Preventing Crisis:

Project Estimation and Tracking That Works

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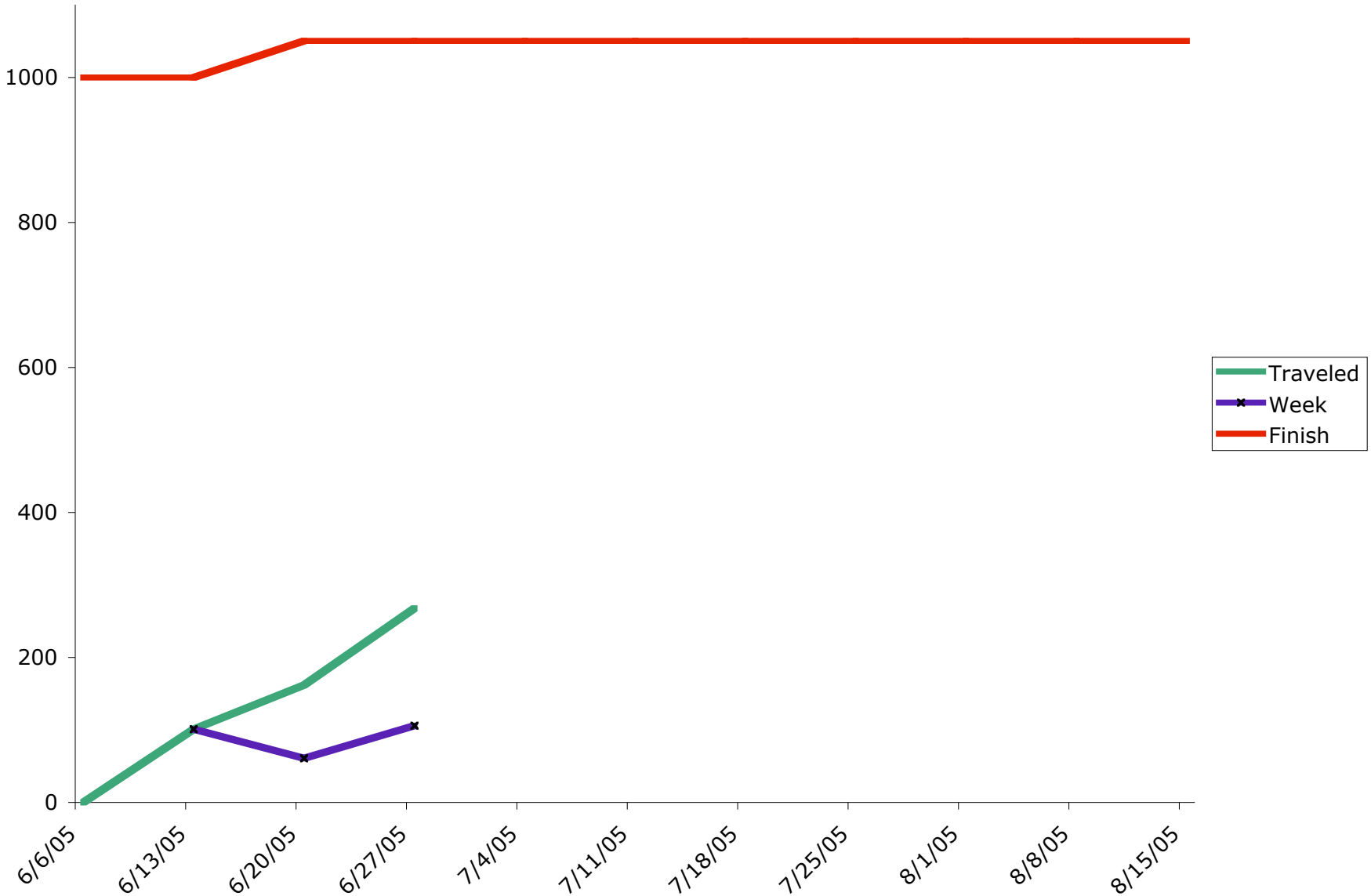
