

Smart Learning Journey Orchestrator

An AI-Powered Personalized Learning Companion
for Students and Employees

Presented by Garima Dubey

AGENDA


- 1 Opportunity & Vision**
From siloed systems to intelligent, personalized guidance
- 2 Where Personalized Guidance Helps**
Student and employee challenges without orchestration
- 3 Solution Overview**
What the Smart Learning Journey Orchestrator is
- 4 Agent Intelligence**
How input data becomes personalized guidance
- 5 Persona Walkthroughs**
Flow diagrams for each user type
- 6 Live Demonstration**
Student and employee journeys
- 7 Key Differentiators**
Why it's different
- 8 Q&A**

From Siloed Systems to Intelligent Guidance


TODAY



Siloed academic and training data



Performance visible only as grades




No guidance on what to fix next




WITH THE ORCHESTRATOR

Rubric-Level Intelligence 

Certification Domain Mapping 

Unified Learner Profile 

Adaptive Learning 

Cross-Domain Detection 

Where Personalized Guidance Can Help



Jane Doe
CS Junlor



Gets a B- on her statistics homework



Doesn't realize her 'Statistical Reasoning' criterion is at 53% — Beginning tier



Has an exam in 14 days but doesn't connect the urgency



Meanwhile, her algorithm analysis in Data Structures uses the same formal reasoning —she doesn't see the link



No system tells her: 'You need to focus HERE, for THIS reason, by THIS date'



Garima Dubey
Solutions Architect



Preparing for AWS Cloud Practitioner independently



Completed trainings but lacks visibility into exam domain coverage



Focuses on strongest area (Cloud Concepts-62%) over at-risk domain (Billing & Pricing- 38%)



