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Course, Year and Section: BSIT2A **Subject:** Platform Technologies

Lesson 3 – Assessment 3 (Laboratory Activity):

Alison Course Completion + Cloud Service Simulation

Activity Title:

Google Cloud Computing Foundation + Cloud Deployment Simulation

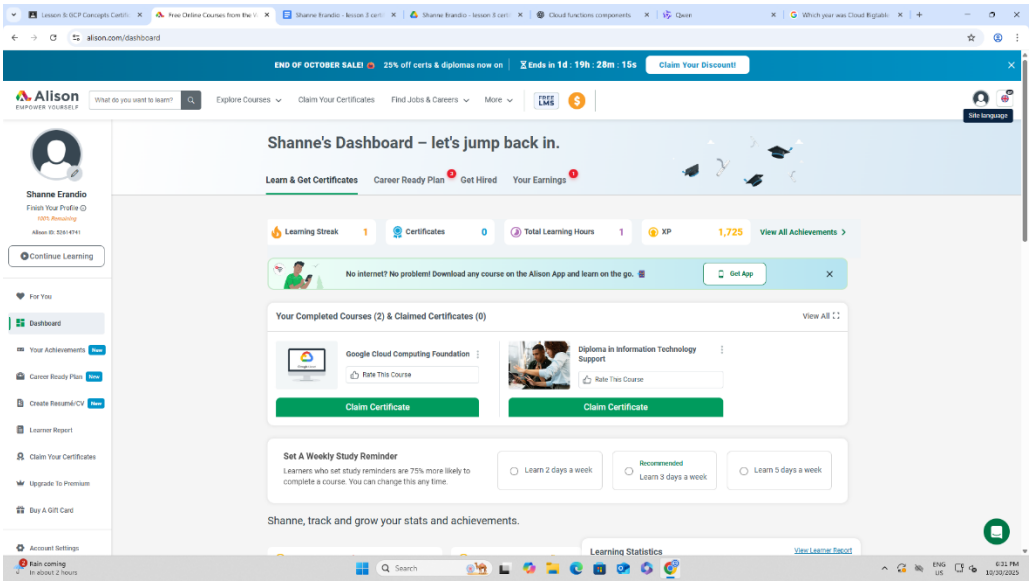
Objective:

To develop foundational knowledge and hands-on familiarity with Google Cloud concepts, architecture, and services by completing the *Google Cloud Computing Foundation* course and performing a short simulation of deploying or managing cloud resources.

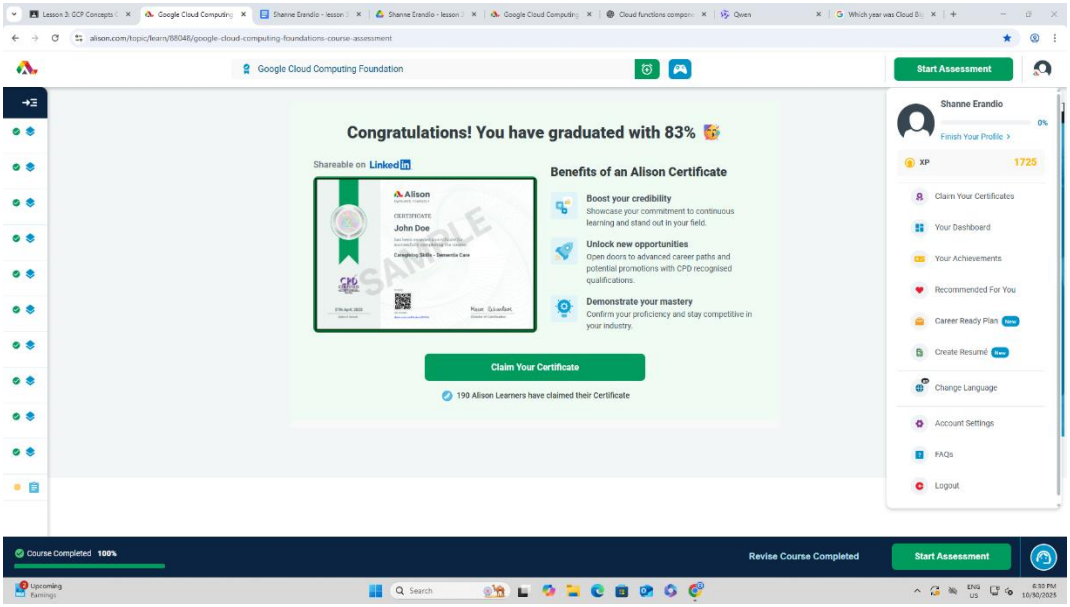
This activity enhances cloud literacy, problem-solving, and documentation skills—essential for IT and software-related roles.

