

# THE INVISIBLE TRACEBACK

BLOCKERS THAT MAKE  
POTENTIAL CONTRIBUTORS  
DROP OUT  
(AND HOW TO FIX THEM)

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**TWO REQUESTS:**

# TWO REQUESTS:

1. PLEASE IGNORE ME

# TWO REQUESTS:

1. PLEASE IGNORE ME

2. PLEASE KEEP TRACK OF  
WHAT YOU DO WHEN YOU  
IGNORE ME

**WHO AM I?**

**WHO AM I?**

**WHO AM I?**

**HACKER**

**WHO AM I?**

**HACKER OF SYSTEMS**

**WHO AM I?**

**HACKER OF SYSTEMS FOR  
PEOPLE**

**WHO AM I?**

**HACKER OF SYSTEMS OF  
PEOPLE**

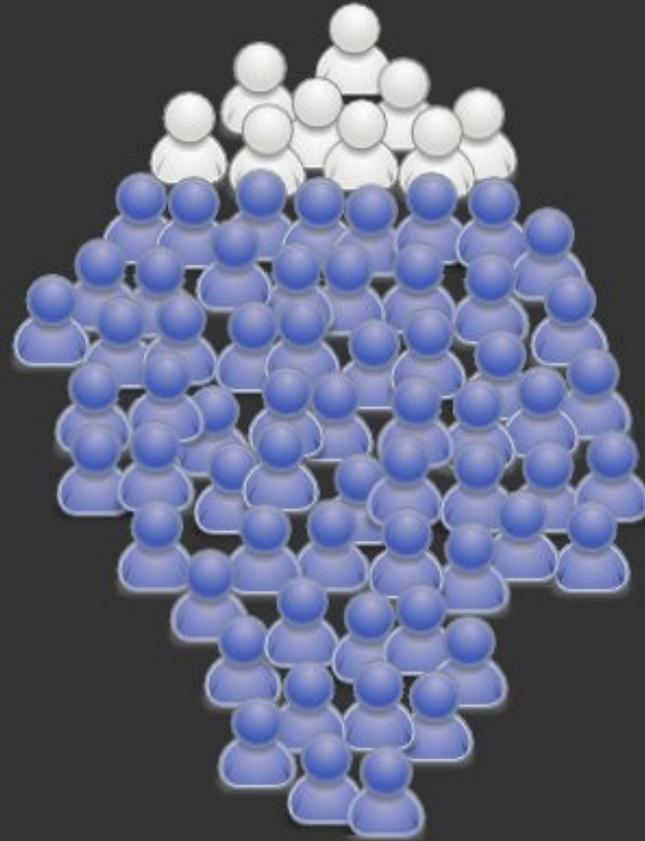
**WHO AM I?**

**HACKER OF SYSTEMS OF  
PEOPLE MAKING SYSTEMS  
FOR PEOPLE**

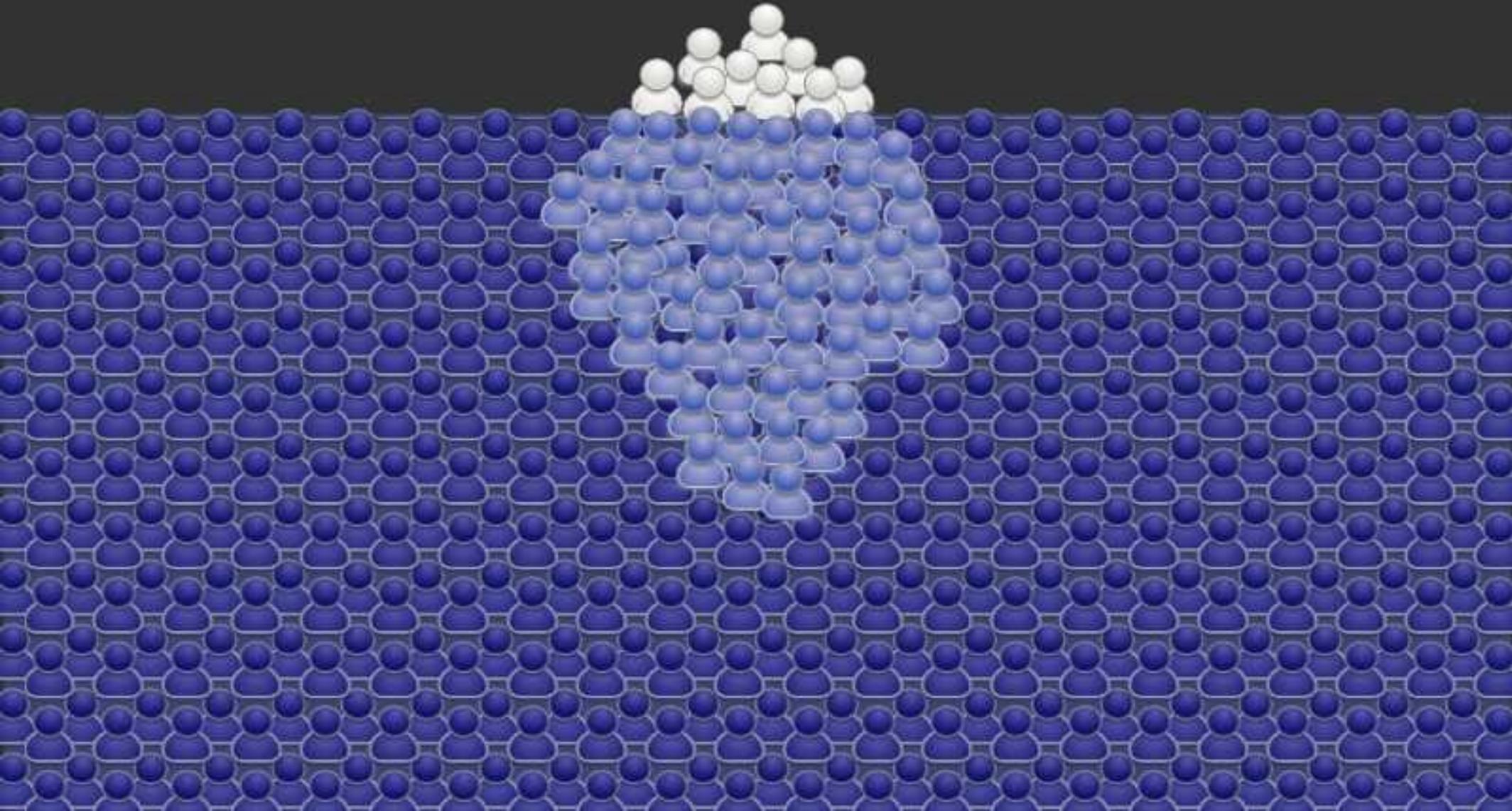
**WHERE ARE THE  
PEOPLE?**



# HERE.



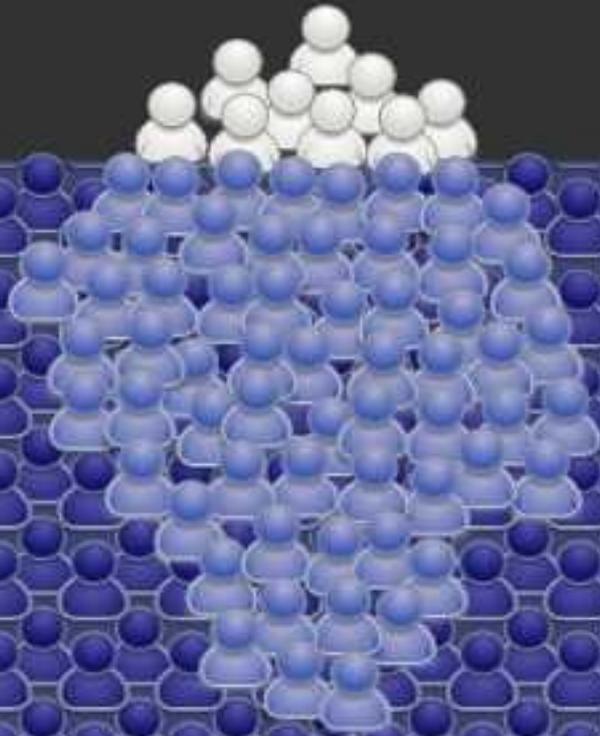
**OR REALLY, HERE.**



# UNIX PHILOSOPHY #12: RULE OF REPAIR

**"WHEN YOU MUST FAIL,  
FAIL NOISILY  
AND AS SOON AS POSSIBLE."**

**THESE PEOPLE  
KNOW IT.**



**THESE PEOPLE  
DON'T.**

**LISTEN  
UNDERWATER.**

**THE IMPORTANT THING IS  
WHAT YOU DON'T HEAR.**