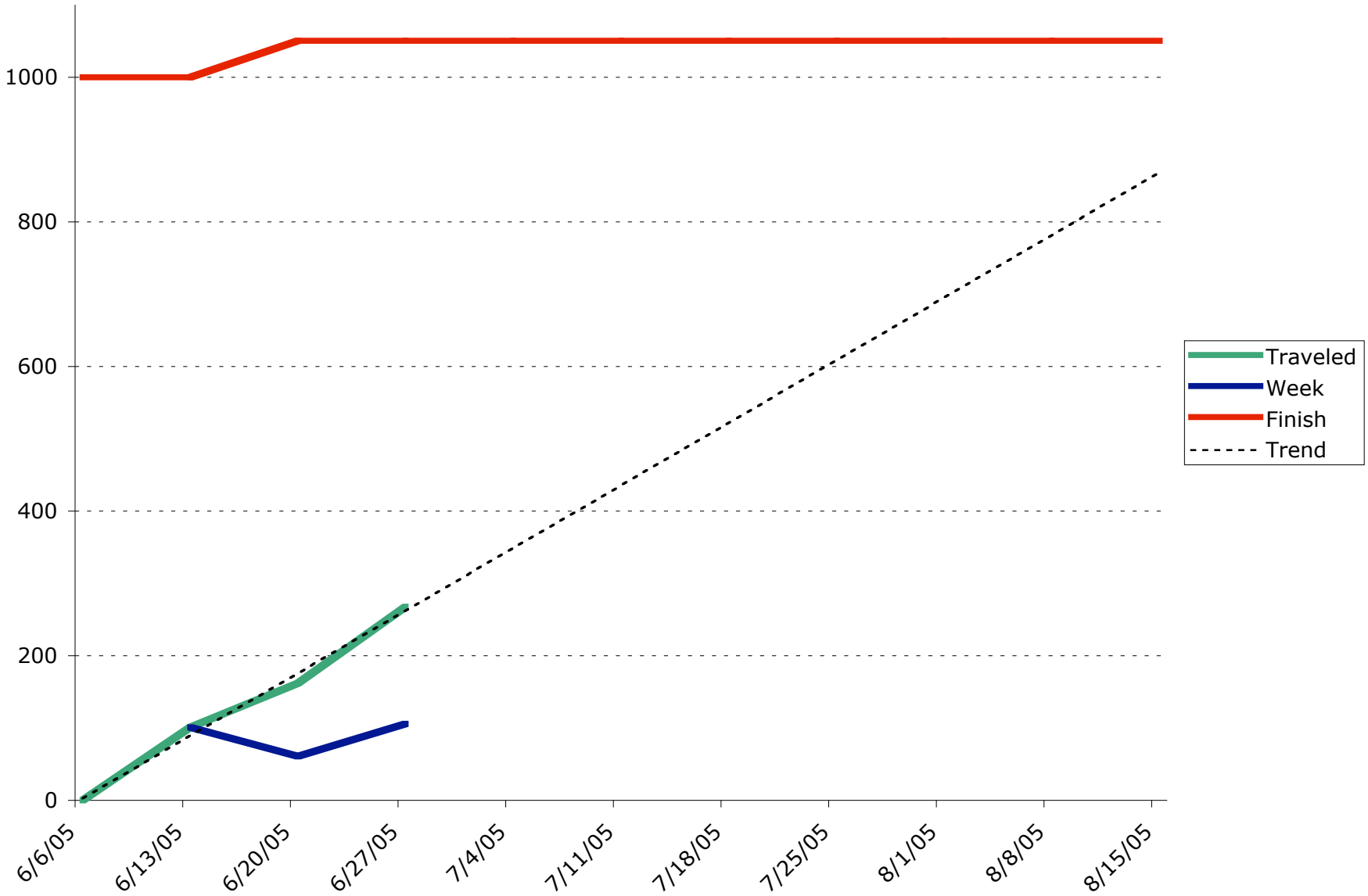
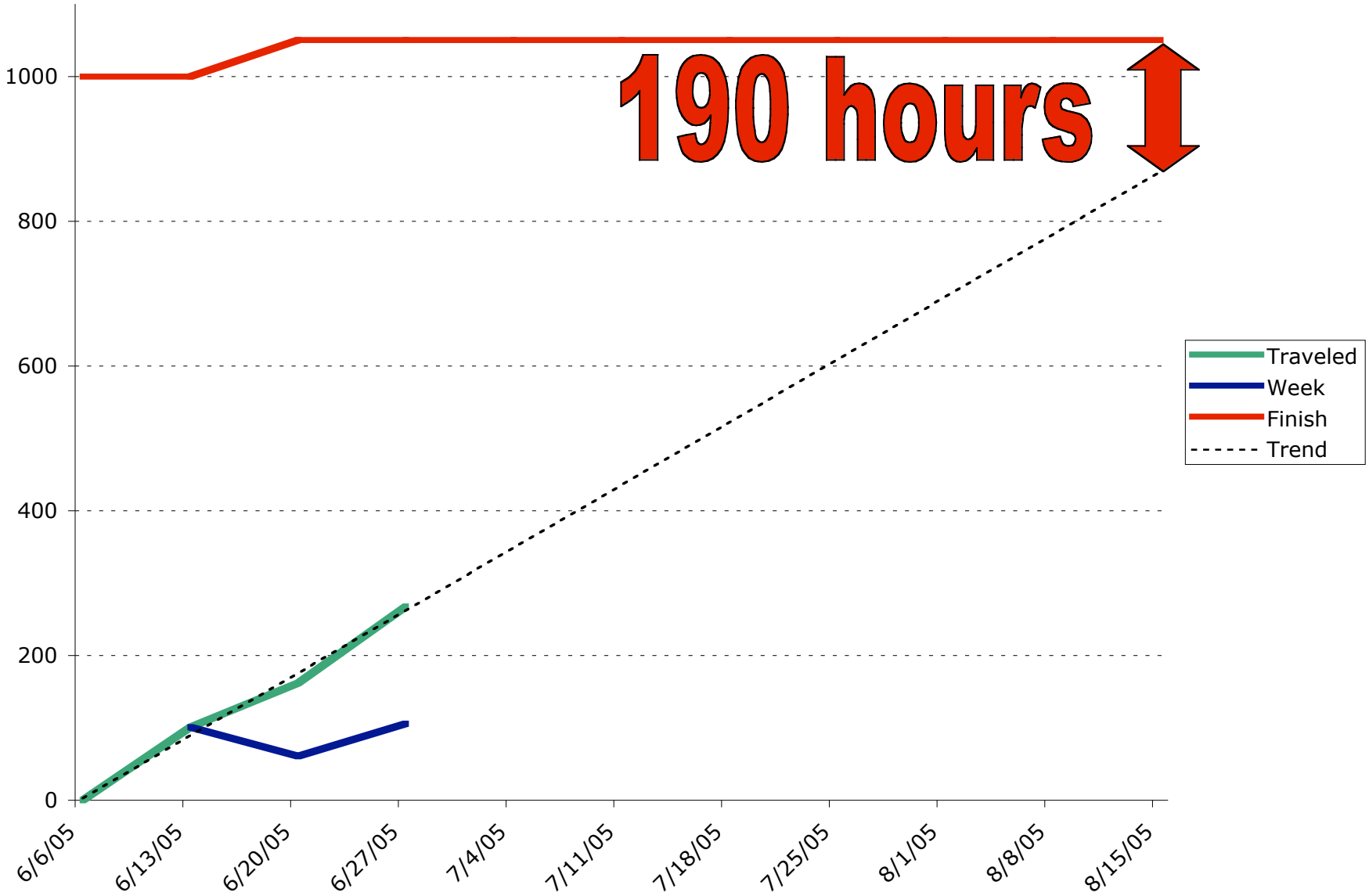
Will we make it?



