AI Solutions Architect Class - Study Guide

AI Solutions Architect Class

Class Information

- **Instructor**: Noelle Russell
- **Date**: 2025-12-05
- **Duration**: 117 minutes
- **Participants**: 10

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Key Concepts

1. AI Adoption Scorecard

Definition: A framework to analyze and measure an organization's readiness and challenges in adopting AI technologies.

Explanation: Instructor explained that the adoption scorecard is customizable based on expertise and client needs, helping facilitate trust and understanding of adoption barriers.

Examples: - Evaluating baby tigers metaphor for adoption challenges - Scoring AI maturity levels

Covered in: Chunk(s) 12

2. AI Market Landscape Understanding

Definition: Keeping up-to-date knowledge about the trends, tools, and academic advancements in AI technologies.

Explanation: Instructor described the importance of tracking developments across academia and production tools.

Examples: - Foundation model research - Stanford papers on AI

Covered in: Chunk(s) 6, 7

3. AI Solution Architecture

Definition: The practice of designing and implementing AI-based solutions to business challenges.

Explanation: Discussed the importance of being both a technical doer and a credible presenter, shifting from a traditional solution architect focus on presentation toward actionable builds.

Examples: - Finance minister problem-solving scenario - Vibe-coded advent calendar from Lovable.

Covered in: Chunk(s) 1, 2, 5

4. Agentic AI

Definition: AI that demonstrates proactive behavior in addressing client needs and performing tasks autonomously within solution architectures.

Explanation: Instructor highlighted the importance of understanding agentic AI and embedding it within tailored client solutions.

Examples: - Scoping down problems in client projects - Building tools for contact center solutions

Covered in: Chunk(s) 6

5. Ambient Listening

Definition: Technology that automatically listens to and processes conversations to provide real-time insights or information.

Explanation: Mentioned as an example of semantic search use in contact centers to reduce friction during client interactions.

Examples: - Call center agents searching for symptoms like sneezing without manual input.

Covered in: Chunk(s) 9

6. Brand Building for AI Professionals

Definition: Establishing credibility and professional visibility in the AI field through personal branding efforts.

Explanation: Discussed how branding as an AI Solution Architect can help build credibility, including participating in podcasts and creating digital content.

Examples: - Participating in podcasts - Publishing advent calendars with low-code tools - Utilizing social media to share projects

Covered in: Chunk(s) 2

7. Brand Building for AI Solution Architects

Definition: Developing a professional reputation that precedes and supports credibility in AI solution architecture.

Explanation: Instructor shared strategies for establishing visibility, e.g. participating in podcasts, leveraging AI tools for content creation, and ensuring a Google-visible online presence.

Examples: - Participating in five podcasts - Creating ten short videos from podcast content using AI tools like HeyGen and Captions.

Covered in: Chunk(s) 1

8. Centralized System Architecture

Definition: A design approach that consolidates multiple systems into a single architecture.

Explanation: Barnabas explained how centralizing system architecture can help organizations streamline operations and reap more benefits through optimized data management.

Examples: - Reducing multiple systems into one unified framework.

Covered in: Chunk(s) 10

9. Client Assessment and Data Collection

Definition: The process of gathering client information and feedback through structured tools to build trust and tailor solutions effectively.

Explanation: The instructor discussed using assessments to collect client data, build trust, and refine solutions. Iterative improvements based on client responses were demonstrated.

Examples: - Adoption scorecards - Industry assessments

Covered in: Chunk(s) 11

10. Client Journey Analysis

Definition: Understanding the challenges and objectives of clients before proposing technical solutions.

Explanation: Encourages architects to research the client well using public filings, news reports, and AI tools before engaging in conversations.

Examples: - Analyzing SEC filings for challenges - Using Associated Press for company news.

Covered in: Chunk(s) 4

11. Communication Strategy

Definition: A proactive and structured approach to setting clear expectations with clients during a project.

Explanation: The instructor emphasized the importance of defining deliverables and setting clear boundaries to avoid ambiguity with clients.

Examples: - Kickoff meeting expectations - Weekly readout, monthly business review, and quarterly success moments

Covered in: Chunk(s) 3

12. Competitive Analysis

Definition: Evaluating competitors to identify strengths, weaknesses, and opportunities.

Explanation: The instructor explained leveraging AI tools for competitive analysis as either a chargeable service or a value-add for clients.

Examples: - MSP competitive analysis for AI adoption

Covered in: Chunk(s) 8, 9

13. Continuous Learning

Definition: The practice of continuously acquiring knowledge and updating skills to stay relevant in changing environments.

