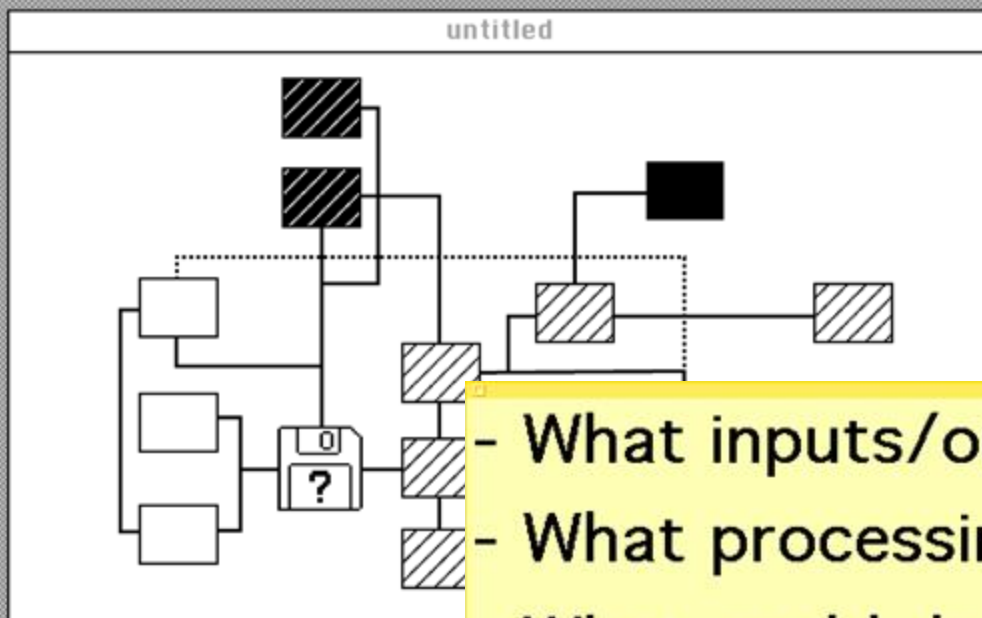


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Trash





- What inputs/outputs are used?
- What processing is done?
- What could do it?
- What might already be doing it?
- What patterns do we prefer?