Will we make it?



Crisis, or readjustment?



Goals

- Accurate schedules
  - They make customers happy
- Bad news early
  - Surprises make customers unhappy
- Fun for you
  - Otherwise, why bother?

Tools and principles

- Honesty with everyone
- Changes & mistakes happen
- Tasks are either done or not
- Nothing is free

Assumptions: You have these already to avoid REAL crisis

Backups
Version control
Bug tracking

How to do projects

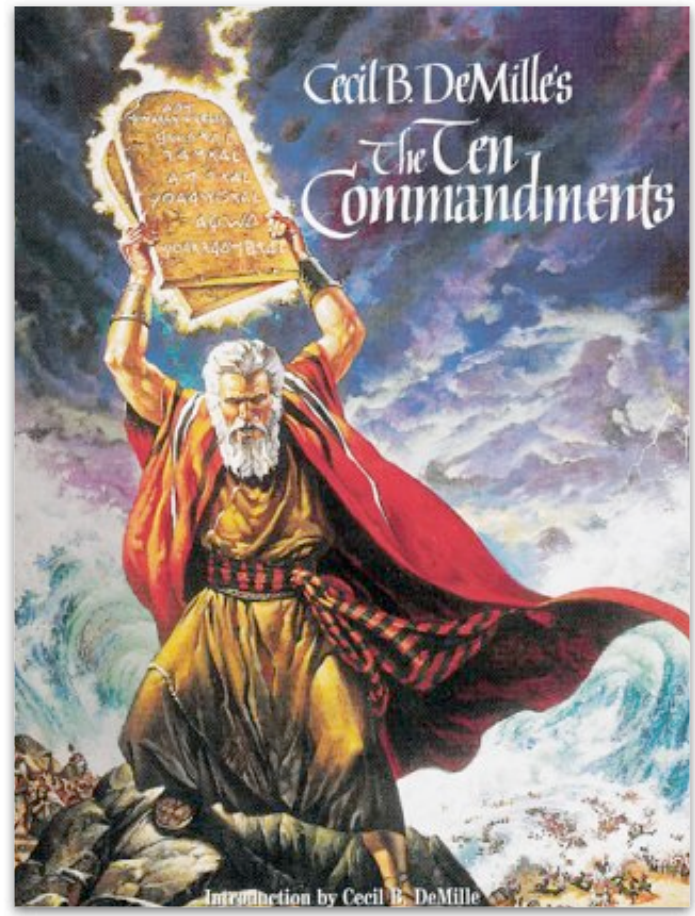
- Get a project
- Do a swag
- Do a task list/schedule/estimate
- Work
- Track your progress
- Adjust as necessary

Get the project

- Some sort of written document
  - Even if you have to write it
- Does it have all the information you need to do the project?
- "How complete"? It's up to you.
  - Think leaflet, not phone book.

Nothing is set in stone

- "Signed off" means "as best we know right now."
- Changes will happen. Don't pretend they won't.
- The requirements establish a baseline from which work can start.



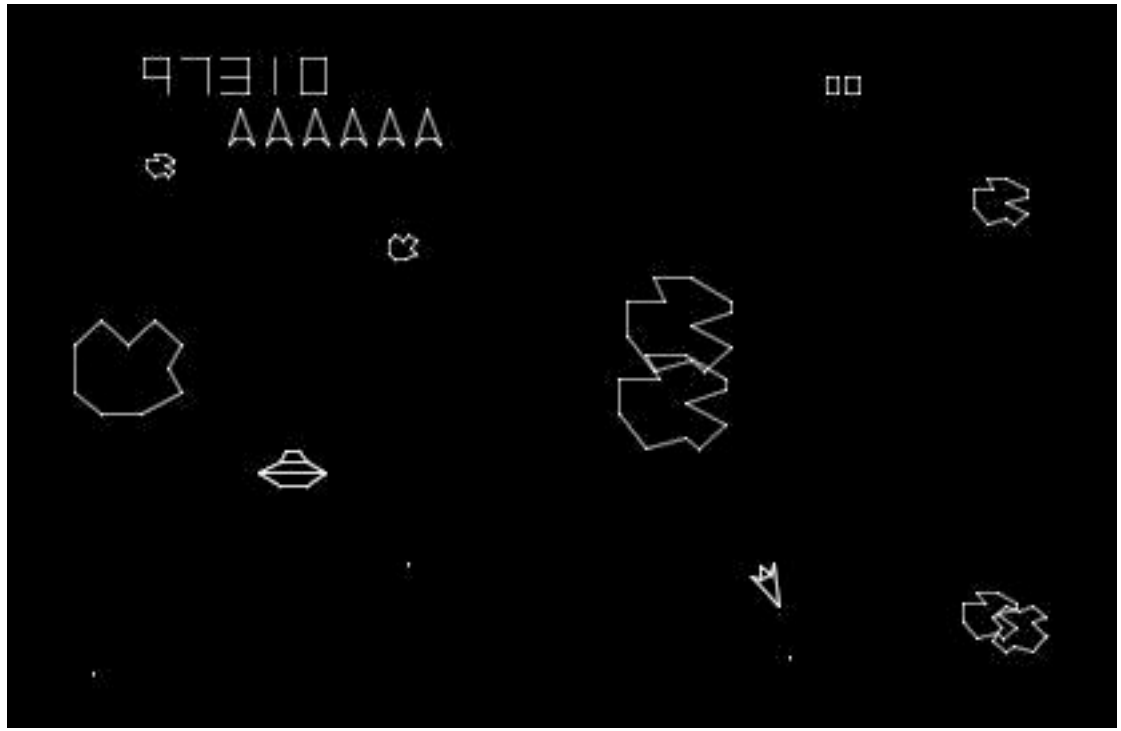
Do a swag

- **S**illy **w**ild-**a**ss **g**uess
- Fast & cheap
- NOT a commitment
- Estimate in days or weeks
- Figure out confidence
- Those responsible for the work OK the swag.

