



Overview

This document provides information and guidance on how to develop formative and summative assessments for AZ-900: Microsoft Azure Fundamentals. It is split into two main sections:

- **Section 1: Learning path questions** provides guidance for assessing student mastery as they progress through the course. This section includes a set of items for each learning path that you can use throughout the course to monitor student progress and inform your instruction; the assessment items may include multiple-choice questions and/or open-ended questions.
- **Section 2: Capstone project** provides guidance for using a capstone project to assess students' ability to apply what they have learned throughout the course to a real-world scenario. This project requires students to create and deliver a cloud solution presentation based on client requirements. It includes guidance for students and the instructor.

This guide is intended to be a reference and starting point for instructors who are planning how to assess students. As you read through the guide, you may choose to tailor the assessment strategies, including the assessment items and rubric, for your classroom.

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Section 1: Learning path questions

Introduction

This section includes multiple-choice and/or open-ended questions that are aligned to the course learning paths for AZ-900: Microsoft Azure Fundamentals.

You can use the questions as they're presented or modify them as appropriate for your learners. The questions do not appear in any other course materials and are designed to supplement the formative assessment opportunities that are integrated directly into Microsoft Learn and the Microsoft Official Course, such as knowledge checks, "try-it" activities, exercises, walkthroughs, labs, and demos.

Questions are designed to allow for easy integration into an online quiz through [Microsoft Forms](#) or through your institution's Learning Management System (LMS). If you aren't familiar with the Microsoft Forms, short [support videos](#) are available. As a best practice, create new quizzes and delete the old ones for each class to keep the response URLs from being circulated and responses continuing to come in after class.

Assigning the module questions to students as an independent activity will enable you to collect data about individual progress. However, we recommend that you set aside class time to review answers and address any common student misconceptions, as later modules depend on knowledge and understanding gained earlier in the course.

Overview of multiple-choice questions

The multiple-choice questions require one or more answer responses and will include plausible distractors. These are set at a level slightly lower than the multiple-choice questions in the [AZ-900 Azure Fundamentals certification exam](#).

Overview of open-ended questions

The open-ended questions present challenges beyond single answer responses and include scenario-based questions. These questions give students the opportunity to demonstrate critical thinking through their responses.

For their responses, encourage students to explore multiple cloud service solutions and adopt a design-first approach before settling on a potential solution. Exploring the official [Microsoft Azure documentation](#) is a great place for students to research and investigate the different cloud services that are available.

Learning path 1: Cloud concepts

Multiple-choice questions

1. Which of the terms in the following list can be considered benefits of using cloud services?

Select all that apply.

- a. **Elasticity (correct answer)**
- b. Unpredictable costs
- c. **Agility (correct answer)**
- d. **Economies of scale (correct answer)**

2. Which of the following terms relates to making a service available with no downtime for an extended period?

Select the correct option.

- a. Performance
- b. Fault tolerance
- c. **High availability (correct answer)**
- d. Agility

3. Which of the following sentences best describes platform as a service (PaaS)?

Select the correct option.

- a. **Users can create and deploy an application as quickly as possible without having to worry about managing the underlying infrastructure (correct answer).**
- b. Users are responsible for purchasing, installing, configuring, and managing their own operating systems, middleware, and applications.
- c. Users pay for an annual or monthly subscription.
- d. Users are only responsible for updating the operating system.

4. Which of the following requires the most user management of cloud services?

Select the correct option.

- a. **Infrastructure as a service (correct answer).**
- b. Platform as a service.

- c. Software as a service.
- d. All require approximately the same level of user management.

5. Which cloud model provides the most flexibility?

Select the correct option.

- a. Public
- b. Private
- c. Hybrid (correct answer)**
- d. All provide the same level of flexibility

Open-ended questions

1. A client wants to deploy their web application and associated data to the cloud with minimal configuration. Which cloud service type is suitable for this and why?

Answer: (Should include the PaaS cloud service type as being suitable as it provides minimal configuration for deploying and publishing code).

2. What important cloud attribute allows businesses and organizations to quickly grow their virtual machine infrastructure as their workloads increase, and how is it achieved?

Answer: (Should include a statement on scalability and how it can be achieved through the use of virtual machine scale sets).

