

Cloud Computing Review III Requirement

Priority	Topic Area	Why It's the Right Choice	What Students Can Do in 10 Days	Expected Deliverables / Demo
#1 – CI/CD Security & Code Scanning (SAST/DAST)	Integrate a lightweight security scan into their GitHub or Azure pipeline using CodeQL , SonarCloud , or OWASP ZAP .	 Practical  Directly tied to DevOps work already done in Review II  Produces tangible scan reports  Enhances understanding of secure DevOps	<ul style="list-style-type: none"> - Add a CodeQL or SonarCloud workflow in their GitHub Actions - Run a basic OWASP ZAP baseline scan - Identify at least 2 vulnerabilities and show one fix 	<ul style="list-style-type: none"> - Security_Report.pdf (scan output)- Short note “How we fixed X issue”- 1-minute demo of pipeline run with security step

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#2 – Monitoring & Observability (Azure Monitor / App Insights)	Use Azure Monitor or a mock dashboard (Grafana / Power BI) to visualize metrics.	 Reinforces cloud operations concepts  Easy to configure / simulate  Connects to syllabus (Cloud Monitoring & DR)  Encourages reflection on performance & cost	<ul style="list-style-type: none"> - Connect app to Application Insights (or simulate via dummy data)- - Define 3 key metrics (CPU %, requests, errors)- - Create one alert rule or dashboard view 	<ul style="list-style-type: none"> - Monitoring_Dashboard.pdf (screenshots) - 3-slide demo of metrics & alert configuration