No structured plan aligned to her 5 hrs/week scheduled learning time



No guidance on using AI to create, review, and refine documents

Architecture and Security by Design



Presentation

Copilot Studio Chat Interface | Demo Website



AI Intelligence

Quiz Generation | Plan Creation | Concept Explanation | Cross-Domain



API Layer

12 Focused Endpoints — each serving a single data concern



Data Sources

Canvas LMS | OMNI HR (PeopleSoft) | myFSU Student Central

Security



Authentication first



Role-based scope



FERPA aligned... records



API key protection



Minimum data retrieval



SSO + encryption

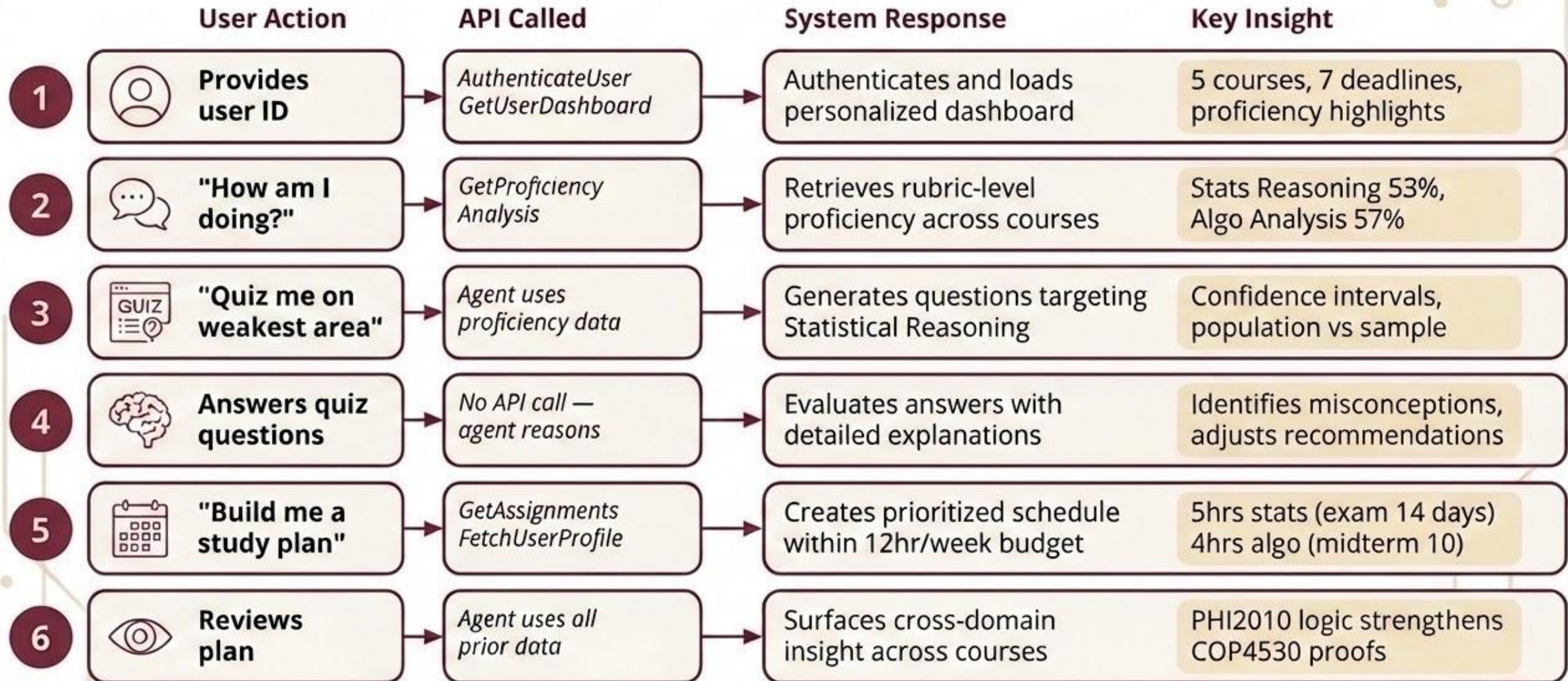


Each endpoint is a focused service returning only the data it owns. The agent orchestrates calls dynamically — a quiz needs one service, a study plan needs three. No interaction loads all endpoints.

How Input Data Becomes Personalized Guidance





Personalized Learning in Action – Student Journey



Personalized Learning in Action

Employee Journey

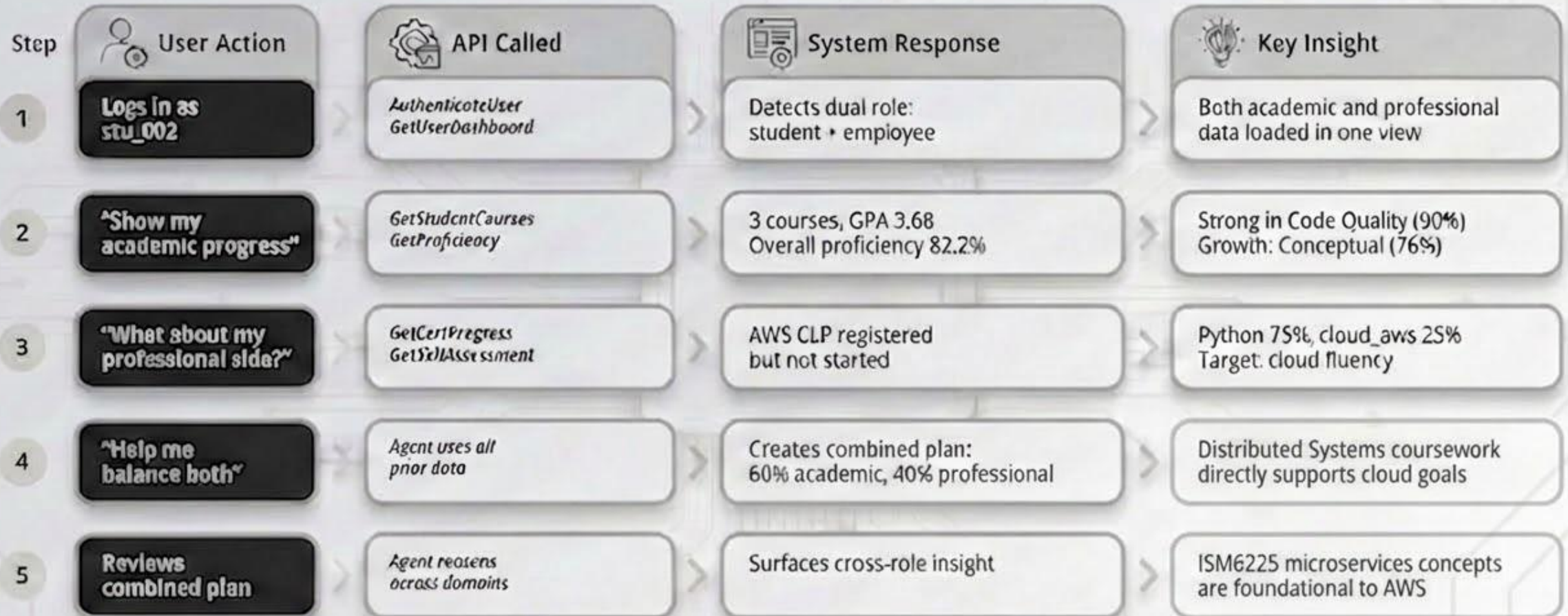
Step	User Action	API Called	System Response	Key Insight
1	 Provides user ID	 <i>AuthenticateUser GetUserDashboard</i>	 Authenticates as employee. Dashboard shows 48% readiness	 7 completed trainings, certification is primary focus
2	 "How is my cert going?"	 <i>GetCertification Progress</i>	 Per-domain readiness: Billing 38%, Tech 42%	 Billing & Pricing is At Risk. She was studying Concepts (62%)
3	 "Quiz me on AWS"	 <i>Agent uses cert domain data</i>	 Creates Cloud Practitioner questions on Billing & Pricing	 Targets her weakest domain, not her comfort zone
4	 Answers quiz	 <i>No API call — agent reasons</i>	 Evaluates answers, identifies gaps in pricing models	 Recommends focus on reserved vs on-demand pricing
5	 "Make me a plan"	 <i>FetchUserProfile (time budget)</i>	 Builds 5hr/week schedule front-loading weak domains	 2hrs Billing, 1.5hrs Tech, 1hr Security, 0.5hr practice



