

TRUST, SAFETY, AND RELIABILITY

CAUSES OF COMPUTER FAILURES

GROUP 1

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OBJECTIVES

01

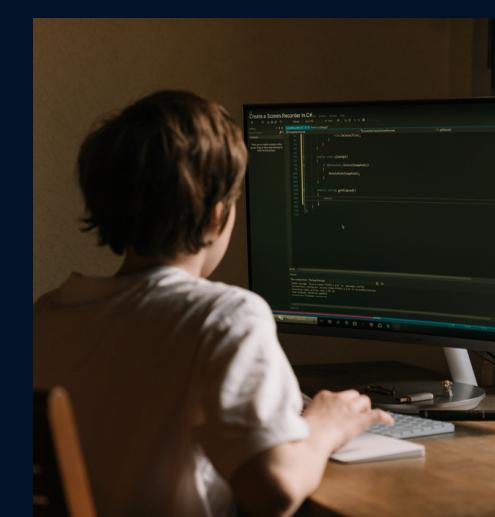
TO KNOW THE CAUSES OF COMPUTER FAILURES

02

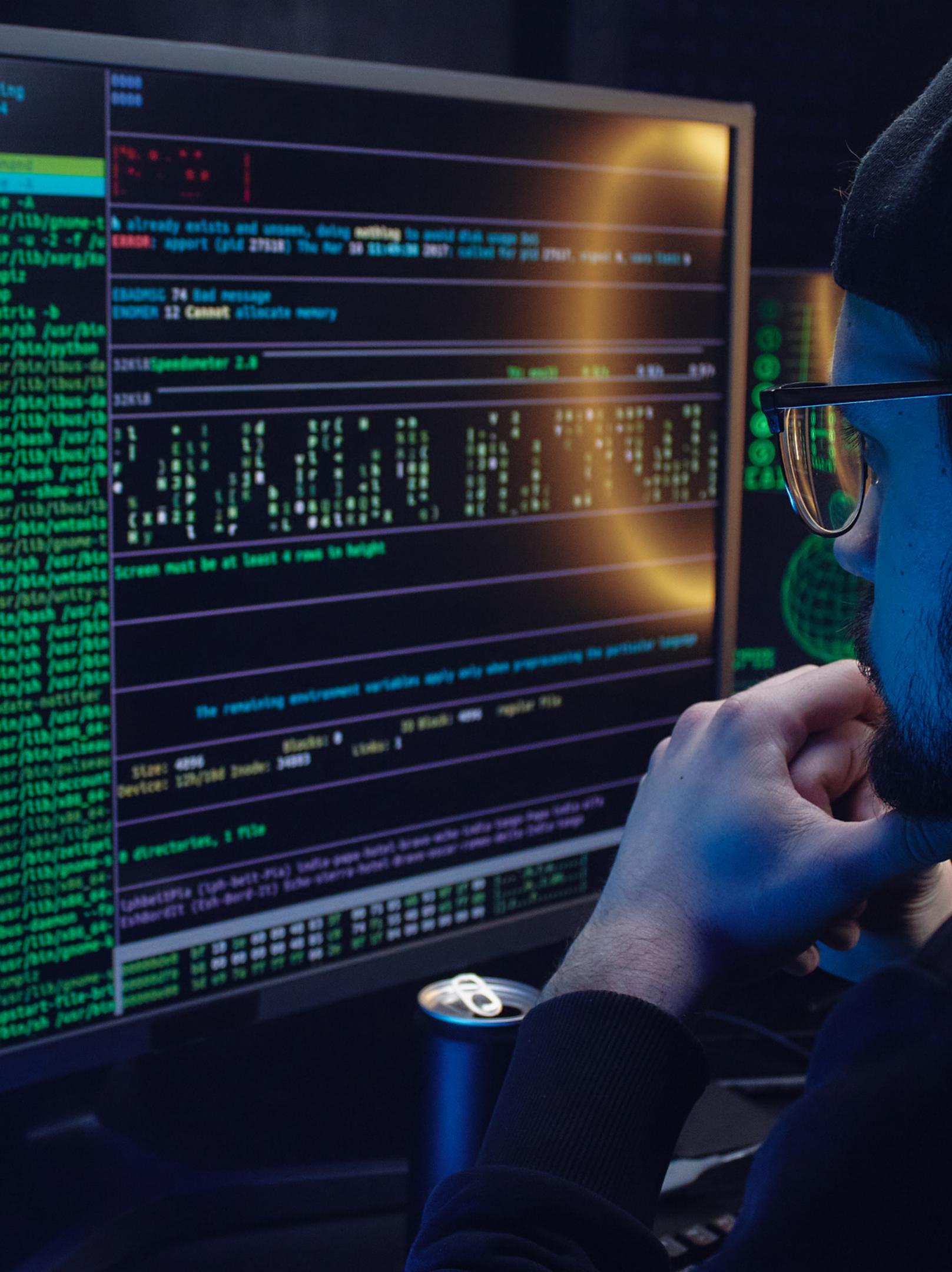
TO UNDERSTAND THE IMPACT OF COMPUTER FAILURE