# TRACEBACK

WEB.SERVER TRACEBACK (MOST RECENT CALL LAST):

```
EXCEPTIONS.VALUEERROR?: INVALID LITERAL FOR INT():
/USR/LOCAL/LIB/PYTHON2.4/SITE-PACKAGES/TWISTED/WEB/SERVER.PY, LINE
152 IN PROCESS 150 SELF.POSTPATH = MAP(UNQUOTE,
STRING.SPLIT(SELF.PATH[1:], '/')) 151 TRY: 152 RESRC =
SELF.SITE.GETRESOURCEFOR(SELF) 153 SELF.RENDER(RESRC) SELF SITE
TWISTED.WEB.SERVER.SITE INSTANCE @ 0X4086F32C
<TWISTED.WEB.SERVER.SITE INSTANCE AT 0X4086F32C> PATH '/AMD-
FULL/BUILDS/' POSTPATH LIST INSTANCE @ 0X40D2F2EC LOCALS SELF
TWISTED.WEB.SERVER.REQUEST INSTANCE @ 0X40D2448C <GET /AMD-
FULL/BUILDS/ HTTP/1.1> GLOBALS UNQUOTE <BUILT-IN FUNCTION UNQUOTE>
STRING <MODULE 'STRING' FROM '/USR/LIB/PYTHON2.4/STRING.PYC'>
/USR/LOCAL/LIB/PYTHON2.4/SITE-PACKAGES/TWISTED/WEB/SERVER.PY, LINE
507 IN GETRESOURCEFOR 505 # SERVERS AND DISCONNECTED SITES. 506
REQUEST.SITEPATH = COPY.COPY(REQUEST.PREPATH) 507 RETURN
RESOURCE.GETCHILDFORREQUEST(SELF.RESOURCE, REQUEST) 508 SELF