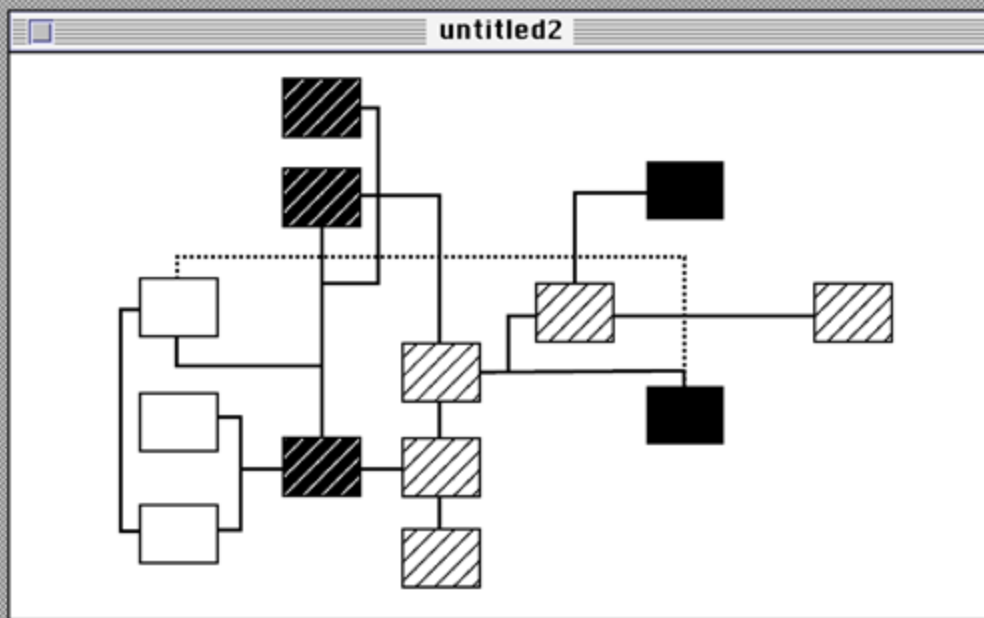
jenga



twister



Trash



jenga



twister

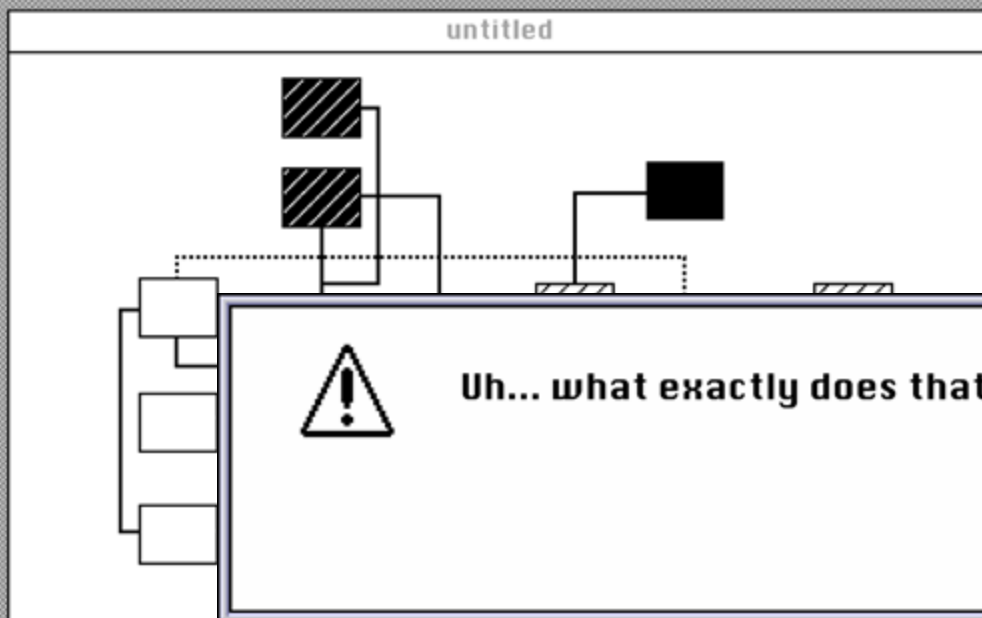
- What could do it?

- What might already be doing it?

- What patterns do we prefer?



Trash



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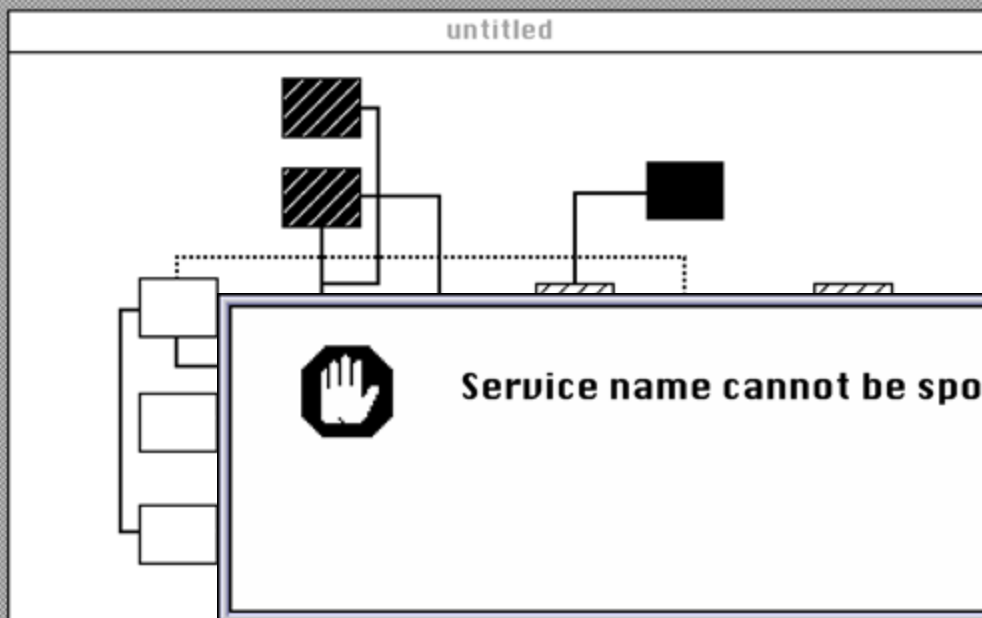
twister

used?