Screenshot Requirements and Placement

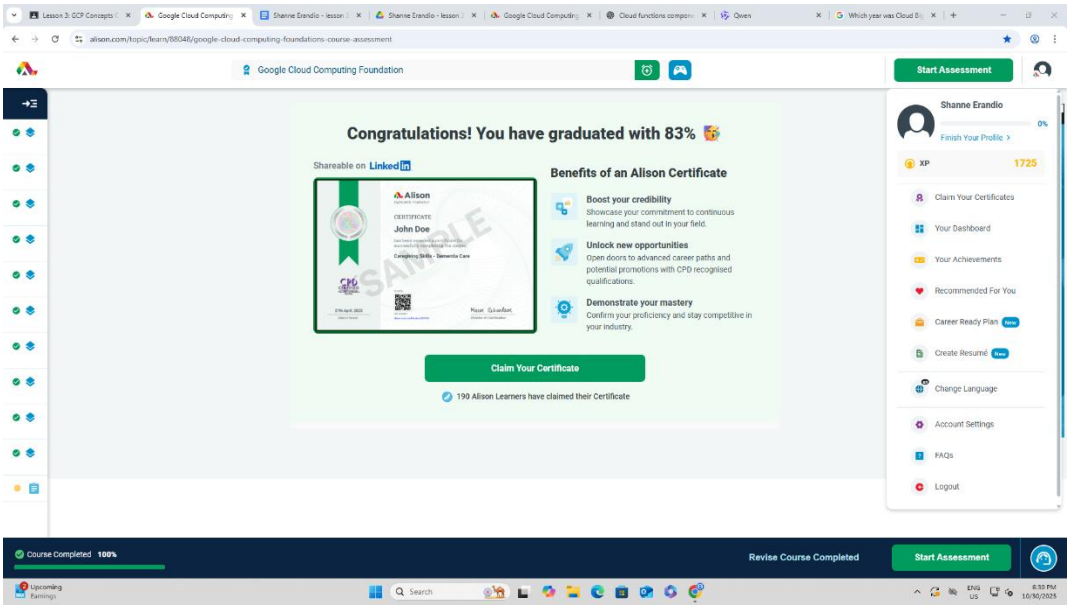
1. Alison Dashboard showing 100% completion



2. Assessment Results or Progress Page (with quiz scores



3. Certificate of Completion (PDF or screenshot)



Scenario: Cloud Storage provides a scalable, secure, and highly available solution for storing and sharing data in the cloud. Learning how to properly upload, manage, and share data enhances efficiency, collaboration, and data governance in an organization. The key takeaway from this exercise is understanding the workflow of managing cloud storage resources, including bucket creation, object upload, permissions, and sharing options.

Simulation: Uploading and Sharing Data Using Cloud Storage

Objective: Simulate creating a Cloud Storage bucket, uploading data, and sharing it with specific users.

Step 1: Log in to Google Cloud Console

1. Navigate to Google Cloud Console.
2. Authenticate using your **Google account** with appropriate permissions (e.g., **Storage Admin** role).