RESOURCE BUILDBOT.STATUS.HTML.STATUSRESOURCE? INSTANCE @
0X4086512C <BUILDBOT.STATUS.HTML.STATUSRESOURCE? INSTANCE AT
0X4086512C> LOCALS SELF TWISTED.WEB.SERVER.SITE INSTANCE @
0X4086F32C <TWISTED.WEB.SERVER.SITE INSTANCE AT 0X4086F32C> REQUEST
TWISTED.WEB.SERVER.REQUEST INSTANCE @ 0X40D2448C <GET /AMD-
FULL/BUILDS/ HTTP/1.1> GLOBALS COPY <MODULE 'COPY' FROM
'/USR/LIB/PYTHON2.4/COPY.PYC'> RESOURCE <MODULE
'TWISTED.WEB.RESOURCE' FROM '/USR/LOCAL/LIB/PYTHON2.4/SITE-
PACKAGES/TWISTED/WEB/RESOURCE.PYC'> /USR/LOCAL/LIB/PYTHON2.4/SITE-
```

**TRACEBACK**

**TRACEBACK**

**OKAY.**

**LET'S MOVE AROUND  
A BIT.**

# BLOCKERS

1. I DON'T HAVE IT.
2. I'M NOT ALLOWED TO USE IT.
3. I'M NOT ALLOWED TO PLAY WITH IT.
4. I DON'T KNOW I CAN TWEAK IT.
5. I DON'T KNOW HOW TO TWEAK IT.
6. I DON'T SEE WHY I'D TWEAK IT.
7. I DON'T KNOW ANYONE WOULD CARE ABOUT MY TWEAKS.
8. I DON'T KNOW WHO WOULD CARE ABOUT MY TWEAKS.
9. I DON'T KNOW HOW TO APPROACH THE PEOPLE WHO WOULD CARE ABOUT MY TWEAKS.
10. I DON'T KNOW THAT THIS IS A BUG.