03

TO BE AWARE OF COMPUTER FAILURES' PREVENTION MEASURES



Everyone knows that this is the age of computer and vast majority of people are using computer. Development of science and technology has direct effect on our daily life as well as in our social life. Computer technology has made communication possible from one part of the world to the other in seconds. They can see the transactions in one part of the world while staying in the other part. Computer development is one of the greatest scientific achievements of the 20th century. Computers are used in various fields as well as in teaching and learning



COMMON COMPUTER PERFORMANCE FAILURE OR ISSUES

- POOR MAINTENANCE
- POWER SURGES AND SPIKES
- HARDWARE FAILURE
- SOFTWARE GLITCHES
- HUMAN ERROR



POOR MAINTENANCE



*One of the most common
reasons for computer failure
is poor maintenance.*

POWER SURGES AND SPIKES



Power surges and spikes are another leading cause of computer failure.

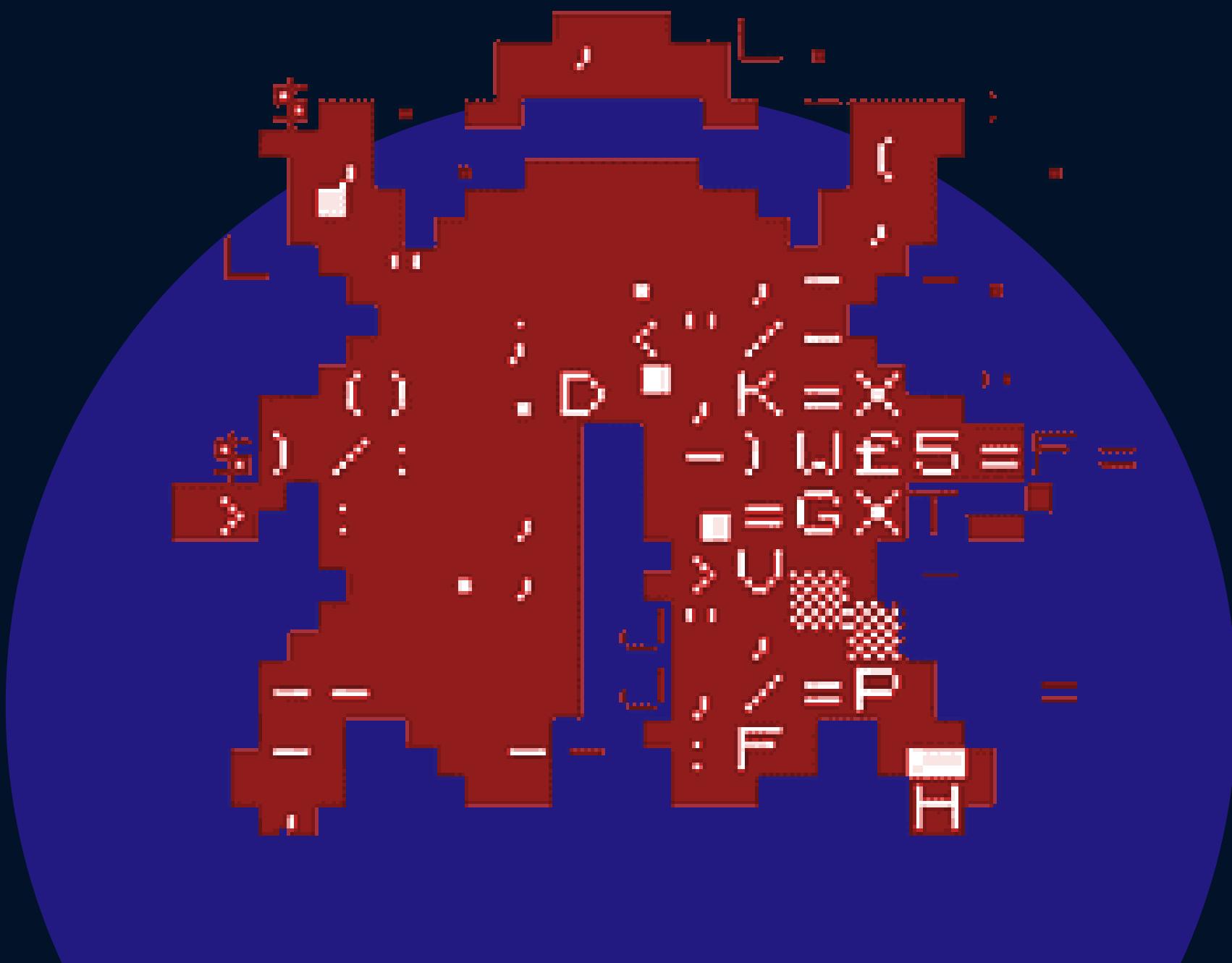
HARDWARE FAILURE

Hardware components can also fail, causing your computer to stop working



SOFTWARE GLITCHES

Sometimes, it's not the hardware that fails but the software.