Explanation: Continuous learning was highlighted as crucial given the fast-evolving AI landscape, helping solution architects remain effective and relevant.

Examples: - Daily learning amid evolving AI solutions

Covered in: Chunk(s) 11

14. Data Lake and Enhanced Reporting

Definition: A centralized repository for storing structured and unstructured data at scale.

Explanation: Barnabas discussed the importance of enhanced reporting through a data lake to provide granular reports and dashboards for operational insights.

Examples: - Dashboard views for stakeholders.

Covered in: Chunk(s) 10

15. Enterprise Resilience Practice

Definition: A framework for ensuring organizational systems can adapt and respond effectively to risks and uncertainties.

Explanation: Jonathan talked about assisting clients in mitigating risks and creating systems that hold up under pressure through enterprise resilience strategies.

Examples: - Building robust systems in financial institutions.

Covered in: Chunk(s) 10

16. Low-Code Development

Definition: Using platforms that allow rapid development of software solutions with minimal coding.

Explanation: Briefly mentioned how tools like Lobe and other low-code platforms allow Solution Architects to quickly prototype solutions for client problems.

Examples: - Advent Calendars - Building a chatbot in two hours

Covered in: Chunk(s) 2

17. Minimum Remarkable Product

Definition: A baseline deliverable that encapsulates the minimum standard of quality and impact for a project.

Explanation: Used to establish project scope and manage client expectations by 'snapping the chalk line' for deliverables.

Examples: - Separating tasks above and below the line

Covered in: Chunk(s) 3, 5, 7, 12

18. Minimum Remarkable Product (MRP)

Definition: Building solutions that are lightweight yet impactful enough to capture initial interest and drive adoption.

Explanation: Avoid overengineering solutions and focus on delivering something remarkable to secure early-stage user adoption.

Examples: - Massive Action Tracker (MAT) - Advent Calendar project.

Covered in: Chunk(s) 4, 6, 8, 9

19. Needs Assessment

Definition: Process of identifying client requirements, challenges, and goals.

Explanation: Instructor emphasized understanding client needs as a foundational step and shared ways to structure assessments for effectiveness.

Examples: - Healthcare manufacturing needs - Assessment for client solutions

Covered in: Chunk(s) 8, 9

20. Proactive Research using AI

Definition: Using AI tools to gather insights and prepare thoughtful questions before meeting with clients.

Explanation: The instructor highlighted AI's role in researching client data, analyzing challenges, and formulating intelligent questions for client engagement.

Examples: - Using ChatGPT for research on SEC filings, earnings reports, and competitive analysis

Covered in: Chunk(s) 3

21. Revenue Alignment in AI Solution Architecture

Definition: Attaching solution architect efforts to measurable revenue outcomes to secure organizational value.

Explanation: Engineers should track the revenue influenced by their solutions to enhance job security and demonstrate their value.

Examples: - Story of generating $2B in revenue at Microsoft.

Covered in: Chunk(s) 4

22. Scope Management

Definition: The process of defining and controlling the extent of a project's deliverables.

Explanation: Instructor emphasized reducing scope to increase usability and adoption while minimizing over-engineering and feature creep.

Examples: - Advent calendar app with patterns and colors - Massive action tracker over-engineering challenge

Covered in: Chunk(s) 5

23. Solution Architecture

Definition: Role involving the design of tailored solutions to client needs, often in customer-facing conversations.

Explanation: Instructor shared insights on understanding client pain points and delivering tailored solutions.

Examples: - Live demos during client conversations - Architecting contact center solutions

Covered in: Chunk(s) 7, 11

24. Solution Architecture Strategy

Definition: The process of creating, designing, and implementing solutions to meet client needs using appropriate tools and practices.

Explanation: Focuses on understanding client journey, identifying problems, using AI tools for research, and breaking large initiatives into actionable steps.

Examples: - Client research using ChatGPT - Building a proactive problem-solving engine.

Covered in: Chunk(s) 4

25. Thought Leadership

Definition: Establishing oneself as an authority in a specific domain by sharing insights, experiences, and solutions.

Explanation: Instructor encouraged building solutions, sharing them publicly, and articulating insights to clients and community.

Examples: - Testing ideas at meetups - Podcast appearances for visibility

Covered in: Chunk(s) 5, 6, 7

26. Trust-Building

Definition: The process of establishing credibility and confidence with clients.

Explanation: Instructor highlighted the importance of authenticity, transparency, and delivery of effective solutions to maintain and restore trust.