# **MORE BLOCKERS**

**11. THE PEOPLE ON THE MAILING LIST ARE MEAN,**

**12. I'M AFRAID TO BREAK IT.**

**13. I DON'T WANT TO MAINTAIN MY TWEAK FOREVER.**

**14. NO VOLUNTEER TRIAGE. OR: VOLUNTEER TRIAGE, BUT NO VOLUNTEER EXCLUSION**

**15. I'M TOO NEW TO FIT IN WITH THE OLD HATS**

**16. SITE IS NOT WELL KNOWN**

**17. NEED A BETTER ELEVATOR PITCH**

**18. NEED A BETTER PROJECT TO START WITH GRADUALLY.**

# **YET MORE BLOCKERS**

**19. NEED TO CLARIFY APPROPRIATENESS OF PROJECT FOR PARTICULAR SITUATIONS.**

**20. I DON'T KNOW IF THIS WILL SUIT MY NEEDS**

**21. I DON'T KNOW IF THIS WILL SCALE**

**22. I DON'T UNDERSTAND THE SCOPE OF THE PROJECT**

**23. I DON'T KNOW ENGLISH**

**24. I'M TRYING TO BE POLITE, AND PEOPLE ARE IGNORING ME**

**25. I'VE SIGNED AN NDA**

**26. I CAN'T FIND THE CORRECT PLACE TO CONTRIBUTE (TOO MANY MAILING LISTS, ETC)**

# LEARNING ABOUT VS LEARNING TO BE

IT'S NOT WHAT YOU KNOW,  
IT'S WHAT YOU WANT TO  
LEARN.

# HOW TO GET A JOB

1. STUDY HARD
2. GET GOOD GRADES
3. MAKE A RESUME
4. DO RESEARCH
5. APPLY TO JOBS
6. GET INTERVIEWED
7. GET AN OFFER
8. ACCEPT THE OFFER
9. GO TO ORIENTATION
10. WORK ON SOMETHING

# HOW TO WORK ON OPEN SOURCE

10. WORK ON SOMETHING

# WHAT DO THESE STEPS DO?

2. GET GOOD GRADES
3. MAKE A RESUME
4. DO RESEARCH
5. APPLY TO JOBS
6. GET INTERVIEWED
7. GET AN OFFER
8. ACCEPT THE OFFER
9. GO TO ORIENTATION

# FILTERS

HIRING DEPENDS ON THE  
APPROVAL OF ONE.

PARTICIPATION DEPENDS ON  
A RAPPORT WITH MANY.