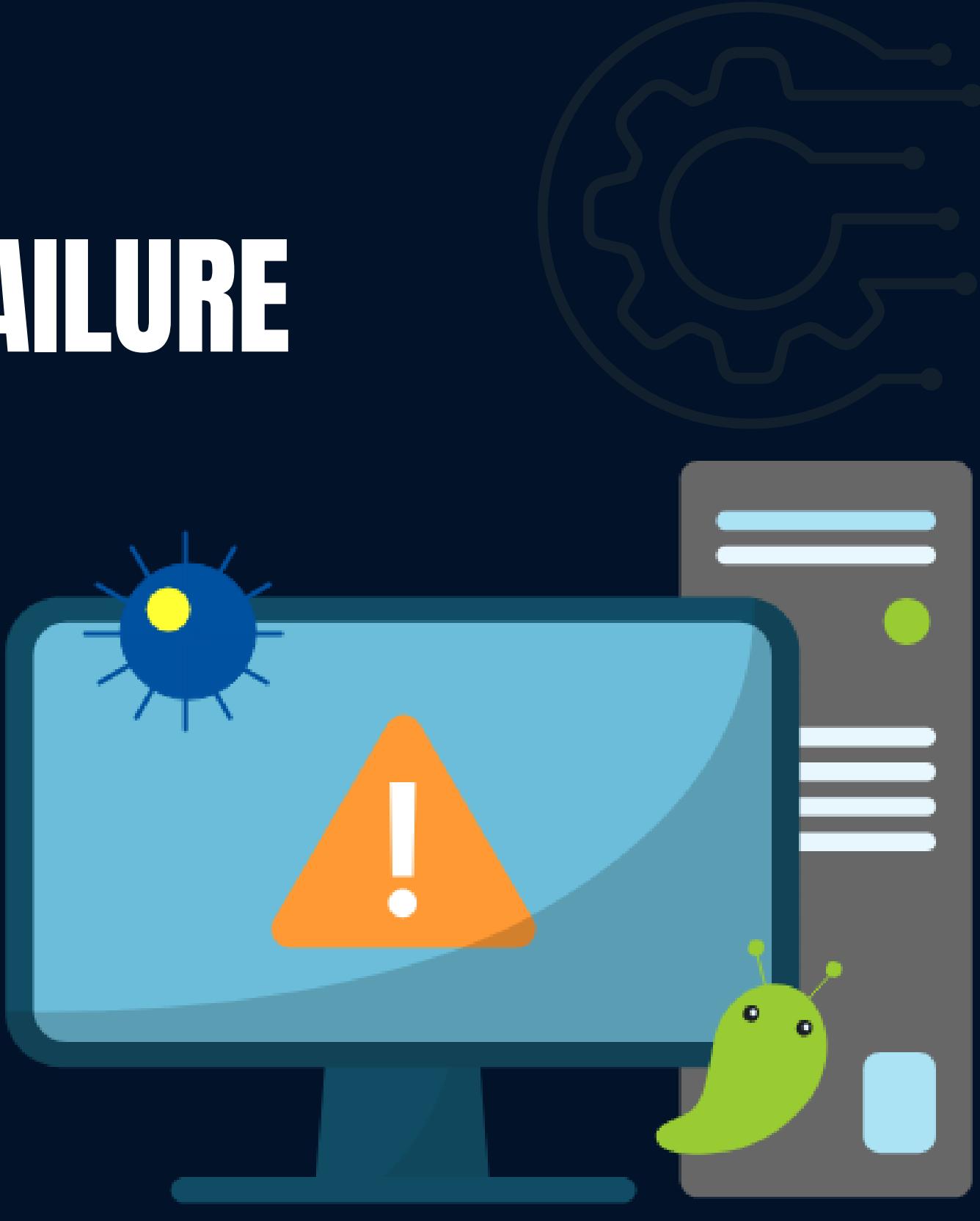
HUMAN ERROR

*an action or decision which
was not intended*



PREVENTATIVE MEASURES FOR COMMON CAUSES OF COMPUTER FAILURE

By implementing preventative measures, individuals and organizations can minimize the risk of computer failures, ensuring the reliability, security, and ethical use of technology in society.



PREVENTATIVE MEASURES FOR COMMON CAUSES OF COMPUTER FAILURE

HARDWARE FAILURES:

Proactive Cooling Systems:

- Ensure proper ventilation for devices and consider additional cooling solutions if necessary.

Surge Protectors and Uninterruptible Power Supplies (UPS):

- Invest in UPS devices to provide a power backup during outages, preventing abrupt shutdowns.

Regular Maintenance:

- Replace aging components before they fail to avoid unexpected breakdowns.



PREVENTATIVE MEASURES FOR COMMON CAUSES OF COMPUTER FAILURE

SOFTWARE ISSUES:

Regular Software Updates:

- Keep all software, including the operating system and applications, up to date to patch vulnerabilities and bugs.

Compatibility Checks:

- Before installing new software, verify its compatibility with existing programs to prevent conflicts.

Backup Systems:

- Utilize reliable backup solutions, such as cloud services or external drives.



PREVENTATIVE MEASURES FOR COMMON CAUSES OF COMPUTER FAILURE

HUMAN ERRORS:

User Training Programs:

- Emphasize data protection practices, such as verifying actions before executing critical tasks.

Systematic Maintenance Plans:

- Establish a systematic maintenance plan that includes regular updates, antivirus scans, and disk cleanup.

Secure Handling Guidelines:

- Implement guidelines for transporting and storing devices to prevent physical damage.



DIFFICULTIES IN PREVENTING COMPUTER FAILURES:

Complexity of Systems:

- Implement robust system architecture and invest in tools that automate compatibility checks. Employ experienced professionals for system design and maintenance.

Human Factor:

- Conduct regular user training programs to enhance awareness. Implement user-friendly interfaces, and employ user behavior analytics to identify potential risks.

Rapid Technological Changes:

- Establish a proactive approach to technology adoption, with regular reviews and updates. Engage in continuous learning and stay informed about emerging threats and best practices.



DIFFICULTIES IN PREVENTING COMPUTER FAILURES:



Budgetary Constraints:

- Prioritize preventive measures based on risk assessment. Explore cost-effective solutions and consider the long-term savings associated with preventing failures.

Unforeseen Circumstances:

- Develop comprehensive disaster recovery and contingency plans. Diversify suppliers to mitigate risks associated with dependencies on a single source.