Swag: 12 weeks

Task	Duration
Database setup	1 week
User screen #1	3 weeks
User screen #2	1 week
User screen #3	2 weeks
Reports	2 weeks
Admin screens	2 weeks
Status web page	1 week

Do a task list/ estimate/schedule



Do a task list/ estimate/schedule

- Start with your swag and start breaking
- Outline form is fine, but not necessary
- Put them in chronological order
- No tasks longer than 4 hours
- You're doing design as you go, so keep notes
- Those responsible for the work OK the task list/schedule.

Four hours???

- You can't estimate accurately above 4 hours
- Distributes risk
  - Estimates are usually off by 100%, not 10%
- Requires rocks to be turned over

Task breakdowns

Task	Duration
Foo report	4 days
Bar report	2 days
Baz report	3 days
Bat report	1 day

Task breakdowns

Task	Duration
Foo report -- data input	2 hrs
Foo -- data marshalling	4 hrs
Foo -- PDF cover page	4 hrs
Foo -- PDF detail	3 hrs
Foo -- PDF summary	3 hrs
Foo -- Web detail	3 hrs
Foo -- Web summary	3 hrs

“I might as well just write the thing.”

You ARE writing it.

Write your code

- Plan tasks for the upcoming week
- Do one task and complete it
- Do the next task and complete it
- Don’t jump more than necessary
- Too much jumping around between tasks means not enough granularity

Planning the week

#	Name	Pts	M	T	W	T	F
8	Create USERS table	4	X				
9	Create INVOICES table	3	X				
10	Foo report -- Data input	2		X			
11	Foo -- Data marshaling	4		X			
14	Foo -- PDF cover page	4			X		
15	Foo -- PDF detail	3			X		
16	Foo -- PDF summary	3				X	
28	Foo -- Web detail	3				X	
29	Foo -- Web summary	3					X

Track your progress

Track your progress

#	Name	Pts	M	T	W	T	F	✔
8	Create USERS table	4						
9	Create INVOICES table	3						
10	Foo report -- Data input	2						
11	Foo -- Data marshaling	4						
14	Foo -- PDF cover page	4						
15	Foo -- PDF detail	3						
16	Foo -- PDF summary	3						
28	Foo -- Web detail	3						
29	Foo -- Web summary	3						

Monday

#	Name	Pts	M	T	W	T	F	✔
8	Create USERS table	4	4					✔
9	Create INVOICES table	3	3					
10	Foo report -- Data input	2						
11	Foo -- Data marshaling	4						
14	Foo -- PDF cover page	4						
15	Foo -- PDF detail	3						
16	Foo -- PDF summary	3						
28	Foo -- Web detail	3						
29	Foo -- Web summary	3						

Tuesday

#	Name	Pts	M	T	W	T	F	✔
8	Create USERS table	4	4					✔
9	Create INVOICES table	3	3	5				✔
10	Foo report -- Data input	2		2				
11	Foo -- Data marshaling	4						
14	Foo -- PDF cover page	4						
15	Foo -- PDF detail	3						
16	Foo -- PDF summary	3						
28	Foo -- Web detail	3						
29	Foo -- Web summary	3						

Wednesday

#	Name	Pts	M	T	W	T	F	✔
8	Create USERS table	4	4					✔
9	Create INVOICES table	3	3	5				✔
10	Foo report -- Data input	2		2	1			✔
11	Foo -- Data marshaling	4			2			
14	Foo -- PDF cover page	4						
15	Foo -- PDF detail	3						
16	Foo -- PDF summary	3						
28	Foo -- Web detail	3						
29	Foo -- Web summary	3						
4	Create SYSINFO table	Bug			5			✔

