

## AI Capstone: Milestone 4 Check-in (Week 12)

**Focus:** Demonstrating a near-complete, end-to-end system, ideally deployed to a staging/test environment. Focus on functionality, testing, and readiness for final polishing and documentation.

### Requirements & Discussion Points:

Students should be prepared to discuss and demonstrate:

#### 1. End-to-End System Demonstration:

- **Live demonstration of the system performing its core function.**
  - *API Project:* Show API calls (e.g., via Postman or curl) to a deployed endpoint, returning results.
  - *Dashboard Project:* Show the deployed dashboard (accessible via URL) displaying insights from processed data/model outputs.
  - *Pipeline Project:* Show the CI/CD pipeline successfully running and deploying/registering a model triggered by a change.
  - *Other Projects:* Demonstrate the integrated components working together as intended.
- Discuss the overall workflow and user experience (if applicable).

#### 2. Deployment Status:

- Provide URL or access details for the deployed application/service (if applicable).
- Discuss the final deployment configuration and any challenges overcome.
- If deployment isn't fully complete, show progress and explain remaining steps/blockers.

#### 3. Testing & Validation:

- What testing has been performed? (e.g., unit tests, integration tests, user acceptance testing, model validation on a holdout set).
- Discuss key findings from testing. What bugs were found and fixed? How was model performance validated post-deployment?

#### 4. Documentation & Final Steps:

- Show an outline or draft of the final report and documentation.
- Discuss the plan for the remaining ~2 weeks: final bug fixing, polishing, final report writing, presentation preparation.
- Identify any remaining risks to successful completion.

## **Marking Scheme (Informal Discussion-Based Assessment - Total 30 points)**

- **1. End-to-End Functionality & Demonstration (8 points):**
  - (0-2) Core functionality is broken or demonstration fails significantly.
  - (3-5) Most core functionality works but is buggy, slow, or parts are missing; demonstration is okay.
  - (6-8) Smooth demonstration of a largely complete and functional end-to-end system; workflow is clear.
- **2. Deployment Success & Configuration (7 points):**
  - (0-2) No deployment achieved or major issues prevent access/functionality.
  - (3-4) Deployed but significant issues remain, or configuration is poorly explained/understood.
  - (5-7) System successfully deployed and accessible (URL provided if applicable); deployment configuration clearly explained; challenges discussed. (Partial marks if deployment is very close but facing minor, well-understood issues).
- **3. Testing & Validation Evidence (5 points):**
  - (0-1) Little to no evidence or discussion of testing.
  - (2-3) Some testing performed (e.g., manual checks, basic model validation); results discussed superficially.
  - (4-5) Clear evidence of relevant testing (unit, integration, UAT, model validation); key findings and fixes discussed effectively.
- **4. Final Plan & Documentation Readiness (5 points):**
  - (0-1) No clear plan for final weeks; documentation outline missing or very basic.
  - (2-3) Basic plan for final steps exists; documentation outline is adequate.
  - (4-5) Clear, realistic plan for final polishing, report writing, and presentation prep; solid documentation outline/draft shown.
- **5. Overall Project Cohesion & Polish (5 points):**
  - (0-1) Project feels disjointed; many rough edges; lacks polish.
  - (2-3) Project components work together reasonably well; some areas lack polish.
  - (4-5) Project demonstrates good integration and cohesion; evidence of attention to detail and polish appropriate for this stage.

**Feedback:** Verbal feedback will focus on the completeness and robustness of the system, deployment success, testing thoroughness, and readiness for the final submission and presentation. Specific feedback on remaining tasks and potential improvements will be provided.