Examples: - Checkride assessments at Red Hat - Engaging product leaders via LinkedIn authentically

Covered in: Chunk(s) 8

Tools & Frameworks

Tool/Framework	Purpose	Use Case
AI Trend Index by Stanford	Database of AI-related legislative bills and international modeling competition.	Monitoring AI policy trends and regulatory changes.
ChatGPT	Discussed as a tool for researching client needs and preparing intelligent questions.	Synthesizing client challenges, gathering insights, and competitive analysis.
ChatGPT (or similar LLMs)	Used for competitive analysis by leveraging its ability to search, analyze, and summarize insights f	Understanding competitive landscapes and providing insights for client solutions.
Chatbot Builder	Suggested as a weekend tool for app creation.	Developing and deploying chat-based applications
Claude	Used within Gamma to perform assessments with generative AI.	Providing interactive artifact-based assessments.
Fathom	Recommended as an alternative notetaking tool.	Capturing notes and action items during calls.
Gamma	Assessment tool for capturing client feedback and hosting data collection domains.	Creating initial assessments for client engagement.
Github Copilot	Used as a conversational interface for clients to access repositories.	Providing transparency and progress updates to clients.
HUX	Tool to help separate signal from noise in AI development.	Curating important technical knowledge in the AI landscape
HeyGen	Tool for generating video content from podcasts.	Creating short-form video content for social media and

Tool/Framework	Purpose	Use Case
		enhancing professional branding.
Heygen	Used for video content creation.	Used to generate small clips from longer podcast or video content for social media.
Hux	Tool specified for separating signal from noise in AI market insights.	Filtering relevant updates in the AI space.
Hux AI	A tool to synthesize inbox and calendar data, offering AI-generated insights and podcasts.	Filtering signal-to-noise ratio in emails and calendars.
Limitless	A notetaker tool used by the instructor for automated meeting documentation.	Recording meetings locally without external bots while capturing notes and action items.
Limitless Notetaker	Recommended by the instructor as a tool for taking private notes during meetings.	To record discussions, create summaries, and compile action items without adding bots to calls.
Listen Notes	Tool to find relevant podcasts for branding as an AI solution architect.	To become more visible and establish credibility in AI-related domains.
ListenNotes	Suggested for finding podcasts to participate in as a guest.	Promote personal brand by participating in relevant industry podcasts.
Lovable	Tool used to create an advent calendar application.	Rapid prototyping and creating simple applications with minimal effort.
Loveable	An evolved version of Gamma for hosting assessments with tracking capabilities.	Creating more robust assessments that include tracking of responses and class-level integration.
Make.com	Used for building an engine to pull client data and create insights.	Automating SEC filings, news, and public data collection.
Massive Action Tracker (MAT)	Used as an example of how over-	Tracking daily business activities to

Tool/Framework	Purpose	Use Case
	engineering leads to poor user adoption.	aid growth.
Microsoft Copilot	Recommended for building agents during weekend practice labs.	Creating intelligent agents via the platform's trial program
Microsoft Responsible AI Beta Test Group	Mentioned as an example of beta testing AI features with direct engagement from product leaders.	Testing tools like red-teaming agents prior to release.
Notebook LM	Optional tool to create summaries and briefings.	Synthesizing company insights into actionable briefs.
Particle AI	Customizing information intake	Generating personalized news models based on interests
PaymeGBT	Introduced as a tool for building applications.	Creating AI-based apps for specific customer use cases.
PaymeGPT	Generative AI application development	Building specialized conversational AI apps
Stanford AI Trend Index	Understanding AI trends and legislative changes	Tracking global AI bills, regulations, and trends
Vibe	Discussed as a low-code/no-code development platform.	An advent calendar application was built on the platform in less than two hours as an example.

Best Practices

1. Build a strong personal brand as a solution architect to establish credibility and foster trust.
2. Leverage podcasts and small-scale public appearances to increase visibility in your domain.
3. Use AI tools to repurpose content and expand professional reach efficiently.
4. Focus on actionable, rapid solutions in client-facing scenarios to build trust and demonstrate expertise.
5. Always begin building solutions immediately upon identifying problems to showcase skills and creativity.
6. Establish a personal brand through podcast participation and creating digital content.
7. Be a doer, not just a talker, as an AI Solution Architect.
8. Develop skills to prototype solutions quickly during client interactions.

