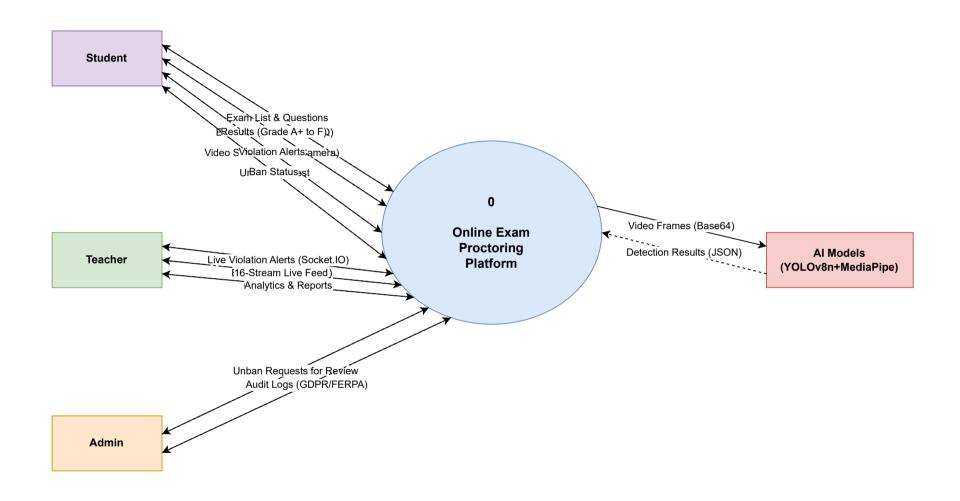
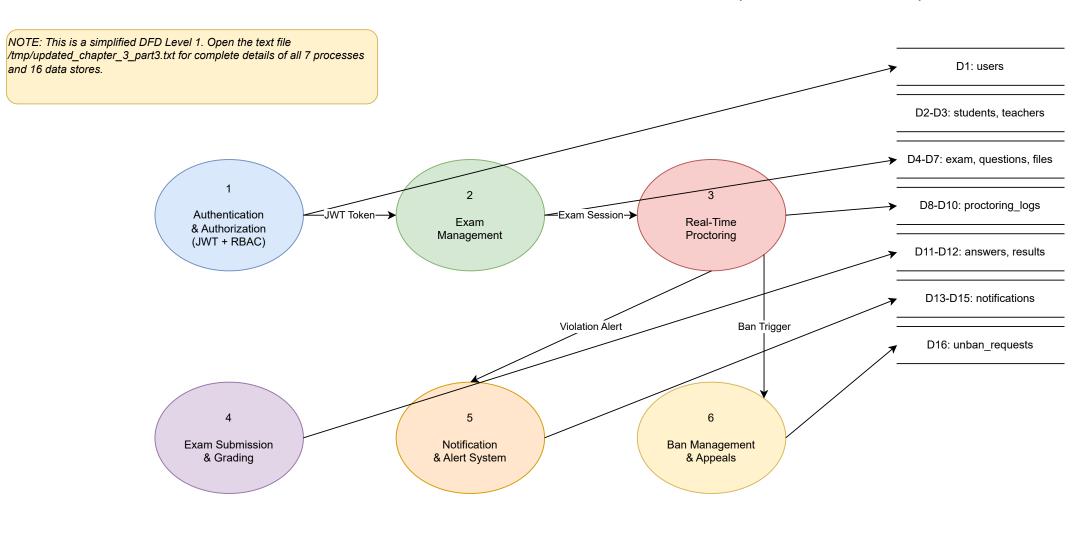
## **DATA FLOW DIAGRAM - LEVEL 0 (CONTEXT DIAGRAM)**



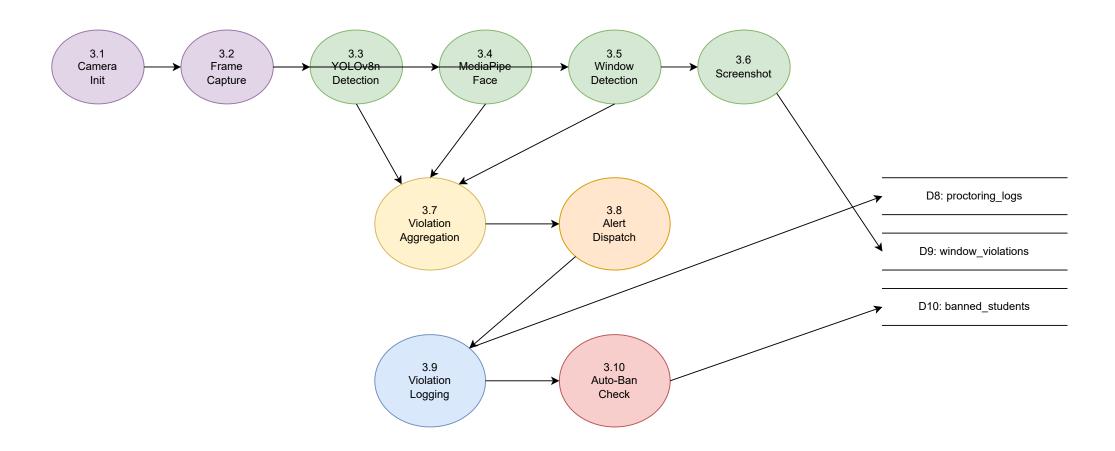
## DATA FLOW DIAGRAM - LEVEL 1 (PROCESS BREAKDOWN)



7
Analytics & Reporting

## DFD LEVEL 2 - PROCESS 3: REAL-TIME PROCTORING (Detailed Breakdown)

NOTE: This shows 10 sub-processes within the Real-Time Proctoring process. See /tmp/updated\_chapter\_3\_part3.txt for complete technical details.



KEY: 3.3-3.5 = Parallel Al Detection | 3.7 = Aggregation | 3.8 = Socket.IO Alert | 3.10 = Auto-Ban ( $\geq 5$  violations)