

Tech Problem Solving

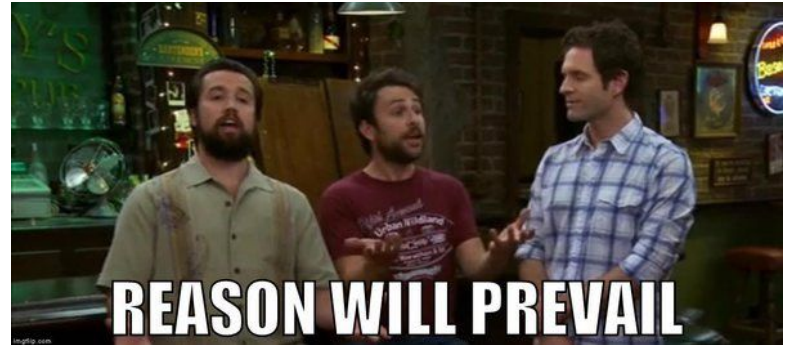
Will Leeson

Problem Solving

1. Define the problem
2. Determine the cause
3. Identify solutions
4. Analyze your options
5. Implement best option
6. Evaluate the situation

Define the Problem

- Clearly state what is going wrong
 - “It isn’t working” doesn’t tell you anything
 - What are your expectations?
 - How does the situation differ?
- Don’t get upset
 - Suppress your emotions
 - Reason will prevail



Determine the Cause

- Symptoms can be misleading
- Break the problem into smaller checkpoints
 - Follow the checkpoints
 - When you reach one that doesn't work:
 - Ask “Can I reduce the problem more?”
 - If not, this is likely the cause



frog syndrome

symptoms:

- frog



Identify Solutions

- Have you dealt with a similar problem?
 - How did you fix that?
 - Can that be applied here?
- What resources do you have access to?
 - A manual?
 - The internet?
 - An “expert”?



Google is your friend

- In most cases, someone has dealt with this before you
- There are thousands of forums dedicated to products
- Someone will be there to answer
 - A paid worker
 - A kind soul

Doctors: Googling stuff online does not make you a doctor.

Programmers:



How to Google for Help

- If there is an error message
 - Just google that
- If there isn't
 - Google what you are trying to do
 - Brief statements are good
 - Include product information
 - Bad - “How do I get my TV to connect to my wifi router?”
 - Better - “LG TV can't connect to wifi”

Analyze Your Options

- How complex are your solutions?
 - Occam's Razor
- How confident are you in them?
 - Is there an expert?
 - How confident are they?
- How “expensive” is it to try?
- How isolated is your solution?

Implement Best option

- Do not rush
 - May miss steps
 - Sometimes tech just takes a bit
- Don't try multiple mixing solutions
 - May lead to confusion
 - Harder to backtrack
- Double check
 - "Measure Twice, Cut once"



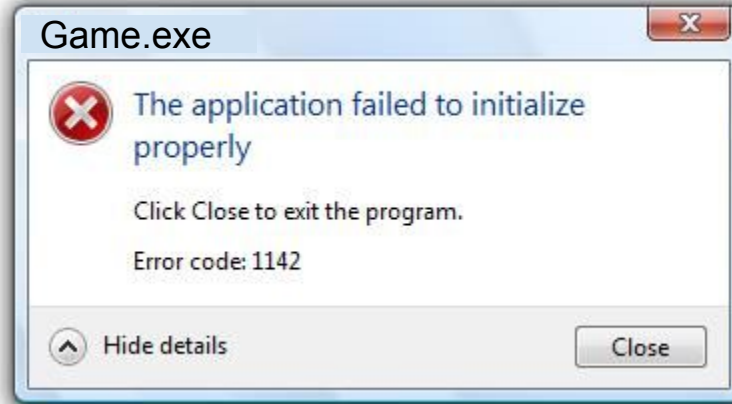
Evaluate the Situation

- Is it working as intended?
 - Woohoo! Your done (Maybe)
- Have things improved?
 - Why did it help?
 - Is there a logical next step?
- Have things gotten worse?
 - Can you undo what you did?
 - How could what you tried affect it?
- Have things changed?
 - Maybe your solution had nothing to do with the problem
 - You can check that off the list

Situation: My game
won't open

Define the problem

- What are my expectations?
 - Normally, when i double click the icon, the game will open
- How does this situation differ?
 - Now, when I double click the icon, an new window appears with a message?