3. What are the main differences between public and private clouds?

Answer: (Should include a statement indicating a private cloud enables the owner to have full control over everything including hardware, while a public cloud is owned by the cloud vendor).

4. A developer wants to deploy their application code to the cloud and needs access to the operating system to install custom software. Which is the best cloud service type to use in this case and why?

Answer: (Should include a statement that indicates IaaS is the most suitable as it provides access to an underlying operating system to install custom software).

5. What are the main differences between OpEx and CapEx? Give an example of each.

Answer: (Should include a statement that says OpEx has no upfront costs and can scale to meet unpredictable demand. A simple OpEx example could be a web service running on PaaS instead of on-premises server hardware. Additionally, CapEx should be briefly defined as an upfront cost an organization may invoke to purchase physical assets such as on-premises server hardware. An example of which could be a large Storage Area Network (SAN))

Learning path 2: Azure architecture and services

Multiple-choice questions

1. What Microsoft Azure object contains multiple datacenters that are connected by a low-latency network?

Select the correct option.

- a. A geography
- b. A region (correct answer)**
- c. An availability set
- d. A pair

2. Availability sets are made up of which of the following?

Select all that apply.

- a. Update domains (correct answer)**
- b. Region pairs
- c. Fault domains (correct answer)**
- d. A geography

3. Which of the following statements about virtual machines (VMs) and containers is true?

Select all that apply.

- a. All VMs share the same operating system instance.
- b. VMs are isolated from the host hardware, while containers are not.
- c. All containers share the same operating system instance (correct answer).**
- d. VMs and containers are isolated from the host hardware (correct answer).**

4. Availability zones allow customers to run mission-critical applications with what benefits?

Select all that apply.

- a. High availability (correct answer)**
- b. Low-latency replication (correct answer)**
- c. Offsite backup

d. Live migration

5. What strategy employs a series of mechanisms to slow the advance of an attack aimed at acquiring unauthorized access to data?

Select the correct option.

a. Ciphertext

b. Blob security

c. Network security layers

d. Defense in depth (correct answer)

6. Which layer of defense in depth is focused on preventing network-based attacks?

Select the correct option.

a. Data layer

b. Identity and access layer

c. Perimeter layer (correct answer)

d. Compute layer

Open-ended questions

1. What can a company do to help ensure data redundancy when using Azure Blob storage?

Answer: (Should include a statement that describes Locally Redundant Storage (LRS) and Zone Redundant Storage options and the pros/cons of each).

2. Describe what a resource group is on Azure and give an example of best practice when using one.

Answer: (Should include a statement that describes a resource group as a container of related resources for an Azure solution. It is best practice to add resources to the group that share the same life cycle, such as a web application with data storage).

3. Describe what an availability zone is on Azure and what availability zones are used for.

Answer: (Should include a statement that describes an availability zone as a service that protects applications from datacenter failures. An example could be to ensure 99.99% SLA uptime of a web service if it deployed as part of an availability zone).

4. What is the main benefit to a developer when using Azure Functions?

Answer: (Should include a statement that says Azure Functions allow developers to run small pieces of code without worrying about any of the underlying application infrastructure—they are very quick to deploy and publish)

5. In the context of the network layer in defense in depth, name and describe two actions that will help secure cloud resources.

Answer: (Should include a statement that mentions two or more of the following: limit communication between resources, deny access by default, restrict inbound internet traffic, and implement secure connectivity to on-premises networks. Essentially the focus at this layer is to limit networking connectivity across cloud resources to reduce the risk of an attack spreading through the network).

6. In what scenario would the Azure Blob immutable storage feature be useful?

Answer: (Should include a statement that mentions sectors such as Healthcare or Finance where data modification is strictly regulated).

Learning path 3: Management and governance

1. What defines the set of controls that are recommended for resources within a specified subscription or resource group?

Select the correct option.

- a. Symmetric policy
- b. Secure score
- c. Azure Policy (correct answer)**
- d. Asymmetric policy

2. If you want to prevent accidental deletion of an Azure resource, which of the following options should you use?

Select the correct option.

- a. MFA
- b. Azure Tags
- c. Azure Resource Locks (correct answer)**
- d. Azure Policy

3. Which feature of Azure would you use to help logically organize resources into a taxonomy?

Select the correct option.