Step 2: Create a Cloud Storage Bucket

1. In the **Navigation Menu**, select **Storage → Browser**.
2. Click **Create bucket**.
3. Enter a **unique bucket name** (e.g., `project-data-bucket`).
4. Select a **region or multi-region** depending on data residency needs.
5. Choose a **storage class**:
    - **Standard** for frequently accessed data
    - **Nearline/Coldline/Archive** for less frequent access
6. Configure **access control**:
    - **Uniform bucket-level access** (recommended for consistent permission management)
7. Click **Create**.

Step 3: Upload Data to the Bucket

1. Open your newly created bucket.
2. Click **Upload files** or **Upload folder**.
3. Select the desired **files or folders** from your local machine.
4. Monitor the **upload progress** and ensure all files complete successfully.

Step 4: Set Permissions for Sharing

1. Inside the bucket, click **Permissions → Add**.
2. Enter the **email addresses** of the users or groups you want to share with.
3. Assign appropriate **roles**:
    - **Storage Object Viewer** – read-only access

    - **Storage Object Admin** – full control over objects
4. Click **Save**.

Step 5: Generate Shareable Links (Optional)

1. Select a file in the bucket.
2. Click **Get link**.
3. Configure link access:
    - **Restricted** (only specific users)
    - **Public** (anyone with the link)
4. Copy and distribute the link as needed.

Step 6: Verify Access

1. Ask a collaborator to access the bucket or object using the provided link or permissions.
2. Ensure proper role-based access and file visibility.

Technical Notes:

- **Buckets** are the top-level containers for objects in Cloud Storage.
- **Objects** refer to the individual files stored in buckets.
- **Roles and permissions** in Cloud IAM control access to buckets and objects.
- **Uniform bucket-level access** simplifies security by applying the same policies to all objects.

Outcome:
Successfully uploaded data to Cloud Storage and shared it securely with intended collaborators, ensuring proper permissions and access control.

Reflection:

The *Google Cloud Computing Foundation* course provided a clear and structured introduction to cloud computing fundamentals and Google Cloud's ecosystem. The most valuable takeaway was understanding the shared responsibility model and how Google Cloud abstracts infrastructure management while empowering users to configure security, networking, and compute resources effectively. I particularly appreciated the modules on Identity and Access Management (IAM) and Virtual Private Cloud (VPC), which clarified how permissions and network isolation work in real-world deployments.

The course demystified core services like Compute Engine, Cloud Storage, and BigQuery by explaining their use cases and integration patterns. One challenge was grasping the nuances of IAM roles versus permissions, but the interactive quizzes helped reinforce the concepts. The billing and cost management section was also eye-opening—it emphasized the importance of

setting budget alerts and using committed-use discounts, which are critical for operational efficiency.

This foundational knowledge will significantly benefit my future career in software development. As more applications migrate to the cloud, understanding how to deploy, secure, and monitor resources on platforms like Google Cloud is essential. I now feel more confident designing cloud-native applications and collaborating with DevOps or infrastructure teams. Additionally, this course has motivated me to pursue further certifications like the Associate Cloud Engineer.

Criteria	Excellent (16–20 pts)	Very Good (11–15 pts)	Good (6–10 pts)	Needs Improvement (1–5 pts)	Poor (0 pts)	Score
1. Course Completion	Completed with certificate; all modules finished with high scores	Completed; cert shown with minor issues	Completed but unclear details	Incomplete; missing cert	No attempt	
2. Screenshot Documentation	All required screenshots attached, clear and visible	Minor screenshots missing or unclear	Some blurry or missing details	Screenshots cropped or unreadable	None	
3. Reflection Quality	Deep insight, thoughtful, and articulate	Clear and relevant with good depth	Basic ideas, surface-level	Very short or vague	None	
4. Cloud Simulation	Clear, realistic, and technically accurate	Mostly clear, logical, professional	Limited realism or minor technical errors	Unclear or incorrect flow	Not submitted	

5. Timeliness	Submitted on/before deadline	1–2 days late	3–5 days late	6+ days late	Not submitted	

Total Score: _____