- What could do it?
- What might already be doing it?
- What patterns do we prefer?



Trash



Service name cannot be spoken.

OK

used?

- What could do it?
- What might already be doing it?
- What patterns do we prefer?



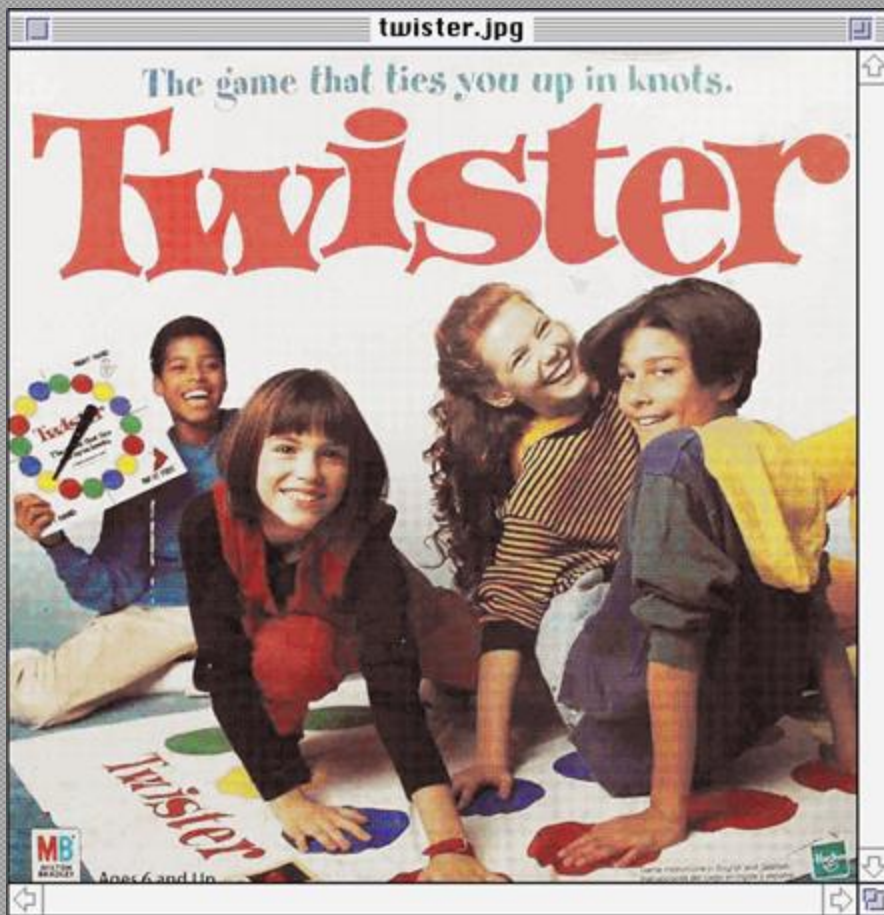
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Trash

