

6.s081

Intro to OS

Lecture Notes

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1 Lecture 1

Secure = "works" despite adversity

eg: only TAs can access grades.txt

Pos: Test by TAs Neg: bugs → bribe a TA, guess the password, steal the laptop

1.1 Systemic plan

Goal: only Alice can access F

Threat model: assumptions

Policy: plan/config to meet goal

Mechanism: code implements policy

1.2 Hard to get right

Iterate

→ monitor attacks

→ using well-understood parts

→ post-mortems

Defense

→ \forall attacks

Adversary

→ one attack

1.3 Imperfect but useful

attack cost > value

attack other systems

We want to look at techniques that have payoff with relatively low cost

Enable features: VPN, sandboxing