

Unit-3: Linear time properties

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Summary

- ▶ Behaviour of a TS described as a set of its **traces**
- ▶ A **property** is a **set of infinite words** over $PowerSet(AP)$
(Linear-time property)
- ▶ TS satisfies property if its traces are contained in the property
- ▶ Invariants, Safety, Liveness, Fairness

Important concepts: Atomic propositions, X operator, detecting deadlocks