Thursday

#	Name	Pts	M	T	W	T	F	✔
8	Create USERS table	4	4					✔
9	Create INVOICES table	3	3	5				✔
10	Foo report -- Data input	2		2	1			✔
11	Foo -- Data marshaling	4			2	2		✔
14	Foo -- PDF cover page	4				2		
15	Foo -- PDF detail	3						
16	Foo -- PDF summary	3						
28	Foo -- Web detail	3						
29	Foo -- Web summary	3						
4	Create SYSINFO table	Bug			5			✔

Friday

#	Name	Pts	M	T	W	T	F	✔
8	Create USERS table	4	4					✔
9	Create INVOICES table	3	3	5				✔
10	Foo report -- Data input	2		2	1			✔
11	Foo -- Data marshaling	4			2	2		✔
14	Foo -- PDF cover page	4				2	1	✔
15	Foo -- PDF detail	3					6	✔
16	Foo -- PDF summary	3					1	
28	Foo -- Web detail	3						
29	Foo -- Web summary	3						
4	Create SYSINFO table	Bug			5			✔

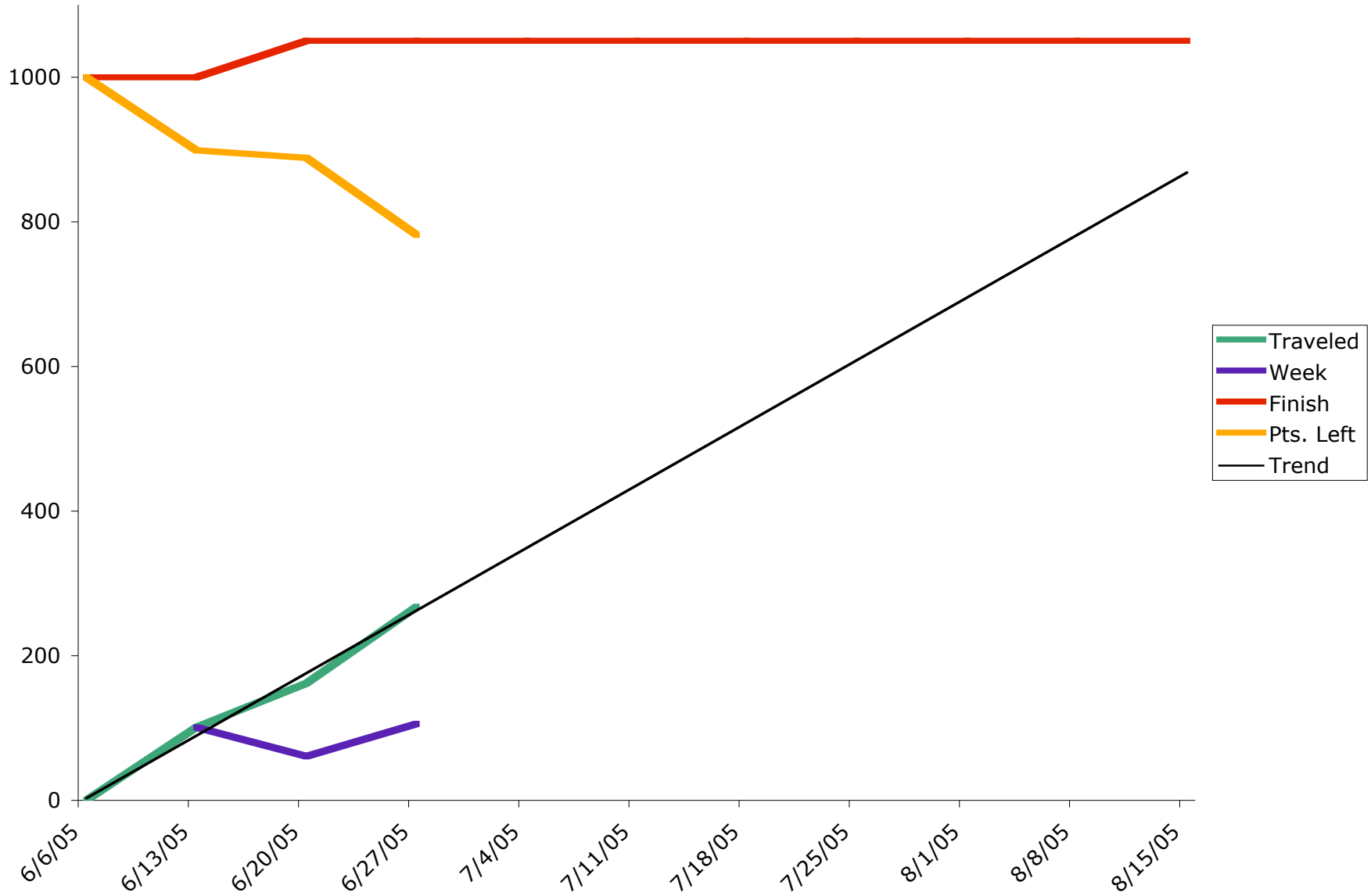
Counting points

#	Name	Pts	M	T	W	T	F	✔
8	Create USERS table	**4**	4					✔
9	Create INVOICES table	**3**	3	5				✔
10	Foo report -- Data input	**2**		2	1			✔
11	Foo -- Data marshaling	**4**			2	2		✔
14	Foo -- PDF cover page	**4**				2	1	✔
15	Foo -- PDF detail	**3**					6	✔
16	Foo -- PDF summary	3					1	
28	Foo -- Web detail	3						
29	Foo -- Web summary	3						
4	Create SYSINFO table	Bug			5			✔

