**Acceptance Test Procedure (ATP)**

**Project Name:** Goat Observation and Assessment Technology (G.O.A.T)  
**Team Name:** Mean Green Solutions  
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**Sponsor:** Clean Chickens and Co. LLC  
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**1. Introduction**

This **Acceptance Test Procedure (ATP)** outlines the methods and criteria for validating the G.O.A.T system to ensure it meets the functional, performance, and security requirements defined in the project specifications. The ATP serves as a formal agreement between the development team and the sponsor to verify system readiness.

**2. Test Environment**

**2.1 Hardware Setup**

* **Cameras:** 3 high-resolution cameras (front, side, and top views)
* **Processing Unit:** Windows-based workstation with AI-capable GPU
* **Database:** SQL-based database for goat record management
* **Network:** Secure, local area network with encrypted data transmission

**2.2 Software Setup**

* **Operating System:** Windows 11
* **Programming Languages:** Python (for image processing and AI)
* **Database Management System:** SQL
* **Test Tools:** Automated testing frameworks for image recognition accuracy

**3. Acceptance Test Cases**

**3.1 Functional Tests**

| **Test ID** | **Test Description** | **Expected Outcome** | **Status** |
| --- | --- | --- | --- |
| FT-001 | Capture images from all cameras simultaneously | All three images are stored in the database | Pending |
| FT-002 | Analyze goat images using AI model | System provides accurate grading and pricing | Pending |
| FT-003 | Store processed data in the database | Entry is created with correct breeder and pricing info | Pending |
| FT-004 | Retrieve goat record from database | User can access stored information | Pending |

**3.2 Performance Tests**

| **Test ID** | **Test Description** | **Expected Outcome** | **Status** |
| --- | --- | --- | --- |
| PT-001 | Process 100+ goats per day | System maintains efficiency | Pending |
| PT-002 | Image processing speed | Processing completed in <30 seconds | Pending |

**3.3 Security Tests**

| **Test ID** | **Test Description** | **Expected Outcome** | **Status** |
| --- | --- | --- | --- |
| ST-001 | Unauthorized database access attempt | Access is denied | Pending |
| ST-002 | Encrypted data transmission | Data is securely transmitted | Pending |

**4. Test Execution & Reporting**

* Each test will be executed **manually and automatically**, where applicable.
* Logs will be maintained for each test case.
* Any failures will be reported with detailed issue tracking and resolution steps.

**5. Acceptance Criteria**

The system will be considered **accepted** if:

* **All functional tests pass without major defects**
* **Performance metrics meet the 100 goats/day benchmark**
* **Security measures are validated and enforced**