- a. Azure Resource Locks
- b. Azure Advisor
- c. Azure Policy
- d. Azure Tags (correct answer)**

4. The Azure pricing calculator provides:

Select the correct option.

- a. A bill for the selected configurations of products and services used in the past month.
- b. A means to save money by committing to selected configurations of products and services over one or three years.
- c. An estimate of the costs associated with selected configurations of products and services (correct answer).**

- d. A tool to compare on-premises costs to Azure products and services.

Open-ended questions

1. A company wants to implement geographic compliance requirements to limit locations where services can be deployed. How might this be done?

Enter your answer in the following space.

Answer: (Should include a statement that mentions implementing Azure Policy and creating a policy definition based on Allowed Locations. The policy enables the company to restrict the available locations when deploying resources. Its effect is used to enforce geographic compliance requirements).

2. An employee working in the human resources department of a company is assigned a role via the Azure role-based access control (RBAC). This enables them to read and write to employee records. Considering the company has many other departments, should employees in all departments have the same RBAC role assigned as the human resource employees—or can it be done another way?

Enter your answer in the following space.

Answer: (Should include a statement that mentions employees must be assigned different roles via RBAC depending on the department they are in and their overall responsibilities. For example, some employees may only require read permissions, while others need write permissions. This can be managed through RBAC at a granular level).

3. A business wants to enhance the security of the customer sign-in process for its website so that it asks for additional forms of identification. What type of Azure service could they use for this? Additionally, give examples of the types of additional identification information that could be used.

Enter your answer in the following space.

Answer: (Should include a statement that mentions Azure MFA (multifactor authentication). The additional identification falls into three categories: something you know (security question), something you possess (mobile phone for token generation), and something you are—biometrics such as a fingerprint).

4. A business offers several separate services for music, video, and eBook content with each service requiring individual sign-in credentials. To make the customer experience more seamless they want to use a service that allows people to use one set of sign-in credentials for all separate services. Currently the business uses Microsoft Entra ID. What service do they need to add to enable the new sign-in approach?

Enter your answer in the following space.

Answer: (Should include a statement that mentions as they are already using Microsoft Entra ID, they can simply enable the single sign-on (SSO) service. This will enable customers to use just one username and password for all services, which greatly simplifies account management).

5. What are some strategies a company could use to minimize their costs when using virtual machines?

Answer: (Should include a statement that mentions deallocating resources for virtual machines when they're not in use. For noncritical workloads on virtual machines, Azure Spot Instances can save money).

6. Using the Azure pricing calculator, price a virtual machine in different locations around the world and compare the costs. What do you notice? What factors may have influenced the prices that you see? And what factors other than cost should you consider when choosing a location for your virtual machine?

Answer: (Should include a statement that says the cost of running Azure datacenters may vary around the globe due to factors such as energy costs and local taxes. Multiple factors other than cost need to be considered if deploying a service in a location that is less expensive. For example, is it far from the customers and does it increase latency? Additionally, would deploying to the location breach compliance or government regulations around data privacy?)

Section 2: Capstone project

Overview

This guide features a single, end-of-course capstone project in which each student creates and delivers a cloud solution presentation based on client requirements. The project draws upon the students' understandings gained from all learning paths in the course and presents an opportunity to demonstrate their intellectual curiosity around the design and presentation of a scenario-based cloud solution. It's designed to be flexible enough to be used in a variety of contexts for students of differing technical levels.

The Capstone Project Student Guide can be copied and redistributed to students as standalone content, as it provides an example of a baseline project that could be tailored to fit the needs of various classes. You may choose to modify some of the content dependent on which parts of the capstone are to be assessed and whether a real-world client or predefined scenario is used.

The Capstone Project Educator Guide provides additional guidance for modifications that can be made to the capstone project, as well as comprehensive information on best practices in its preparation and development.

The Capstone Project Rubric provides additional information for students and teachers in using the project as a summative assessment. Students may use this document to guide them as they complete the activities, ensuring that their work reflects what they have learned in the course.