Tracking the weeks

Week	Larry	Randal	Damian	Andy	Week	Traveled	Finish	Left
6/6	0	0	0	0	0	0	1000	1000
6/13	33	34	26	8	101	101	1000	899
6/20	38	0	23	0	61	162	1050	888
6/27	37	39	25	5	106	268	1050	782
7/04								
7/11								
7/18								

After three weeks

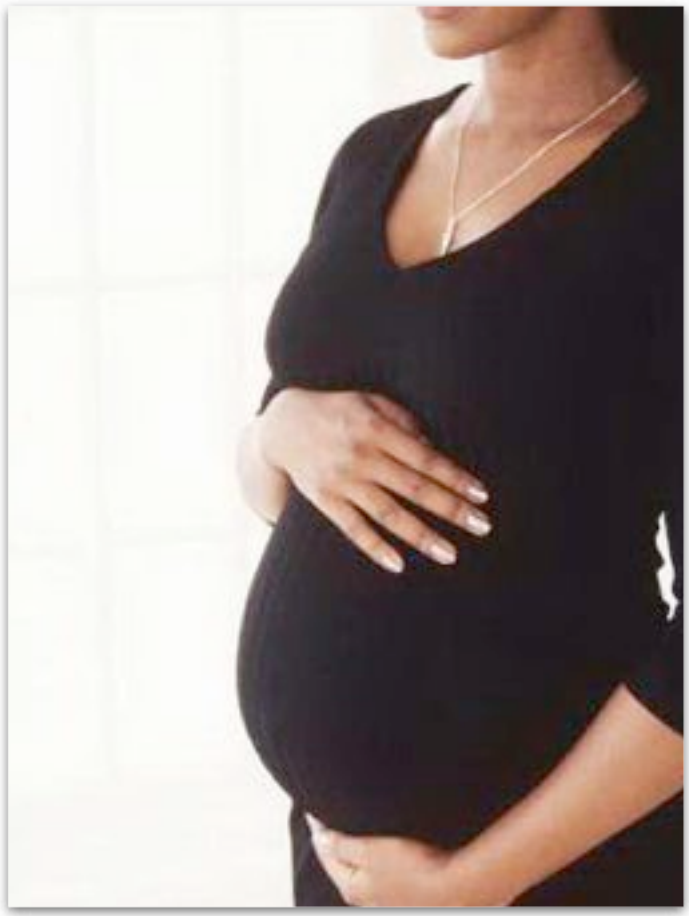


Tracking your progress

- All tasks are binary
- Track points completed on a velocity chart
- No points for rework
  - Bug fixes & rework are buying on credit

You can't be "a little bit pregnant"

- A task is done, or it is not done.
- "I'm about 90% done with these tasks."
- "I'm done with that code. I just need to clean it up."



Adjust

- Shuffle tasks if order doesn't make sense
- Re-estimate and break up tasks if your initial estimates are bad.
- Bugs break the 100% done rule
  - Go back and fix them NOW, or
  - Mark the task unfinished, and subtract the points you earned.

Handle requests

- “Can you do X?”
  - Yes
- “How long will it take?”
  - I need about a day to tell you
- “Can you just give me a ballpark?”
  - “Yes, if you would like me to take a day off of our work on the project.”

Thank you for coming and listening

Slides at
http://petdance.com/perl/