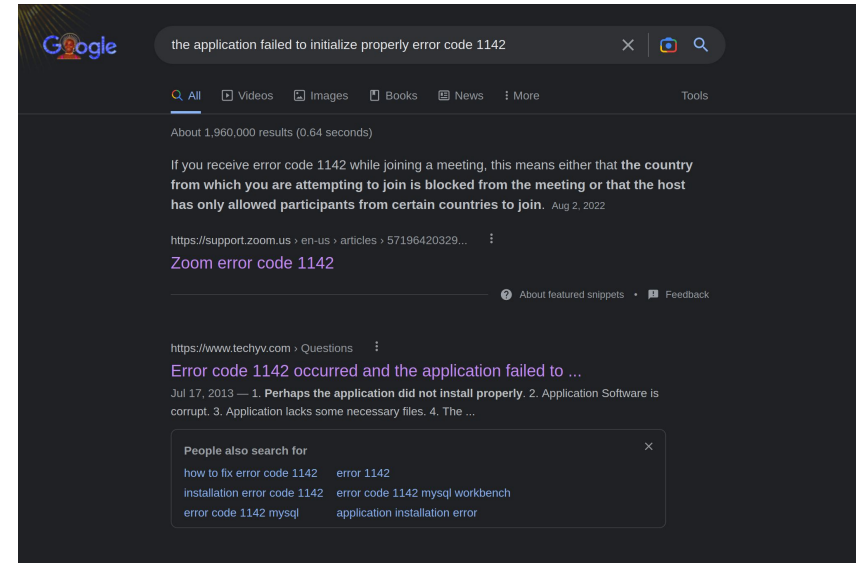


Determine the cause

- Break the problem into smaller checkpoints
 - Is my computer working fine besides the app? Yes
 - Can I open an app? Yes
 - What happens between clicking the button and the error message? Nothing
- The app itself is having troubles

Identify Solutions

- Google the error message
 - I'm not using Zoom, so first response isn't helpful
 - Second one seems promising



Identify Solutions

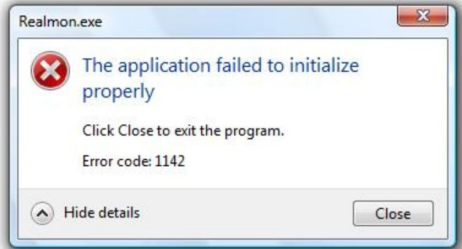
- Google the error message
 - I'm not using Zoom, so first response isn't helpful
 - Second one seems promising
- Check the prompt

Asked By **Redacted** 70 points ● N/A Posted on - 07/17/2013

Hello,

I am getting the following weird Windows system error message. I can't initialize the application because of the error saying "The application failed to initialize properly". I have tried to solve this system error but there was nothing to resolve this matter that's why I need an expert's advice for the proper resolution.

Thanks for help.



The image shows a screenshot of a Windows error dialog box. The title bar reads 'Realmon.exe'. The main text says 'The application failed to initialize properly'. Below that, it says 'Click Close to exit the program.' and 'Error code: 1142'. At the bottom, there are two buttons: 'Hide details' and 'Close'.

Error: the application failed to initialize properly Click close to exit the program.

Error code: 1142

Identify Solutions

- Google the error message
 - I'm not using Zoom, so first response isn't helpful
 - Second one seems promising
- Check the prompt
- Check the answer

Hi,




There can be many things that caused this error.

Some of them can be:

1. Perhaps the application did not install properly.
2. Application Software is corrupt.
3. Application lacks some necessary files.
4. The system does not meet the software requirements. Etc.

Try reinstalling the software!
If still does not work contact the seller.
If the software does not work check the software requirements.