Capstone Project Educator Guide

Overview and objectives

This is the final activity for the course. The primary objective is to create a presentation that summarizes and justifies an industry client's needs and goals for cloud services, along with a list of the recommended cloud services required to realize the goals. The presentation should also document the expected cloud service costs and state the benefits to the client. This is an opportunity for students to reflect on what they have learned throughout the course, both about Microsoft Azure and the client.

Capstone modification options

As you plan your course, you may choose to tailor the capstone project to the unique needs of your students. This may be in response to particular learning goals or logistical constraints. Depending on the student cohort and the focus of their study program, you may want to consider changes to:

- The parts of the capstone students will be assessed on.
- The use of either a real-world client or predefined client scenario.
- The rubric criteria.

The capstone can be completed individually or in groups and is modular to suit different student cohorts. You can select which parts of the capstone project to deploy for assessment purposes.

To align with industry expectations and real-world application of cloud skills, the capstone is primarily designed as a scenario-based project. In the baseline version of the project, students interact with a real-world industry client, allowing them to experience the requirements gathering phase and carry out the required research around selecting suitable cloud services. If this is not possible, you can develop a predefined industry scenario where students will make assumptions based upon the scenario content to develop an informed set of requirements. You can also ask students to research an existing company and develop a set of recommendations based on publicly available information.

The rubric criteria can easily be modified to reflect the priorities within your own classroom. You may choose to add or remove rows from the rubric or change the details of the scoring criteria.

Capstone parts

The capstone is split into three parts that offer some flexibility to adapt to student needs and their program of study:

- Part 1—produce a list of appropriate cloud services for a real-world client/predefined scenario.
- Part 2—design a cloud infrastructure diagram for the selected cloud services.
- Part 3—present the cloud solution with a discussion on the selected services.

It may be more appropriate to assess students on less technical programs against **Parts 1** and **3**. Students on more technical programs may be assessed across **Parts 1, 2,** and **3**. This is a judgement that you, as the instructor, are best equipped to make.

Part 1—produce a list of appropriate cloud services for a real-world client/predefined scenario

Depending on how you deliver the course, students can use class sessions or independent study time to complete their capstone work. This can also be facilitated through remote drop-in/support sessions.

Remind students to review the capstone rubric so they understand the required tasks for Part 1 as listed below:

- A summary description of their clients' current situation, their needs, and their goals.
- What kind of cloud service model (public, private, or hybrid) would work best for the client and why?
- What kind of cloud service type (IaaS, PaaS, or SaaS) would work best for the client and why?
- Specific Azure services and solutions they recommend for their clients and why?
- Expected costs—use the online [Azure Pricing Calculator](#) for this.
- Benefits to their clients.

Part 2—design a cloud infrastructure diagram for the selected cloud services

This part of the capstone project is designed specifically for students in more technical programs. It involves taking the cloud services identified from Part 1 and integrating them in an interconnected architectural diagram. The diagram can be created in [Microsoft PowerPoint](#) or [Microsoft Visio](#) using the [Microsoft Azure Icon Set](#). Alternatively, there are several free-to-use web-based diagramming tools that are suitable for the task. In Appendix B, an example diagram is presented that addresses the predefined client scenario for a company focused on a need for IoT cloud services.

Remind students to review the capstone rubric so they understand the required tasks for Part 1 as listed below:

- Visualize core cloud services from the identified list of cloud services.
- Cloud services should correctly highlight relationships to other services through connections.
- Identifies customer endpoints.

Part 3—present the cloud solution with a discussion on the selected services

Students can deliver their presentations either in-class or remotely. In terms of timings, approximately 10 minutes for the presentation followed by five minutes for questions should suffice. Consider the following options to decide the best format for your students to present their work to an audience:

- **Whole-class presentations:** Students share their presentations with the whole class, taking turns and following any time limits—this is only suitable for small class sizes.
- **Small group presentations:** Divide the class into small groups. Allow each student a set amount of time to present to the other students in the group.
- **Invite the clients:** If possible, inviting the clients to the presentations will provide the students with further feedback opportunities.

Students should be encouraged to discuss and justify why they selected specific cloud services to meet the client's needs. You may want to ask students to respond to some, or all, of these reflection questions:

- Why did you choose a specific service over another?
- What benefits might the client customers expect?
- What was the most challenging part of the project?
- If you had more time, what improvements would you make?

