

INSTALLATION AND TROUBLESHOOTING

Installation and Troubleshooting is a systematic approach to problem solving that is often used to find and correct issues with complex machines, electronics, computers and software systems.

The first step in troubleshooting is gathering information on the issue, such as an undesired behaviour or a lack of expected functionality. Other important information includes related symptoms and special circumstances that may be required to reproduce the issue.

Once the issue and how to reproduce it are understood, the next step might be to eliminate unnecessary components in the system and verify that the issue persists, to rule out incompatibility and third-party causes.

The recent surveys reveal that the hardware and electronics sector is expected to expand above \$60billion in India. The wide recognition of software industry in India dominates the hardware sector. But the situation is likely to change in the near future. The number of hardware and networking jobs is expected to grow extensively in India.

Objectives:

1. Know the different beep codes and error codes.
2. Troubleshoot computer problems.
3. Preventive maintenance of a computer.
4. Students become professional in trouble shooting the problems with systems they come across in their life.
5. Students will be able to install softwares, operating systems and diagnose different malwares on computers.

Context :

Installation and troubleshooting show and debug commands that are useful to check the health of the computers or to isolate a problem.

Continuing, assuming the issue remains, one might next check common causes. Depending on the particular issue and the trouble shooter's experience, they may have some ideas. They may also check product documentation and/or conduct research on a support database or through a search engine.

These courses not only promise a rewarding career but also offer hand-on-training to individuals, which is very useful for them to handle real life work situations.

The department of MCA has organized this training program for the students of MCA to make them professional and capable enough to handle real time situations.

Practice:

The department of MCA considered that the students when well trained in these courses and technologies and continuously organizing various training programs for students for the career of students additional apart from curriculum.

The process of identifying troubles with the systems and insulation includes various things.

- Once the problem part is identified, it may be adjusted, repaired or replaced as needed. Evidence of effective troubleshooting is

indicated when the issue is no longer reproducible and function is restored one.

- After common causes are ruled out, the trouble shooter may resort to the more systematic and logical process of verifying the expected function of parts of a system.
- One common method is the split-half troubleshooting approach: With a problem resulting from a number of possible parts in series, one tests half-way down the line of components. If the middle component works, one goes to the middle of the remaining parts, approaching the end.
- If the test finds a problem at the mid-point, one does a split towards the start of the line until the problem part is found. The split-half process can save time in systems that depend on many components.

Evidence of Success:

1. Students done the installation of the systems with softwares, hardwares and other needed technologies on their own successfully.
2. They have become capable in trouble shooting the issues they encounter while doing the installation.
3. Formatting the system and installation of operating systems in systems are done efficiently by the students.
4. Students connect hardware devices like projector etc., to the system on their own.

Future Ideas:

- The candidates with this certification can earn a package of about Rs. 20000 to 25000 initially, therefore we encourage the students to partake.

- Create an environment where students share their knowledge to other students.
- Providing awareness for the new courses and their significance in their career building.

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