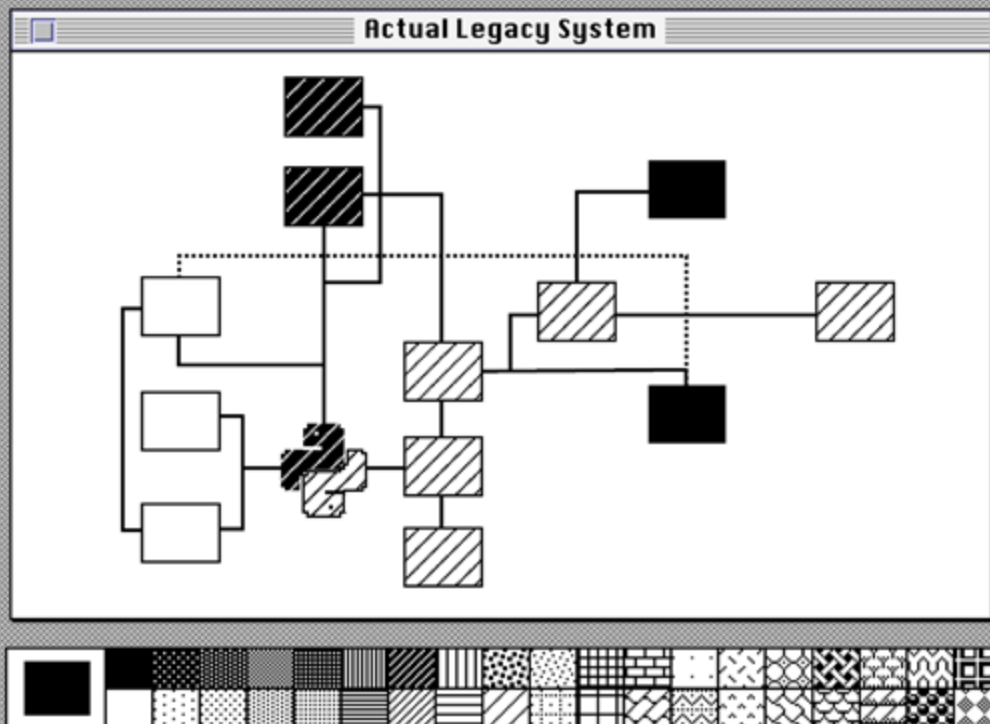
twister.jpg

## Online Visit Jobs To Be Done

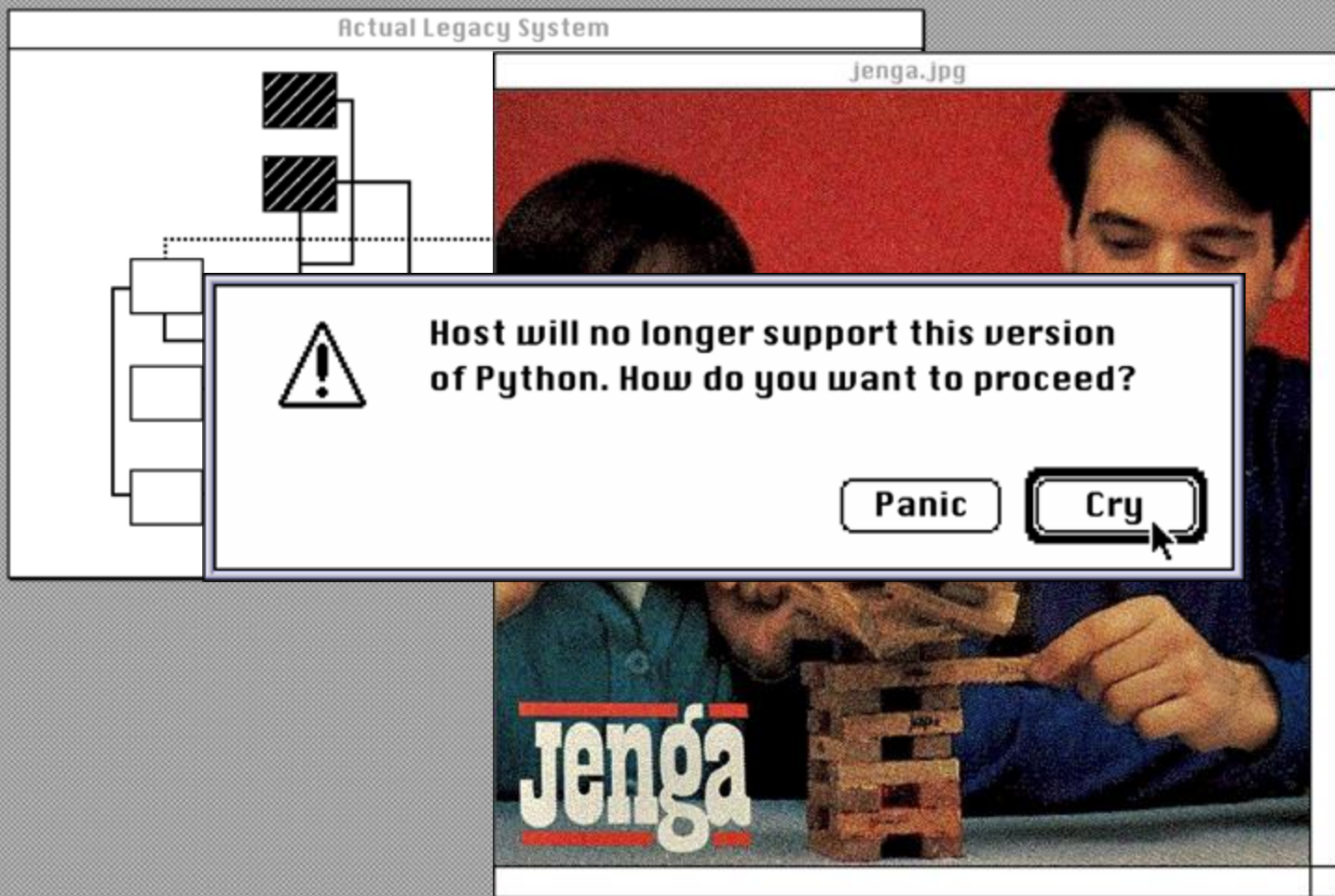
	A	B	
1	Patient Record	Collection of vitals	OV que
2	Patient Record	Collection of patient allergies	Unstru
3	Patient Record	Collection of existing medications the patient is taking	Struct
4	Patient Record	Collection of patient lifestyle and treatment preferences	OV que
5	Patient		red data poin OV sch
6	Patient		OV log
7	Patient		Create
8	Patient		OV que
9	Accoun		Onboar
10	Accoun		"Draft
11	Accoun		Step a
12	Accoun		Govern
13	Accoun		OV cor
14	Ecommerce	Correct and validate payment information	Stripe
15	Ecommerce	Track product shopping cart	OV red
16	Ecommerce	Product coupon/discount checkout logic	OV is