Client scenarios

In the baseline project as outlined in the student guide, students are assumed to have access to a real-world client. However, you may also choose to have students research information about a client or provide them with a predefined client scenario.

Real-world client

The benefits when using a real-world client are clear—it provides a measure of authenticity for the students and also aligns with industry expectations. Generally, the instructor would be responsible for sourcing one or more clients with whom the students can have scheduled time to understand their current business needs and goals. Ideally a session would be arranged with the client in the first instance where they can communicate their needs and goals to all students, followed by a Q & A session.

The instructor should guide the client to communicate the following information for the students to ensure they have all the information they need to begin their preparatory work:

- Company type
- Products
- Customer expectations
- Current technology resources
- Projected needs and goals

Researched client

If direct access to real-world clients is not available, you may choose to have students research a client using publicly available information. This allows for a sense of authenticity without the logistical challenges of managing client interactions. In this case, you may have students choose from a list of appropriate clients that you have preselected or allow each student to submit their own potential client for approval. Be sure to confirm that students can find the same details listed in the previous section from publicly available information when creating a list of appropriate clients and/or approving clients submitted by students.

Predefined client

If a client is not available, or if there are time constraints to deliver the course, you can choose to give students a predefined client scenario. See below for a cloud computing scenario that can be used as the predefined client scenario. Feel free to modify the scenario or develop one of your own.

The client company is looking to migrate their primary website to the cloud. However, they are currently over-provisioned on-premises due to seasonal and cyclic surges, and need to have enough excess capacity to handle demand during peak surge times. They're looking to realize improved reliability and potential cost savings by migrating to the cloud. The customer's current web-hosting solution is coming up on an update cycle, and before they commit to a large capital investment, they want to investigate if transitioning to the cloud would be a better option.

The way forward for the company to meet customer demand and expectations for their products is to use scalable cloud services. This will support the goal of business expansion and surpass the current responsiveness and reliability of their products to increase customer satisfaction. The company would like to explore the use of cloud services to address their current concerns.

The following details can be derived from the client scenario above, which is similar to the basic information that might be yielded from a real-world client:

- **Company type:** eCommerce
- **Their products:** Internet sales
- **Their customers' expectations:** Customers expect a fast, reliable experience regardless of when they're accessing the company's site.
- **Their current situation and how they do things now:** Currently using on-premises servers, which will need to be replaced in the near future. To meet peak demand capacity, they're significantly over-provisioned for day-to-day operations away from peak demand.
- **Their projected needs and goals:** Significant growth requires scalable cloud services.

Preparing and supporting students

We recommend that you introduce the capstone after learning path 2 to allow students to start thinking about how they can apply what they are learning each week to the project. The end-of-learning path questions, particularly the open-ended ones, lend themselves well to preparing your students to think independently about the processes to design a suitable cloud solution for the project. See the introduction to the **Learning Path Questions** section for suggestions of how to encourage high student engagement with the questions to help scaffold the process of designing a full-scale solution for the capstone project.

If students have questions, or are facing problems while completing the tasks, direct them to the following problem-solving strategies before asking you for help:

- Review the content in the Student Capstone Guide.
- Research the official Microsoft Azure Documentation.
- Ask peers for help.
- Review their client notes/predefined scenario document.

You may consider adding extra sessions as needed for the capstone preparation and presentation delivery. This will give students dedicated collaborative time to work in groups and allow you to informally monitor their progress as they move through the various tasks.

Capstone Project Student Guide

Overview

In this capstone, you'll create a presentation that summarizes your client's current situation, needs, and goals; lists the services you'd recommend for your client; documents the expected costs; outlines an architectural diagram; and states the benefits for your client. This is an opportunity for you to reflect on what you have learned throughout the course about Microsoft Azure and your client.

Preparing for the capstone

To best prepare for the capstone, consider the following:

- **Start preparing early.** Read this capstone guide early in the course.
- **Meet with your client and take notes.** Take and keep thorough notes about your client and remember it's better to get too much information than not enough.
- **Think about your client in each learning path.** As you learn new concepts, consider how they might apply to your client.
- **Work on the presentation early and complete the end-of-learning path questions.** Consider building your presentation throughout the course. The end-of-learning path questions are designed to help support your understanding of the capstone tasks, so think about your project as you complete them.
- **Refer to the rubric as you work.** Use the capstone rubric document to ensure you fully understand the requirements for the tasks presented below.