9. Always ensure engineering teams can deliver on the promises made to clients.
10. Create authentic content to maintain credibility, such as showing platform watermarks on low-code/no-code tools.
11. Engage in continuous client support during post-sales, even if mainly as an observer.
12. Define deliverables and communication structure early in the project lifecycle.
13. Use AI tools proactively to prepare for client meetings.
14. Establish boundaries and prioritize work using a minimum remarkable product framework.
15. Utilize recurring communication structures (weekly, monthly, quarterly updates).
16. Research competitors and industry benchmarks to anticipate client needs.
17. Conduct thorough research about the client before initiating discussions.
18. Focus on delivering minimum remarkable products to secure user adoption.
19. Use automation for repetitive research tasks to save time.
20. Align solution architecture efforts with revenue generation for stronger career security.
21. Record every discussion and demo for insights and future repurposing.
22. Reduce scope to avoid over-engineering and increase focus on usability.
23. Build solutions daily to cultivate skills and generate tangible work.
24. Engage clients by showcasing prototypes tailored to their problems during sales calls.
25. Record thoughts and demonstrations to capture valuable insights for later use.
26. Establish thought leadership through regular public sharing and speaking engagements.
27. Define a project scope early and avoid over-engineering.
28. Develop solutions that are remarkable to users for better adoption.
29. Build and share solutions consistently to grow thought leadership.
30. Record all interactions to capture valuable insights and ideas.
31. Focus on small tangible wins during client interactions to demonstrate value.
32. Reduce scope to deliver impactful and adoptable solutions.
33. Start with simple features for initial user adoption.
34. Conduct live client demos to showcase tailored solutions.
35. Engage clients post-meeting with videos or URLs of demoed solutions.
36. Track revenue impact to align efforts with business goals.
37. Build daily to enhance technical and creative skills.
38. Leverage needs assessment to understand client challenges and inform solution strategies.
39. Start with small, remarkable solutions to demonstrate value and gain trust.
40. Be transparent about unknowns and acknowledge when you don't have answers.
41. Establish authentic and professional connections with product leaders and collaborators.
42. Daily monitoring of AI trends through personalized alerts and tools to stay informed.
43. Engage authentically with product leaders to build connections.
44. Start with small, impactful solutions to demonstrate feasibility and value.
45. Focus on trust-building activities like grounding recommendations with competitive analysis.
46. Use AI tools for research and insights to streamline competitive analysis efforts.
47. Leverage AI to streamline business operations and enhance transformation journeys.
48. Focus on execution and tangible solutions rather than idealistic ideas.
49. Use centralized system architectures and data lakes for better reporting and operational insights.
50. Implement risk mitigation strategies that anticipate and adapt to changes.
51. Leverage generative AI for facilitating human-centered and scalable solutions.
52. Prioritize understanding client needs and empathy in solution design.
53. Iteratively improve tools and assessments based on user data and responses.
54. Build solutions collaboratively—never build for someone without including them.

55. Start with a minimum remarkable product to quickly deliver value and iterate.
56. Focus on intentional and mindful assessment design to build trust and credibility.
57. Teach clients how to leverage tools themselves for additional impact.

Q&A Exchanges

Q1: Is a Solution Architect the same as a Forward Deployed Engineer?

Asked by: Daniel Lessa | **Time**: 18:43

Answer: A forward deployed engineer is typically customer-facing and often works post-sales. Solution Architects focus on pre-sales but can also support post-sales engagement to ensure successful delivery.

Q2: How do we avoid being considered 'admin monkeys' while doing strategic solutions work?

Asked by: René Clayton | **Time**: 19:53

Answer: Discussion not completed in this transcript segment, but the instructor acknowledged its importance.

Q3: How do solution architects avoid being seen as admin monkeys and manage ambiguous client requests?

Asked by: René Clayton | **Time**: 19:53-25:36

Answer: Set clear expectations with clients early on, define deliverables and scope, use AI tools for communication, and create boundaries using frameworks like the minimum remarkable product.

Q4: What design tool did you use for lovable?

Asked by: Tara French | **Time**: 33:23

Answer: Lovable was used, but the initial scope was reduced for simplicity.

Q5: How can tools synthesize information to enhance productivity?

Asked by: René Clayton | **Time**: 67:46

Answer: Tools like Hux enhance productivity by summarizing relevant information from emails and calendars, saving users time and avoiding redundant tasks.

Q6: What platform is Particle AI available on?

Asked by: Unnamed Student | **Time**: 70:27

Answer: Particle AI can be used to train models for specific messages and news filters.

Q7: What happens if everything we know becomes solved by AI and available to everyone?

Asked by: Tammy Capistrant | **Time**: 104:00

Answer: The instructor explained the importance of positioning as problem-solvers and partners and emphasized continuous learning to adapt to growing automation.

Q8: If you were to put a value or price tag on the capstone work, what number comes to mind?

Asked by: Aquiles Marcano | **Time**: 117:08

Answer: Instructor did not directly answer the question but acknowledged the need to separate pro bono from professional work and consider the value provided.

Class Timeline

00:03 - 10:03

Main Theme: Orientation to the AI Solutions Architect course, focusing on solution architect branding, skill-building, and the importance of actionable learning.