17	Ecommerce	Implicit product configuration store	OV sch
18	Ecommerce	Directly submit orders for over-the-counter products	Produc
19	Terms	Collect consent to telehealth	Legal
20	Terms	Collect acknowledgement of terms of service and privacy policy	Baked
21	Terms	State-based preferences	Specif
22	Fulfillment	Capture billing and shipping addresses	OV que
23	Fulfillment	Address validation	Third

**Warning: Cliffhanger.**

OK







1. Let it fall  
over (YOLO)

2. Explore migration  
and deprecation

3. Update  
Python and  
keep on host

4. Lift and shift



jenga



twister



Trash

1. Let it fall  
over (YOLO)

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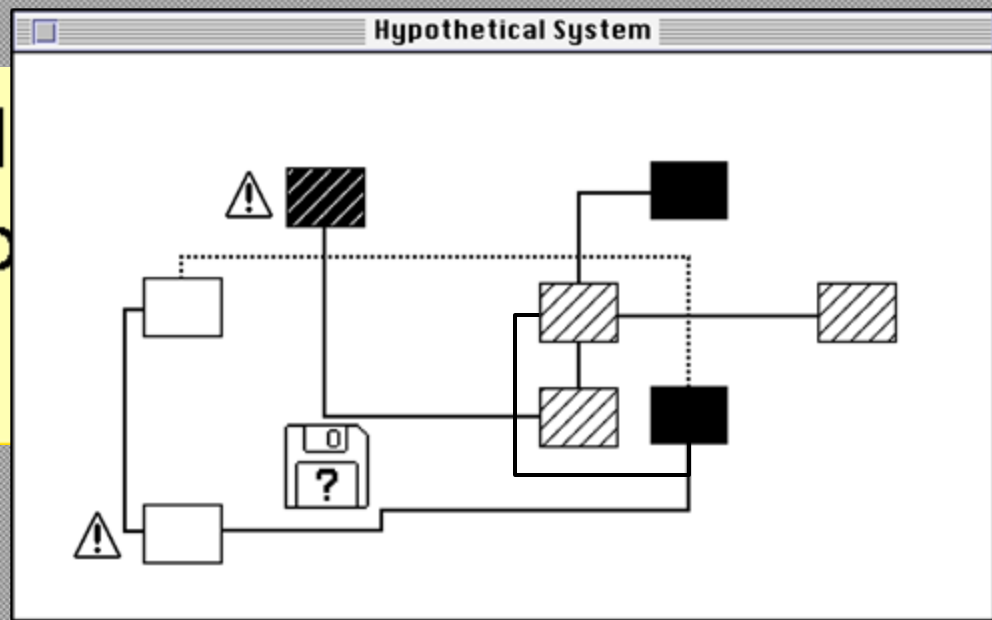
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ore migration  
recreation

