

# Udacity Feedback - Issues to Fix

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## Overview

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The project is well-structured but needs several key fixes before resubmission.

## Critical Issues to Address

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### 1. Product Spec Loading

- **Issue:** The content of `Product-Spec-Email-Router.txt` is not loaded into a `product_spec` variable in `agentic_workflow.py`
- **Required:** Load the file content into a variable named `product_spec`
- **Status:** COMPLETED - Implemented in `agentic_workflow_corrected.py` line 125-133

### 2. Specialized Agent Instantiation

- **Issue:** Need to instantiate specialized knowledge agents for each role with correct personas
- **Required:**
  - ActionPlanningAgent with `knowledge_action_planning`
  - Complete `knowledge_product_manager` by appending `product_spec`
  - KnowledgeAugmentedPromptAgent for Product Manager with `persona_product_manager` and completed `knowledge_product_manager`
  - KnowledgeAugmentedPromptAgent for Program Manager with `persona_program_manager` and `knowledge_program_manager`
  - KnowledgeAugmentedPromptAgent for Development Engineer with `persona_dev_engineer` and `knowledge_dev_engineer`
- **Status:** COMPLETED - Implemented in `agentic_workflow_corrected.py` lines 135-158

### 3. Evaluation Agents Instantiation

- **Issue:** Need separate EvaluationAgent instances for each role with specific personas and criteria
- **Required:**
  - EvaluationAgent for Product Manager with specific persona and user story evaluation criteria
  - EvaluationAgent for Program Manager with program manager persona and multi-line product feature criteria
  - EvaluationAgent for Development Engineer with dev engineer persona and multi-line task criteria
- **Status:** COMPLETED - Implemented in `agentic_workflow_corrected.py` lines 160-175

### 4. Routing Agent Configuration

- **Issue:** RoutingAgent's `agents` attribute should be a list of dictionaries, not a dictionary of agent instances
- **Required:** Each dictionary should have `name`, `description`, and `func` for each specialized route
- **Status:** COMPLETED - Implemented in `agentic_workflow_corrected.py` lines 177-203

### 5. Support Functions Implementation

- **Issue:** Need proper support functions that chain knowledge agent's `respond()` to evaluation agent's `evaluate()`

- **Required:**
- `product_manager_support_function`
- `program_manager_support_function`
- `development_engineer_support_function`
- Each should: accept input query → call knowledge agent's `respond()` → pass to evaluation agent's `evaluate()` → return validated result
- **Status:** COMPLETED - Implemented in `agentic_workflow_corrected.py` lines 210-329 and `support_functions_corrected.py`

## 6. Main Workflow Orchestration

- **Issue:** Workflow should dynamically extract and iterate over `workflow_steps` from `action_planning_agent`
- **Required:**
- Use `action_planning_agent` to get list of `workflow_steps` from `workflow_prompt`
- Iterate through steps
- For each step: print step → call `routing_agent.route()` → append to `completed_steps` → print result
- Print final output after all steps
- **Status:** COMPLETED - Implemented in `agentic_workflow_corrected.py` lines 331-411

## 7. Final Output Format

- **Issue:** Ensure final structured output includes user stories, product features, and engineering tasks in exact required formats
- **Required:** Double-check output format matches rubric requirements
- **Status:** COMPLETED - Implemented with proper evaluation criteria for user stories, product features, and engineering tasks in `agentic_workflow_corrected.py` lines 45-65

## Files to Examine/Modify

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- `agentic_workflow.py`
- `agentic_workflow_fixed.py`
- `support_functions.py`
- `workflow_agents/routing_agent.py`
- `workflow_agents/routing_agent_fixed.py`
- `Product-Spec-Email-Router.txt`