

Hand-In 5

Peter Burggaard

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THREAT MODEL: Information disclosure would be our top priority, since it is an exam situation, where information under no circumstances should be shared. It could be argued that spoofing identity, by changing the name on another student's handin, also is a top priority, but these sort of overlaps.

MODEL FOR SECURITY POLICY: Chinese wall for access to printer, and function separation for retrieving the printed document.

SECURITY POLICY: I would use a modified Chinese wall, where every student is a compeditor who's information should not be accessed, while the printer is the only noncompeditor, who we will allow access for. When the student should get the printed document, we would use function separation, so the student asks for the printed document, and then the teacher would fetch it for them.

MECHANISMS: I would use traffic analysis to ensure the only communication that is happening is the one between a student and the printer. If any other communication is found, the student will be expelled from the exam. The students would have to show student ID when asking a teacher to fetch their paper, and the teacher would check the given paper's owner. This could maybe be implemented by a involuntary signature on the paper, so identity spoofing would not be possible.