**SCAFFOLDING**

**SCAFFOLDING**

# DREYFUS MODEL

1. NOVICE

2. ADVANCED BEGINNER

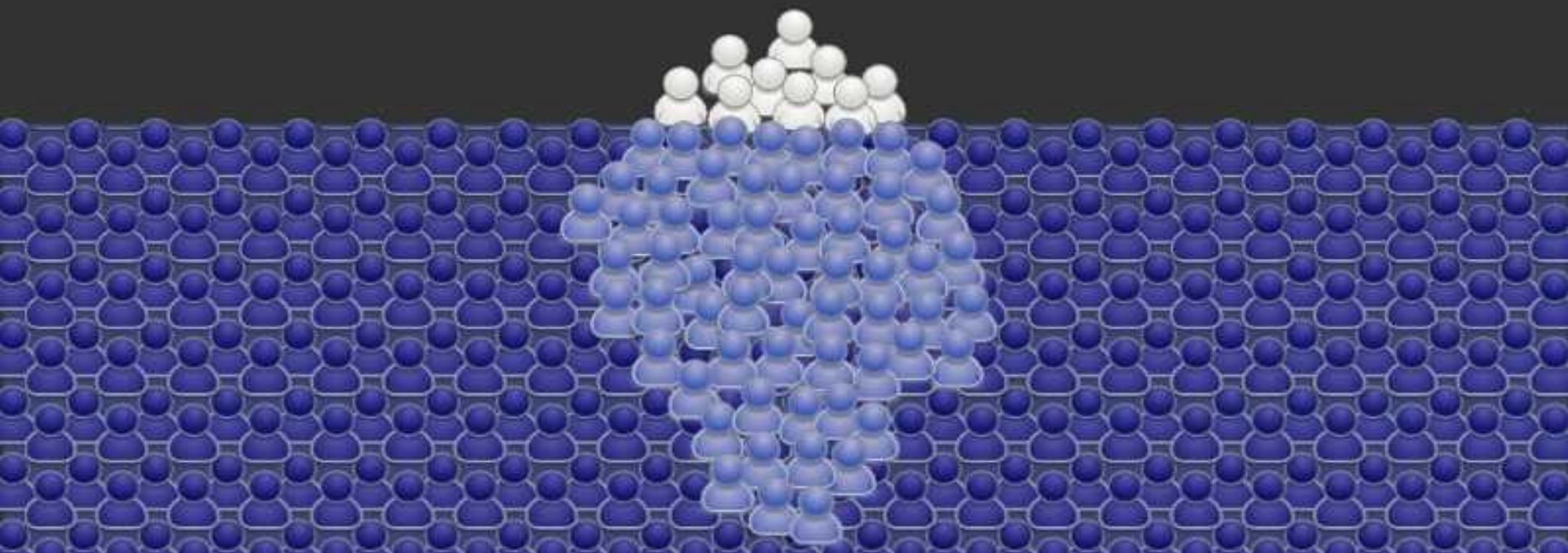
3. COMPETENT

4. PROFICIENT

5. EXPERT

# **RADICAL TRANSPARENCY**

**TEACHES STUDENTS YOU  
DIDN'T KNOW WERE THERE**



**(LIKE THESE FOLKS)**

# FANCY WORDS

1. ACCIDENTAL LEARNING

2. ZONE OF PROXIMAL  
DEVELOPMENT

3. LEGITIMATE PERIPHERAL  
PARTICIPATION

# LEARNING TO BIKE

1. WATCHING

2. SOMEBODY PUSHES YOU

3. RIDING ON THE DRIVEWAY

**PAY IT FORWARD**

**TO PAY FOR A LESSON,  
DOCUMENT IT.**

# LEGITIMATE PERIPHERAL PARTICIPATION

1. MISSION-CRITICAL,

3. NOBODY REALLY CARES

# LEGITIMATE PERIPHERAL PARTICIPATION

1. MISSION-CRITICAL,
2. WE HAVE NO TIME
3. NOBODY REALLY CARES

# **"HARD TO CONTRIBUTE" IS A BUG**

- 1. MISSION-CRITICAL**
- 2. WE HAVE NO TIME**
- 3. NOBODY REALLY CARES**

# DREYFUS MODEL

1. NOVICE

2. ADVANCED BEGINNER

3. COMPETENT

4. PROFICIENT

5. EXPERT

**RULE OF THUMB**

**EVERYTHING IS HACKABLE.**

# DREYFUS MODEL

1. NOVICE

2. ADVANCED BEGINNER

3. COMPETENT

4. PROFICIENT

5. EXPERT

# ALGORITHM

1. THINK OF SOMETHING YOU ALREADY CARE ABOUT
2. RUN (WHILE THINKING OUT LOUD)

# UNIX PHILOSOPHY #12: RULE OF REPAIR

**"WHEN YOU MUST FAIL,  
FAIL NOISILY  
AND AS SOON AS POSSIBLE."**

# TRACEBACK

1. OLDER SIBLING USES  
LINUX

2. DISCOVER THE GIMP

3. OFFER TO HELP

4. "NO, GO AWAY"

# TRACEBACK

1. INTRODUCE SELF ON  
MAILING LIST

2. "I'M IN CHARGE"

# TRACEBACK

1. OFFER TO HELP

2. WAIT FOR INSTRUCTIONS

3. LOOP RUNS FOREVER

**TRACEBACK**

**HOW ABOUT YOURS?**

# THANK YOU

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