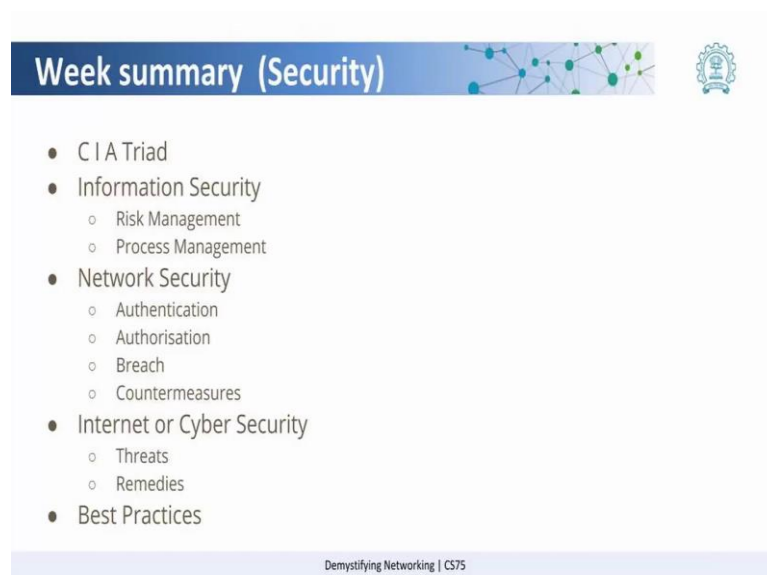


Demystifying networking
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Lecture - 98
Week Summary

So, as we have come to the end of this week, it is the right time to summarize the learnings of the entire week. So, let us start by summarizing the learnings of security.

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The slide is titled "Week summary (Security)" and features a blue header with a network diagram and the IIT Bombay logo. The main content is a bulleted list of security topics. The footer contains the text "Demystifying Networking | CS75".

- CIA Triad
- Information Security
 - Risk Management
 - Process Management
- Network Security
 - Authentication
 - Authorisation
 - Breach
 - Countermeasures
- Internet or Cyber Security
 - Threats
 - Remedies
- Best Practices

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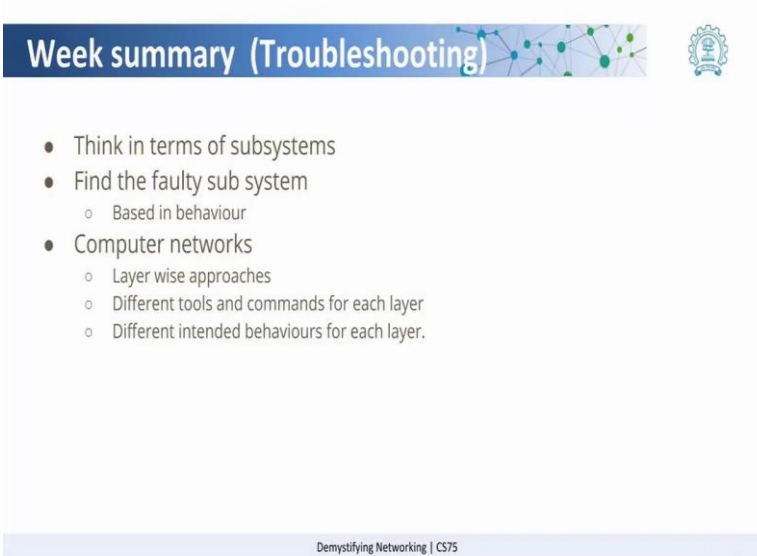
So, in security we saw certain important points, the first point was about the CIA triad which is basically Confidentiality, Integrity and Availability why they are important and the key concept that you cannot achieve all three at the time, but you need to decide which one which one or which among these are important and how you can focus towards them.

And then we looked at what information security is. In information security, we saw certain risk management procedures, how we can have processes to manage security, then we looked at information security, then we looked at network security.

In network security we saw about authentication and authorization where authentication means you are able to tell your network that you are the person who is entering and authorization is that you have the right of entering a particular system, then we looked at

what are the common type of breaches that happen in a network and what countermeasures that we can use to avoid these breaches. Here we looked at internet or cyber security and here we saw certain threats and the remedies that can be put in place to counter these threats and we also looked at some best practices that can be followed to have a secured network.

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The slide features a blue header with the text "Week summary (Troubleshooting)" and a network diagram. A small gear icon is in the top right. The main content is a bulleted list. The footer contains the text "Demystifying Networking | CS75".

- Think in terms of subsystems
- Find the faulty sub system
 - Based in behaviour
- Computer networks
 - Layer wise approaches
 - Different tools and commands for each layer
 - Different intended behaviours for each layer.

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Then we started learning about troubleshooting by reading an article about it. In that we learnt that a system can be electrical mechanical or computer network it is made up of different subsystems and it is useful to think in terms of those subsystems and what are the functions of each of these subsystems in order to troubleshoot. With respect to computer networks, we also found that a preferred way to troubleshoot is to consider each layer of the network that is physical layer, link layer, network layer and the application layer.

And we saw that there are different tools or commands that are available for each of these layers to troubleshoot and there are particular things about these layers that we need to focus on. Now, as we come to the end of this course, it is time for your last assignment.