

# SENG 350

## - Software Architecture & Design

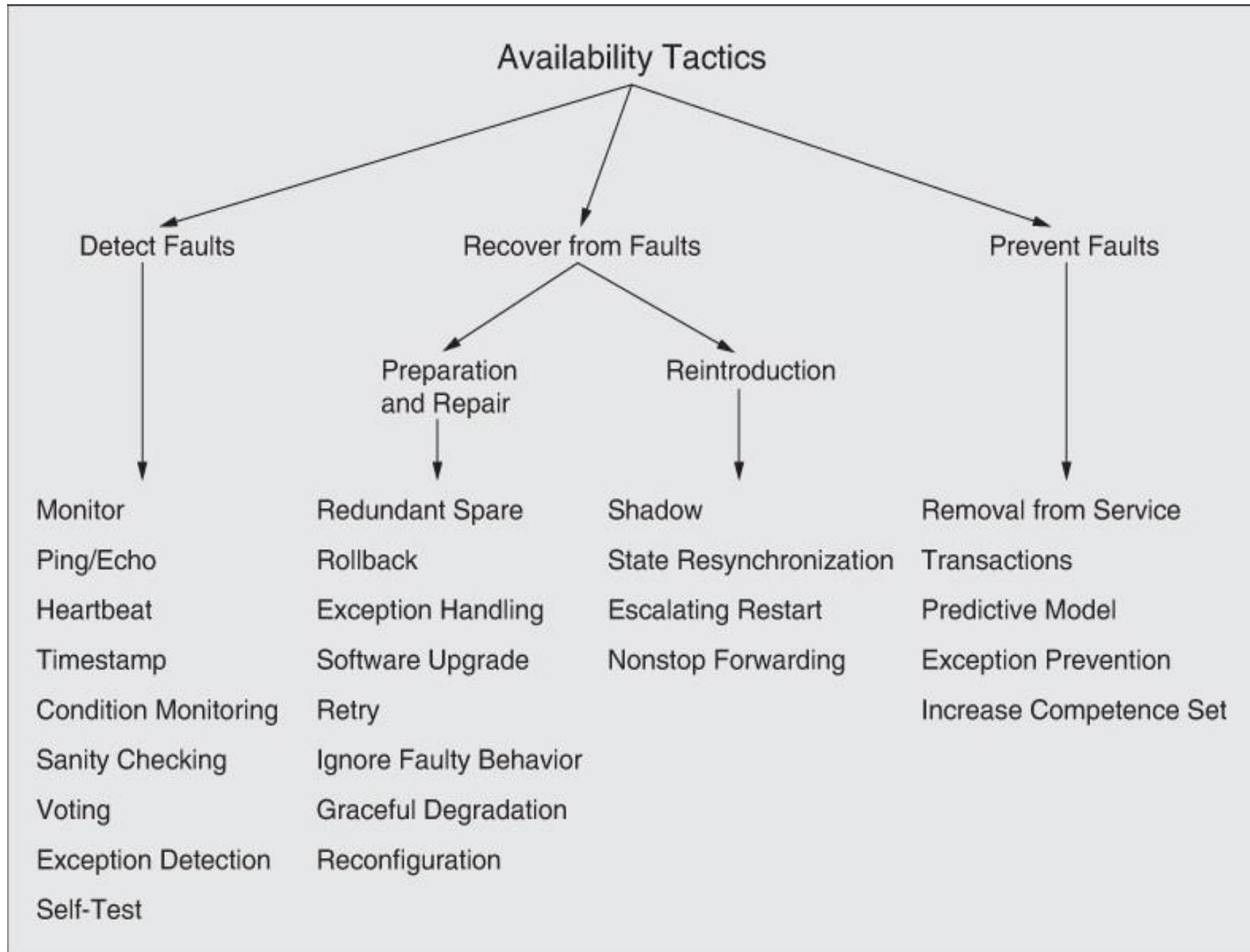
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### **Architectural Tactics**

Fall 2024



Last Time



# Performance



# Performance

## Performance Tactics

```
graph TD; PT[Performance Tactics] --> CRD[Control Resource Demand]; PT --> MR[Manage Resources]; CRD --> MWR[Manage Work Requests]; CRD --> LER[Limit Event Response]; CRD --> PE[Prioritize Events]; CRD --> RCO[Reduce Computational Overhead]; CRD --> BET[Bound Execution Times]; CRD --> IE[Increase Efficiency]; MR --> IR[Increase Resources]; MR --> IC[Introduce Concurrency]; MR --> MCC[Maintain Multiple Copies of Computations]; MR --> MCD[Maintain Multiple Copies of Data]; MR --> BQS[Bound Queue Sizes]; MR --> SR[Schedule Resources];
```