Hope this helps you! 😊

	About Redacted	 Vote Up		0	 Vote Down	
	Questions	Answers	Best Answers			
	0	100	51			

Posted on - 11/16/2013

Question Category: [Misc Software](#)

Analyze your options

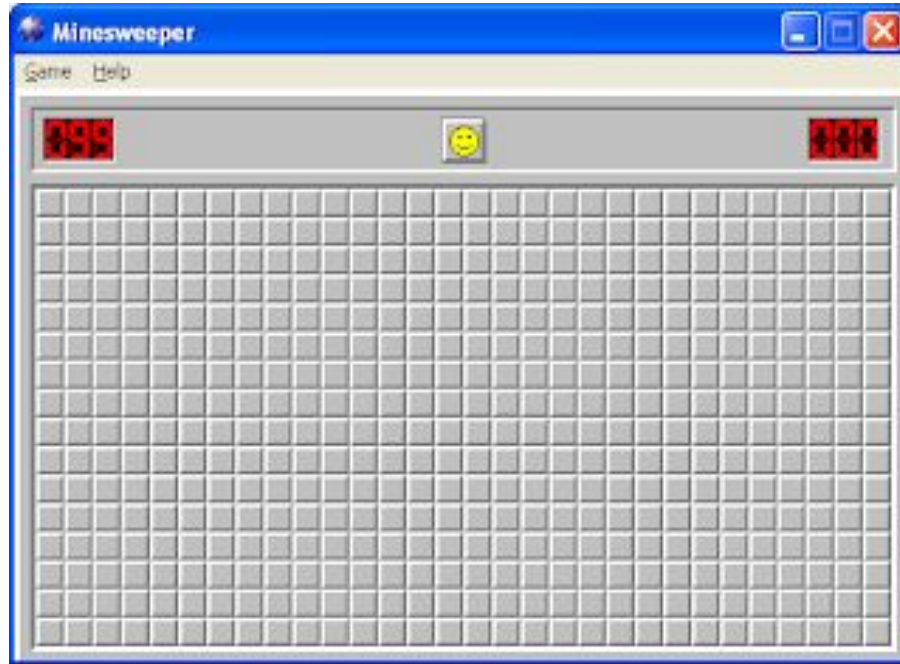
- How complex are your solutions?
 - I installed it once, I can do it again
- How confident are you in them?
 - Seems reasonable
- How “expensive” is it to try?
 - Cheap, this is a game and my info is tied to my account
- How isolated is your solution?
 - Very. Nothing relies on this game being installed

Implement Best option

- Do not rush
 - Wait for the uninstall
 - Wait for the install
- Don't try multiple mixing solutions
 - I'm only going to reinstall it
- Double check
 - Did I correctly uninstall?
 - Did I do a "fresh" install?

Evaluate the Situation

IT WORKS!

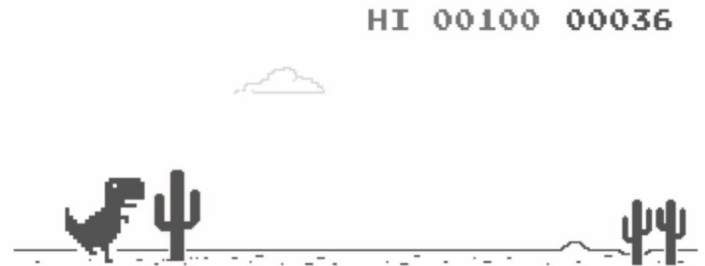
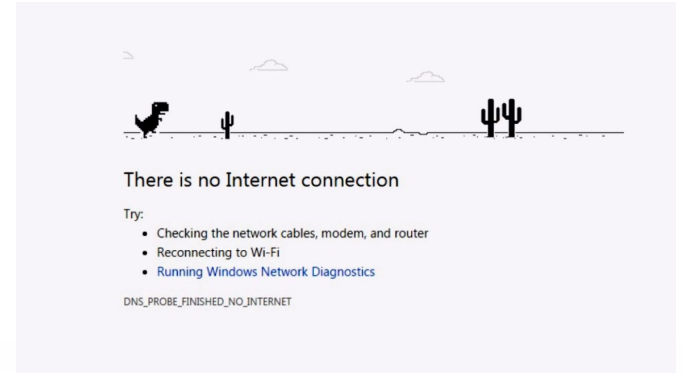