Concepts Covered: - AI Solution Architecture - Brand Building for AI Solution Architects

Tools Mentioned: - Listen Notes - HeyGen - Limitless - Lovable

10:03 - 20:03

Main Theme: Building skills and strategies for becoming an effective AI Solution Architect, with a focus on branding, pre-sales engineering, and practical problem-solving.

Concepts Covered: - AI Solution Architecture - Brand Building for AI Professionals - Low-Code Development

Tools Mentioned: - Limitless Notetaker - Vibe - Heygen - Fathom - ListenNotes

20:03 - 30:03

Main Theme: Effective communication strategies for solution architects and proactive research to understand client needs.

Concepts Covered: - Communication Strategy - Minimum Remarkable Product - Proactive Research using AI

Tools Mentioned: - ChatGPT - Notebook LM - Make.com - Github Copilot

30:03 - 40:03

Main Theme: Developing solution architecture skills for AI projects, including client interaction strategies, technical solution building, and aligning with revenue generation.

Concepts Covered: - Solution Architecture Strategy - Client Journey Analysis - Minimum Remarkable Product (MRP) - Revenue Alignment in AI Solution Architecture

Tools Mentioned: - ChatGPT - Notebook LM - Make.com - Lovable - PaymeGBT

40:03 - 50:03

Main Theme: The importance of scope management, user-centric design, solution architecture, and thought leadership in AI projects.

Concepts Covered: - Scope Management - Minimum Remarkable Product - Thought Leadership - AI Solution Architecture

Tools Mentioned: - Microsoft Copilot - Chatbot Builder - Notebook LM - HUX

50:03 - 60:03

Main Theme: Developing solution architecture skills with a focus on practical experience in building AI solutions and growing as a thought leader.

Concepts Covered: - Minimum Remarkable Product (MRP) - Agentic AI - Thought Leadership - AI Market Landscape Understanding

Tools Mentioned: - Massive Action Tracker (MAT) - Lovable - Microsoft Copilot - Notebook LM - Limitless

60:03 - 70:03

Main Theme: Strategies for success as an AI Solutions Architect, including building, sharing knowledge, and engaging clients effectively.

Concepts Covered: - Minimum Remarkable Product - Solution Architecture - AI Market Landscape Understanding - Thought Leadership

Tools Mentioned: - Microsoft Copilot - Lovable - PaymeGPT - Hux - Particle AI

70:03 - 80:03

Main Theme: The importance of needs assessment, trust-building, and delivering remarkable solutions as part of AI solution architecture.

Concepts Covered: - Needs Assessment - Minimum Remarkable Product (MRP) - Competitive Analysis - Trust-Building

Tools Mentioned: - Hux AI - Particle AI - AI Trend Index by Stanford

80:03 - 90:03

Main Theme: Strategies for building AI solutions in client-focused roles, including needs assessment, competitive analysis, and minimum remarkable product development.

Concepts Covered: - Needs Assessment - Competitive Analysis - Minimum Remarkable Product (MRP) - Ambient Listening

Tools Mentioned: - ChatGPT (or similar LLMs) - Microsoft Responsible AI Beta Test Group

90:03 - 100:03

Main Theme: Discussion among students about AI Solution Architecture course experiences, professional backgrounds, and application of AI in consulting and enterprise resilience.

Concepts Covered: - Centralized System Architecture - Data Lake and Enhanced Reporting - Enterprise Resilience Practice

100:03 - 110:03

Main Theme: Exploring solution architecture strategies, continuous learning, and tools for client engagement through assessments.

Concepts Covered: - Solution Architecture - Continuous Learning - Client Assessment and Data Collection

Tools Mentioned: - Gamma - Lovable - Claude

110:03 - 117:21

Main Theme: Exploring how to design AI adoption assessments, engage clients meaningfully, and leverage iterative tool development for enhanced impact.

Concepts Covered: - AI Adoption Scorecard - Minimum Remarkable Product

Tools Mentioned: - Gamma - Loveable - Claude

Action Items

Student Assignments

- **Participate in five podcasts and create ten short video clips for branding**
  - Due: January 2026
  - Purpose: Building professional credibility through thought leadership
- **Build a functional application using a tool like Microsoft Copilot or Lovable**
  - Due: Over the weekend
  - Purpose: Gain hands-on experience in rapid prototyping and AI solution creation

Preparation for Next Class

- Review needs assessment frameworks for client interactions
  - Reason: To ensure proficiency in assessing client needs
- Review AI tools used in prototyping
  - Reason: To enhance understanding of tools before capstone project work

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