Goal: Build fluency in cloud concepts and earn AWS Cloud Practitioner to strengthen architectural decisions in her current role.



Personalized Learning in Action – Dual Role Journey



Goal: This agent sees both the student and the employee roles and connects their learning goals.



LIVE DEMONSTRATION

Smart Learning Journey Orchestrator in Action

Jane Doe — Student: Proficiency analysis → Quiz → Study Plan

Garima Dubey — Employee: Certification gaps → AWS Quiz → Learning Plan

John Doe — Dual Role: Combined academic + professional development

Key Differentiators

TODAY

Grades by course



Training completions



Manual deadline tracking



Courses treated independently



Generic advice



WITH ORCHESTRATOR

Proficiency by rubric criterion across courses



Certification domain readiness mapping



Prioritized plan balancing urgency and gaps



Cross-domain skill transfer detection



Guidance calibrated to level, time budget, and goals



APPLICABILITY ACROSS DOMAINS



Computer Science: Rubric-based proficiency across programming and analysis



ITS: Certification readiness tied to role-based skill development



Financial Aid: Works equally well for non-technical credentialing

Questions & Discussion

Smart Learning Journey Orchestrator

Florida State University | Information Technology Services

How Input Data Becomes Personalized Guidance



Input

From Canvas:
 Statistical Reasoning: 53%
 Algorithm Analysis: 57%
 Critical Analysis: 60%
 Code Quality: 80%

Instructor Feedback :
 "Confuses population and sample parameters"

Training Information:
 Training information from Omni ,Canvas

Determines tier per criterion:

Beginning 0-59%

Developing 60-74%

Proficient 75-89%

Exemplary 90-100%

Agent Reads & Reasons



Responses Calibrated to tier

Reads instructor comments for specific gap context

What the Agent Creates — No Pre-Built Responses

Adaptive Quizzes:
 Questions calibrated to tier and specific gaps

Personalized Plans:
 Deadlines + gaps + time budget = prioritized schedule

Concept Explanations:
 Analogies for Beginning, precision for Proficient

Cross-Domain Links:
 PHI2010 logic recognized in COP4530 proofs