4. Lift and shift



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twister



Trash



## 4. Lift and shift





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Trash

A Brighter Tomorrow

1. Let it fall  
over (YOLO)



ore migration  
orecation

keep on host

4. Lift and shift



jenga



twister

1. Let it fall  
over (YOLO)

2. Explore migration  
and deprecation

keep on host

4. Lift and shift



Trash

A Brighter Tomorrow

1. Let it fall  
over (YOLO)

2. Explore migration  
and deprecation



We do not have the time or staffing to  
take on this scope right now.

OK :(

keep on host 4. Lift and shift



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3. Update  
Python and  
keep on host

4. Lift and shift



Trash



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3. Update  
Python  
keep



So, like... when are we going to actually delete something?

Claim False Advertising

Keep Listening



Trash

The system is working and exists already, so therefore it's the right thing.

Refactors are expensive and don't produce a lot of immediate value, so we should avoid even thinking about them.



jenga



twister



Trash

The system is  
working and  
exists already,

but it might not  
be the right thing.

Refactors are  
expensive and  
don't produce a  
lot of immediate  
value, so we  
should avoid even  
thinking about  
them.



jenga



twister



Trash

The system is  
working and  
exists already,

but it might not  
be the right thing.

Refactors are  
expensive and  
don't produce a  
lot of immediate

value, but just  
discussing them can  
have immediate  
benefits.



jenga

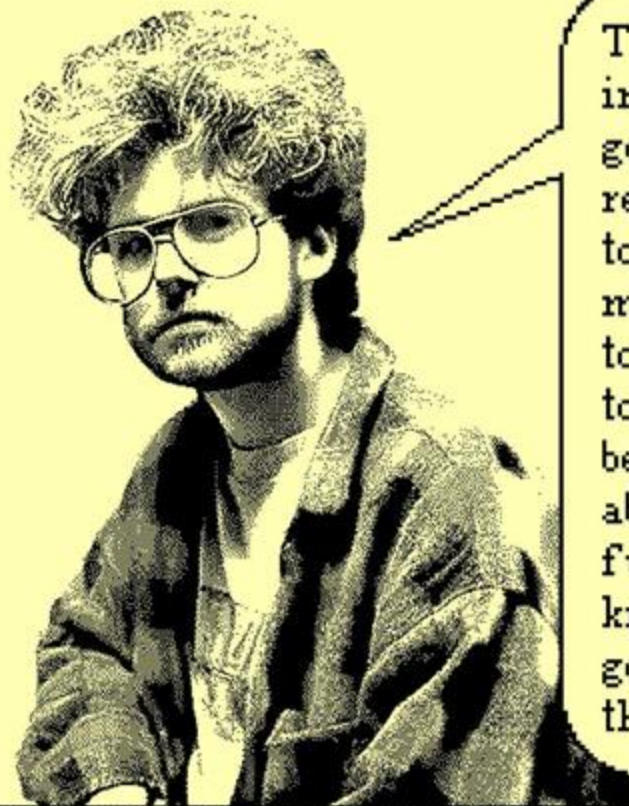


twister



Trash

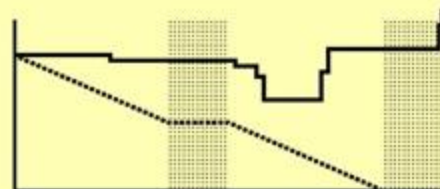
## Agile Trail



The coupons service is inextensible. We've got to do a ground-up refactor and I'll need to work with the merchandising team to update all of their touchpoints as well before we can think about the referral functionality. I don't know how long it's going to take but there's no other way.