Capstone tasks

Task 1—produce a list of appropriate cloud services for the client

In the first phase of this project, you'll be working to understand your client's needs and using what you know about cloud services to design a solution. By the end of this task, you should have a clear idea of your client's needs and how your solution meets them. You'll be using this information to create a presentation in Task 3, so be sure that you have all the following documented:

- A summary description of the client's current situation, their needs, and their goals.
- Cloud service model (public, private, or hybrid) recommended for the client and an explanation.
- Cloud service type (IaaS, PaaS, or SaaS) recommended for the client and an explanation.
- Specific Azure services and solutions recommended for the client and an explanation.
- Expected costs (use the online Azure calculator for this).
- Benefits to the client.

Task 2—design a cloud infrastructure diagram

Use the list of Azure services identified in Task 1 and integrate them in an interconnected architectural diagram. The diagram can be created in [Microsoft PowerPoint](#) or [Microsoft Visio](#) using the [Microsoft Azure Icon Set](#). Alternatively, there are several free-to-use web-based diagramming tools that are suitable for the task.

Be sure to include the following in your diagram:

- A visualization of each of the core cloud services recommended to your client.
- Connections that correctly highlight relationships between services.
- Identification for each of the customer endpoints.

Task 3—present the cloud solution

In this phase, you will deliver a 10-minute presentation that describes the needs analysis, recommendations, and explanations that you documented earlier in the project. After the presentation, others will have an opportunity to ask you questions about your process and recommendations. Make sure you include clear evidence to support the decisions that you've made, based on the information that you gathered about your client. Also, ensure your presentation is organized and detailed enough for your audience to have a good understanding of the benefits of your recommendations.

Support and resources

If you have questions or are facing problems while completing the tasks, use the following problem-solving strategies before asking your instructor for help:

- Review the content in this Student Capstone Guide.
- Research the official Microsoft Azure Documentation.
- Ask peers for help.
- Review your client notes.

Post-project reflection questions

1. What did you learn in creating and delivering this capstone presentation that might be helpful to you in the future?
2. What challenges did you experience? How did you work to overcome them?
3. What components of your presentation went well? What are some things in your presentation that you could improve?
4. Add other comments you would like to make about this project or your work.

