**Capstone: Digital Debt Audit & Remediation Sprint**

**Module 10B**

**Institut Premià de Mar – AI Governance Officer Certification**

**Purpose**

Reduce “digital debt” (outdated tech, missing docs, quick fixes) that blocks AI governance and compliance. You’ll inventory the debt, prioritize the top issues, and run a 90-day remediation sprint with clear owners, milestones and evidence.

**Deliverables**

1. **Digital Debt Inventory** (systems, gaps, scores)
2. **Top-10 Remediation Backlog** (ranked; owners, deadlines, DoD)
3. **90-Day Remediation Roadmap** (phased plan)
4. **Definitions of Done (DoD)** checklists
5. **Evidence Pack** (before/after, notices, logs) for GitHub

**How to Run It**

1. **Inventory (1-2 hrs):** List AI/data systems and capture debts across Data, Models, Code/Integrations, Documentation, Processes, Vendors. Score Risk, Impact, Effort.
2. **Prioritize:** Compute **Priority = (Risk × Impact) / Effort**. Select **Top-10**.
3. **Plan 90 days:** Assign owners, deadlines, and milestones.
4. **Execute + log:** Publish notices, stand up monitoring, add fairness tests, collect vendor docs.
5. **Prove it:** Save artifacts (notices, logs, checklists) to GitHub.

**Template A - Digital Debt Inventory**

**Purpose:** Catalogue AI/data debt; score and prioritize.

| **ID** | **System/Area** | **Debt Description** | **Category (Data/Model/Code/Docs/Process/Vendor)** | **Risk (1–5)** | **Impact (1–5)** | **Effort (1–5)** | **Priority Score** | **Owner** | **Notes** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
| **Example** | Learning Analytics | No bias tests/sampling log | Model | 5 | 5 | 2 | (auto) | AIGO | Add fairness eval & sample reviews |
| **Example** | GenAI Chatbot | No student/parent transparency notice | Docs/Process | 4 | 4 | 2 | (auto) | Comms/DPO | Publish plain-language notice |

**Priority Score = (Risk × Impact) / Effort**. Ties break toward student-facing/compliance items.

**Template B - Top-10 Remediation Backlog**

**Purpose:** Turn the highest-priority debt into actionable work.

| **Rank** | **Debt ID** | **Title** | **Why it matters** | **Root Cause** | **Fix Approach (Quick win/Refactor)** | **Dependencies** | **Owner** | **Deadline** | **DoD summary** | **Status** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |
| **1 (ex.)** | DD-01 | Bias evaluation harness for Learning Analytics | Reduce discrimination risk; oversight compliance | No eval process | Quick win | IT data access; AIGO | IT + AIGO | 30 Sep | Tests+metrics saved; sampling SOP updated; staff briefed | Planned |

**Template C - 90-Day Remediation Roadmap**

**Purpose:** Time-box the work and show progress.

| **Week(s)** | **Milestone/Task** | **Linked Debt ID(s)** | **Owner** | **Dependencies** | **Done Criteria** |
| --- | --- | --- | --- | --- | --- |
| 1–2 | Publish/refresh transparency notices | DD-02, … | Comms/DPO | Principal approval | Notices live; links in README |
| 2–3 | Stand up monitoring log & sampling review | DD-01, … | AIGO/Dept Heads | Data access agreed | Log exists; 2 entries completed |
| 4–6 | Bias & accuracy evaluation harness for pilot model | DD-01 | IT + AIGO | Data slices prepared | Metrics baseline; report saved |
| 7–9 | Model Cards + Instructions for Use | DD-01/DD-04 | AIGO/Teachers | Vendor docs | Docs in repo; staff briefed |
| 10–12 | Incident tabletop & runbook update | DD-05 | IT/DPO/AIGO | Scheduling | Drill minutes + updated runbook |

**Template D - Definitions of Done (DoD)**

Checklists to formally close items.

**1) Transparency Notice (Student/Parent Facing)**

* Notice text approved (plain language)
* Published **before first use**
* Version/date recorded; link added to README
* Parents/students informed; comms channel documented

**2) Monitoring & Sampling**

* Monitoring log created (date, sample, anomalies, actions)
* Two sampling cycles completed
* Anomalies triaged and actions assigned
* Summary saved to repo; owners notified

**3) Model Fairness & Accuracy Evaluation**

* Evaluation harness created (metrics defined)
* Baseline runs on representative data
* Results reviewed; mitigation (if needed) documented
* Report saved to repo; next review scheduled

**4) Documentation (Model Card & Instructions for Use)**

* Model Card completed and saved in repo
* Instructions for Use drafted and shared with staff
* Links embedded in staff hub/README
* Briefing delivered; attendance logged

**5) Vendor Technical Documentation**

* Technical file or summary received/reviewed
* Obligations mapped to school controls
* Gaps & actions recorded in backlog
* Decision documented (accept/mitigate/replace)

**Roles & RACI**

| **Activity** | **AIGO** | **Principal** | **DPO** | **IT Lead** | **Dept Heads** | **Teachers** |
| --- | --- | --- | --- | --- | --- | --- |
| Debt inventory | R | C | C | R | C | I |
| Transparency fixes | R | A | R | C | C | I |
| Monitoring setup | R | C | C | R | C | I |
| Bias/eval harness | R | C | C | R | C | I |
| Vendor docs | R | C | C | R | I | I |
| *A=Accountable, R=Responsible, C=Consulted, I=Informed* |  |  |  |  |  |  |

**KPIs (show debt is reduced)**

* **Coverage:** ≥90% AI systems with current **Instructions for Use** & **Model Cards** in 90 days
* **Monitoring:** ≥80% of weeks with completed sampling review
* **Fairness/Accuracy:** All Top-10 items with evaluation harness + baseline metrics
* **Transparency:** 100% of active student-facing AI with live notices
* **Incidents:** Time-to-contain ≤24h; RCA ≤10 working days (if any)