## Standup

June 16, 1993



## Burndown

Estimated: 30 pts.  
Remaining: ??? pts.

## Deadline

Pace: Slow



enga



rister



Trash

## Agile Trail



The coupons service is inextensible. We've got to do a ground-up

## Standup

June 16, 1993



Are you sure you want to shut down Joe?

Cancel

OK

about the referral functionality. I don't know how long it's going to take but there's no other way.

Estimated: 30 pts.  
Remaining: ??? pts.

## Deadline

Pace: Slow



enga



ister

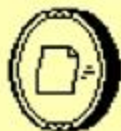
Trash

## Agile Trail

How can Joe approach the project?



Rebuild the current service on a clear timeline



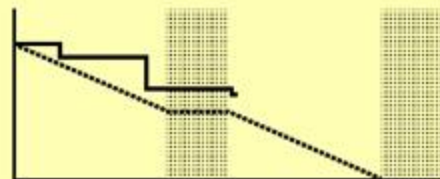
Build a new service, leave the current one alone



Modify the current service (but forward-looking)

## Standup

June 23, 1993



Estimated: 25 pts.

Remaining: 11 pts.

## Deadline

Pace: Steady



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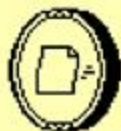
Trash

## Agile Trail

How can Joe approach the project?



Rebuild the current service on a clear timeline



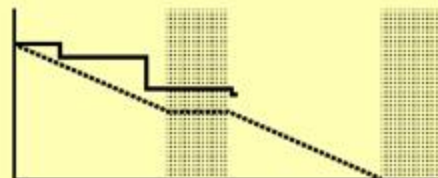
Build a new service, leave the current one alone



Modify the current service (but forward-looking)

## Standup

June 23, 1993



Estimated: 25 pts.

Remaining: 11 pts.

## Deadline

Pace: Steady



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## Agile Trail



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# Standup

June 23, 1993

How can Joe approach the project?



Reb



Buil



Modify the current service (but forward-looking)



Are you ready to return to reality?

Estimated: 25 pts.

Remaining: 11 pts.

## Deadline

Pace: Steady


Current Context			
	A	B	B
1	Current Context		OV Project
2			
3			
4			
5			
6			
7			

enga

ister

Trash

Current Context	
A	B
1	Current Context OV Project
2	Capacity Flexible
3	Tr
4	Biz
5	Te
6	
7	
8	



This is really not the right time to start a full system rewrite. Are you sure you want to proceed?

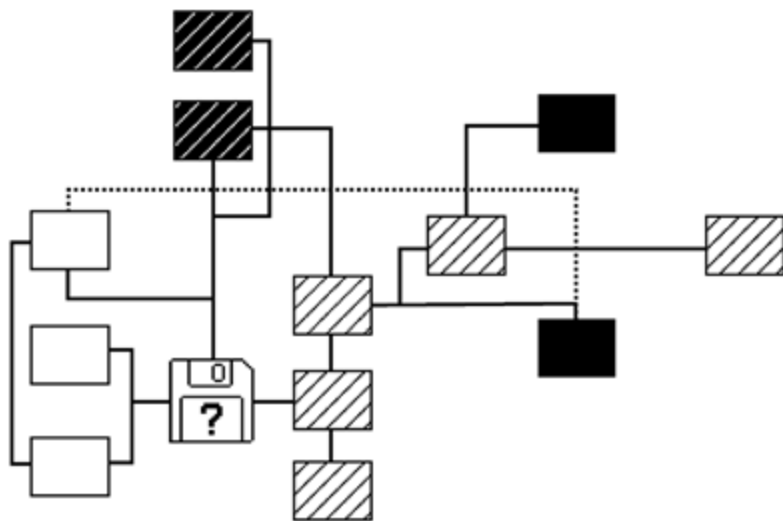
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Trash



fire\_elmo.gif



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