### Control Resource Demand

- Manage Work Requests
- Limit Event Response
- Prioritize Events
- Reduce Computational Overhead
- Bound Execution Times
- Increase Efficiency

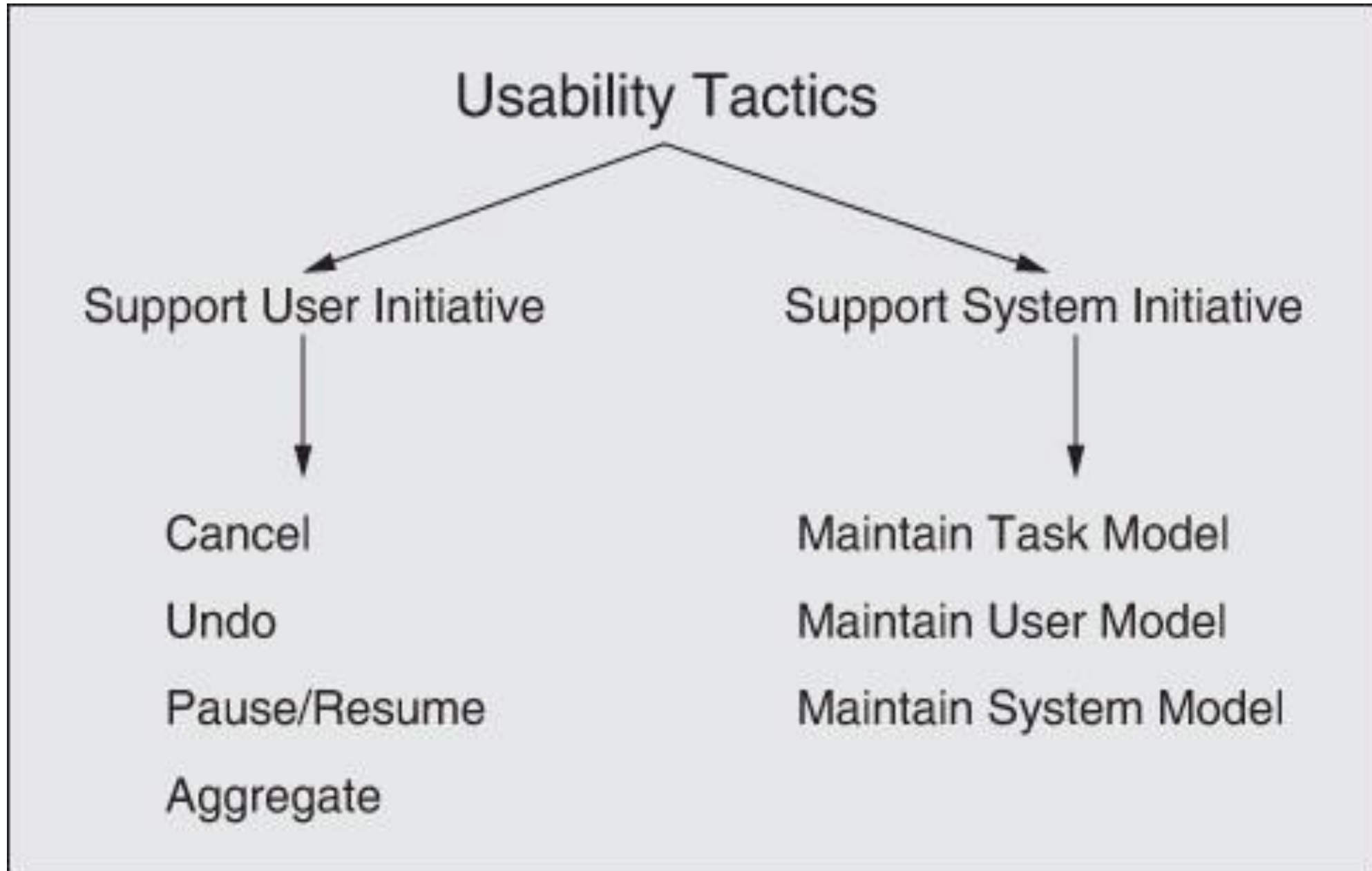
### Manage Resources

- Increase Resources
- Introduce Concurrency
- Maintain Multiple Copies of Computations
- Maintain Multiple Copies of Data
- Bound Queue Sizes
- Schedule Resources

# Usability



# Usability



# Activity

- Make a group of 2.
- Implement 3 of the availability tactics (in Detect Faults)
- Submit Screenshots of the code and the outputs on teams.