Appendix A: Capstone rubric

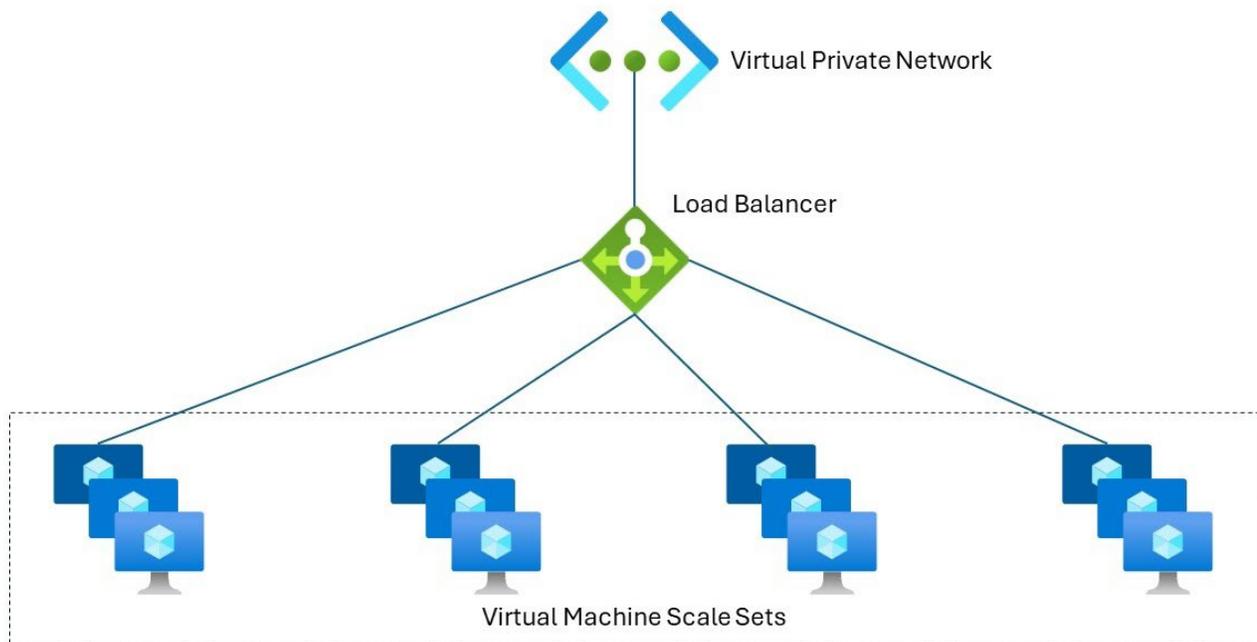
Item	Approaches standard	Meets standard	Exceeds standard (includes items in meets standard)	Summarize where and how you included this item
Task 1				
Description of client’s current cloud situation, goals, and needs	Description of the client’s situation, goals, and needs aren’t clear and relevant.	Description of the client’s situation, goals, and needs are clear and relevant to the business.	Description includes direct quotations from the client that provide details about their situation, goals, and needs and that are relevant to the business.	
Solution proposal frames how Azure Machine Learning can support the client’s goals	Not all proposals/ recommendations fit the client or demonstrate an understanding of appropriate Azure Machine Learning products and services.	Proposals and recommendations fit clearly with an understanding of the client. Services from the course are considered as potential solutions. Reasoning for recommendations demonstrates an understanding of Azure Machine Learning concepts.	Proposals and recommendations at times evidence critical thinking and explain products and services that weren’t chosen and a rationale as to why.	
Description of the costs expected for the client	Costs aren’t clearly explained or lack detail, or the costs don’t include support or a service level agreement (SLA).	Costs are clearly explained in a detailed way that’s easy to understand. All costs are considered, including support and SLAs.	All costs include supporting information that relates cost to the client’s specific needs.	
Description of the benefits for the client	Client benefits aren’t clearly explained or lack detail, or a monthly cost calculation isn’t included.	Client benefits are clearly explained in a detailed way that’s easy to understand and includes a monthly cost calculation.	Benefits include supporting information that relates to the client’s current situation and	

			potential needs in the future.	
Task 2				
Visualize an Azure Machine Learning pipeline diagram using the list of proposed modules from Task 1	Diagram conveys a basic, but somewhat limited pipeline solution for the client’s needs. Some module types may not be the best fit or are missing.	The diagram presents a robust infrastructure solution that should meet most of the client requirements. An appropriate range of module types are evidenced and presented in a linear pipeline workflow.	The diagram presents a well-considered pipeline workflow that should fully support the client’s needs. A wide range of module types are considered to a good standard and presented in a linear workflow.	
An appropriate pipeline algorithm(s) is selected and positioned correctly in the pipeline workflow	The algorithm is not a good fit or is missing from the pipeline.	The selected algorithm is suitable for the solution and positioned as part of the pipeline.	The selected algorithm fully meets the client needs and is positioned correctly in the pipeline workflow.	
Task 3				
Presentation aids	Not all materials are organized or easy to understand. Not all visual and/or audio elements help audience understanding; some might distract.	Materials are organized and clear. Visual or audio elements help audience understanding.	Materials are interesting, easy to understand, and include at least one way to gather audience responses beyond just asking if there are any questions.	
Delivery of presentation	Presenter isn’t prepared or doesn’t engage with the audience.	Presenter is prepared and engaged with the presentation and the audience. Communication of ideas is mostly clear and effective.	Presenter communicates beyond just reading the words on the presentation materials. Communication of	

			ideas is consistently clear and effective.	
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Appendix B: Example capstone virtual machine scale set diagram

The diagram presented below is an indicative example of what a student could produce as a basic pipeline diagram to address the predefined client scenario in the Client Scenarios section. More advanced modules can be added—for example adding robust load balancing and geographical distribution to improve global response and the use of availability sets to alleviate concerns of security updates and patches impacting performance. The students may also choose a path of a containerized solution instead of virtual machines.





To learn more about how Microsoft Learn can help you build your technical skills, go to aka.ms/azureforstudents.