

### 软件工程



张爽 东北大学软件学院





### 8.2

# What is required of Maintenance Programmer?



# What is Required of Maintenance programmers?



- **◆** Every maintenance programmer needs to be an expert in
  - > Specifications
  - > Design
  - > Implementation
  - > Integration
  - > Testing
  - > Documentation



# What is Required of Maintenance programmers?



- **◆** Maintenance is one of the most difficult aspects of software process, because
  - > maintenance incorporates aspects of all other phases.
  - > it needs superb diagnostic and debugging skills.
  - > it needs superb testing skills.
  - > it needs superb documentation skills.
  - > it is thankless.

#### **Current Status of Maintenance**

- ♦ Nevertheless, even today many organizations assign maintenance to
  - > unsupervised beginners
  - > less competent programmers

### How can this situation be changed?

- ➤ Management must understand that maintenance is a challenge, and good maintenance is critical for the success of the organization.
- Managers must restrict maintenance tasks to their best programmers with all skills needed to perform maintenance.
- > And pay them accordingly.



#### **Case Discussion**



> A software organization of American Navy



#### **Case Discussion**



Post-delivery Maintenance Mini Case Study