Case Study 1

Wifi Certificates

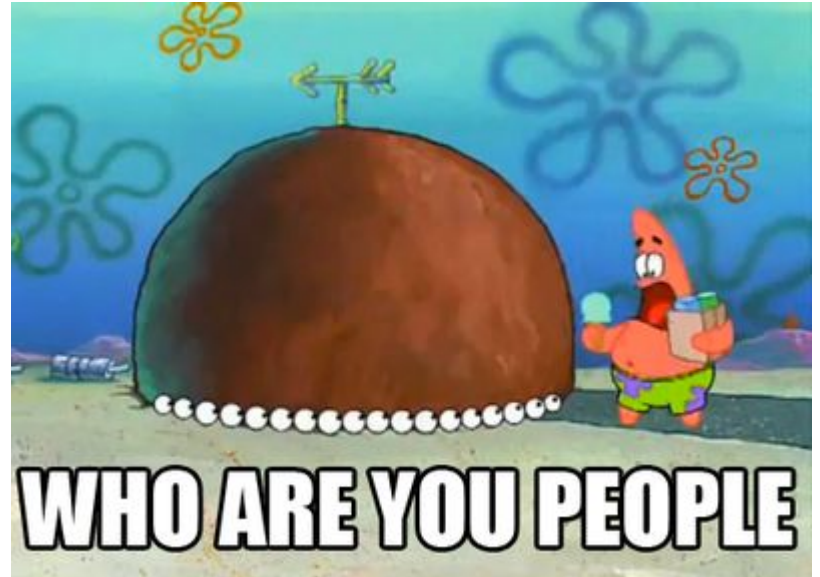
Wifi Certificates

- Define the problem
 - Can't access the wifi
- Determine the cause
- Identify Solutions
- Analyze your options
- Implement best option
- Evaluate the solution



Wifi Certificates

- Scenario
 - You want to hire someone
 - You need to do a background check
 - They provide identification
- How do you know they are who they say they are?



Wifi Certificates

- Diffie-hellman allows secure connection
- But how do we verify you are talking to who you think you are
- In the scenario from before:
 - Give ID to government Agency
 - They show it is not forged
- **Certificate Authority**
 - A group that proves the identify of websites
 - Can be a private company or non-profit organization

Case Study 2

Planned Obsolescence

Planned Obsolescence

- Define the problem
 - iPhone can't connect to data
- Determine the cause
- Identify Solutions
 - Talk to a “genius”, get a new phone
- Analyze your options
- Implement best option
- Evaluate the solution



Planned Obsolescence

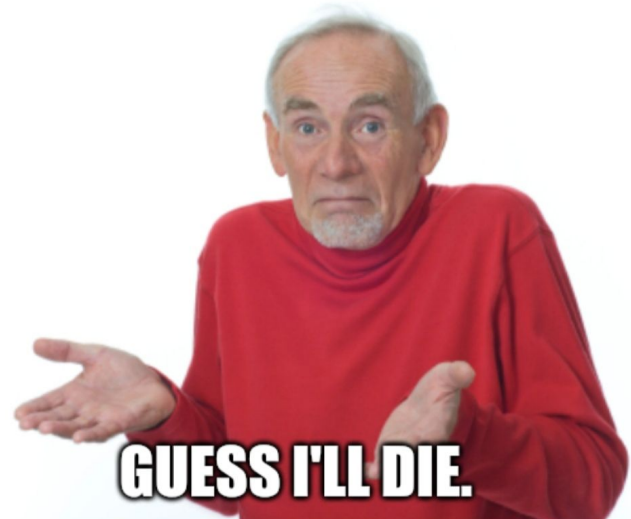
- The concept of designing a product to eventually be useless
 - Using bad parts
 - Ending support
 - Etc.
- Software Updates
 - Generally useful
 - Can cause slowing because:
 - Requires more energy to fast run
 - Requires more computations
 - The company changes the code to INTENTIONALLY SLOW YOU DOWN

Case Study 3

Turn it off and on again

Turn it off and on again

- Define the problem
 - iPhone froze
- Determine the cause
- Identify Solutions
 - Wait for it to fix it self
 - Turn it off
 - Wait for it to fix it self (but longer)
- Analyze your options
- Implement best option
- Evaluate the solution



Turn it off and on again

- Tried and true advice
- But why does it work?
- What happens when you turn off your computer?