Balancing Security and Usability:

- Strike a balance between security and usability by employing solutions that prioritize both aspects. Involve end-users in the design and decision-making process to ensure practical security measures.

PROFESSIONAL CONSEQUENCES, ETHICAL ISSUES, AND IMPACT ON SOCIETY:

PROFESSIONAL CONSEQUENCES:

- Failure to address computer failures can result in financial losses, damage to reputation, and decreased productivity.
- Professionals may face accountability for neglecting preventative measures, impacting their careers.



PROFESSIONAL CONSEQUENCES, ETHICAL ISSUES, AND IMPACT ON SOCIETY:

ETHICAL ISSUES:

- Neglecting preventive measures may be considered ethically irresponsible, especially if it leads to data breaches or loss of sensitive information.
- Ethical considerations include the duty to protect users' data and maintain the integrity of computer systems.



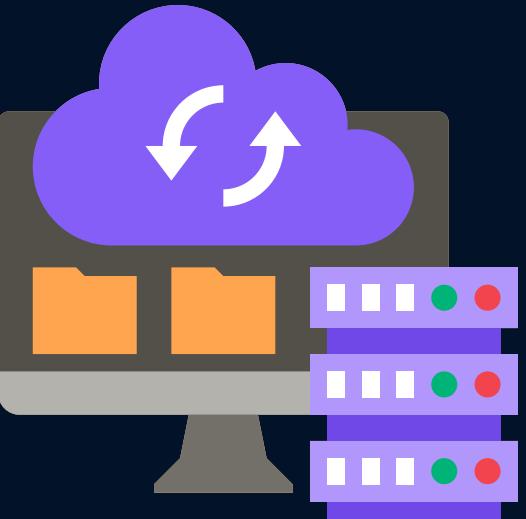
PROFESSIONAL CONSEQUENCES, ETHICAL ISSUES, AND IMPACT ON SOCIETY:

IMPACT ON SOCIETY:

- Widespread computer failures can have far-reaching consequences on society, affecting critical infrastructure, healthcare systems, and communication networks.
- Ethical responsibility extends to organizations and professionals contributing to the overall well-being of society by preventing computer failures.



SOME WAYS THAT PEOPLE PLACE THEIR TRUST IN COMPUTERS



Data Storage and Backup

- People rely on computers to backup and store their sensitive data.



Autonomous Systems

- When these technologies have undergone thorough testing and have safety precautions in place, trust is justified.



Communication

- Using encrypted and secure communication tools provides a justification for trust.



Healthcare Technology

- When medical equipment and computer-based healthcare systems follow regulations and are operated by professionals, then trust in them is justified.

SUMMARY

5 common computer performance failure or Issues

1. POOR MAINTENANCE
2. POWER SURGES AND SPIKES
3. HARDWARE FAILURE
4. SOFTWARE GLITCHES
5. HUMAN ERROR

- **Professional Consequences**

- Result in financial losses, damage to reputation, and decreased productivity.

- **Ethical Issues**

- Ethical considerations include the duty to protect users' data and maintain the integrity of computer systems.

- **Impact on Society**

- affecting critical infrastructure, healthcare systems, and communication networks.

Preventative Measures for Common Causes of Computer Failure

HARDWARE FAILURES:

1. Proactive Cooling Systems
2. Surge Protectors and Uninterruptible Power Supplies (UPS)
3. Regular Maintenance

SOFTWARE FAILURES:

1. Regular Software Updates
2. Compatibility Checks
3. Backup Systems

HUMAN ERRORS:

1. User Training Programs
2. Systematic Maintenance Plans
3. Backup Systems

RECOMMENDATIONS



Stay Informed

- **Remain informed on the latest advancements and news in technology. Making wiser choices regarding the technology you use will come from being aware of current trends and possible problems.**

Use Reputable Services

- **When it comes to software, cloud services, and internet platforms, choose reliable and well-established suppliers.**

Secure Your Devices

- **Make sure the security and antivirus software on your devices is up to date. Update your operating systems and programs on a regular basis to fix security problems.**



FOR LISTENING!

THANK YOU