

## Create and Customize Amazon Q Application

Build a functioning Q App that analyzes skills and recommends training to bridge the skill gap.

- Input cards exist for uploading **CVs** and **Job Profiles**.

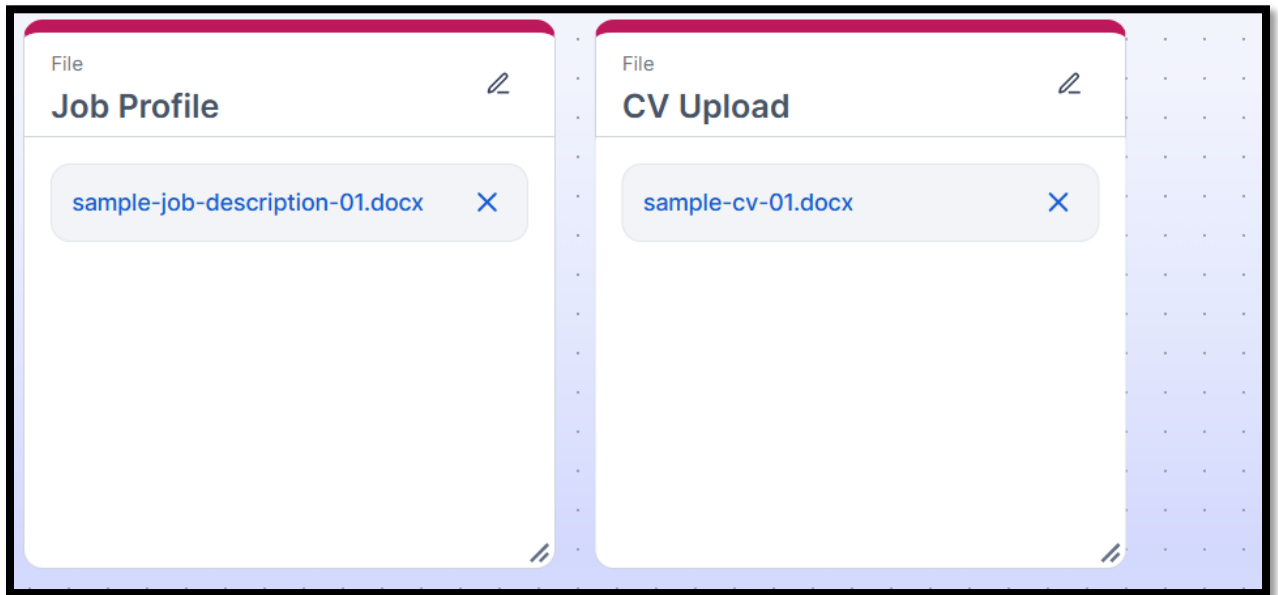


Figure 1-Input cards exist for uploading CVs and Job Profiles

- Output cards are implemented for both **Skill Gap Analysis** and **Training Recommendations**.

# Output

×

Title

Skill Gap Analysis

Prompt ⓘ

Type @ to reference a card

You are a career coach. Review the learner's CV **CV Upload** and compare it with the provided Job Profile **Job Profile**. Identify the key skill gaps, missing qualifications, and areas where the learner could improve to better match the job requirements. Provide:

A summary of the learner's current strengths relevant to the role.

A list of missing or underrepresented skills.

Actionable recommendations for upskilling or improving the CV.

Figure 2 - Output card for Skill Gap Analysis

# Output

×

Title

Training Recommendations

Prompt ⓘ

Type @ to reference a card

Using the Skill Gap Analysis suggest the most relevant training programs to close the identified gaps.  
When generating recommendations, follow these guidelines:  
  
Map each skill gap to specific training resources  
  
Choose the most appropriate courses, videos, articles, hands-on labs, or practice modules.  
  
Explain briefly why each recommendation is relevant.

Figure 3 Output card for Training Recommendation

- Functionality is verified by uploading sample inputs and generating results.

Screenshot of the working interface is provided



Figure 4 - Screenshot of simple working interface

## Enhance the application with advanced interaction components

- An **Input Card** for personalized recommendations by coaches is added.

The image shows a 'Text input' modal window with a close button (X) in the top right corner. It contains three input fields: the first is labeled 'Title' and contains the text 'Coach Recommendation'; the second is labeled 'Placeholder - optional' and contains the text 'Use this space to add coach recommenda'; the third is labeled 'Default value - optional' and contains the text 'default value'. At the bottom of the modal, there are two buttons: 'Delete card' and 'Save'.

Figure 5 - An Input Card for personalized recommendations by coaches is added

The image shows a 'Coach Recommendation' input card. The card has a title 'Coach Recommendation' and a placeholder text: 'Use this space to add coach recommendations by reviewing the skill-gap analysis, choosing relevant training programs based on Learner's Preferred learning format, Time availability and learner's skill level'. A red box highlights the card's content area. Below the card, a large upward-pointing arrow is shown, with the text 'content of placeholder getting displayed' next to it. The card is part of a list, as indicated by the blue header bar and the vertical ellipsis on the right.

Figure 6 Coach Recommendation Input Card with Placeholder content

### Coach Recommendation

Skill Level: Beginner  
Time Availability: 2 hours every morning  
Preferred Learning Formats: Hands-on labs + Video content

Recommendation:

Based on the identified skill gaps, I recommend a blended learning path that combines foundational video lessons with practice labs to build confidence and real-world capability.

Training Programs:

AWS Skill Builder

AWS Cloud Quest: Cloud Practitioner (hands-on, gamified learning)

AWS Cloud Practitioner Essentials (Video Course)

Introduction to AWS Identity and Access Management (IAM)

Hands-On Labs: Build your first Amazon S3 and EC2 setup

Udacity

AWS Cloud Architect Nanodegree – Intro Modules


Introduction to Cloud Computing

Cloud DevOps Basics (Beginner Sections)

Suggested Schedule (2 hours each morning):

Run ▶

↺ Reset



with sample input

Figure 7 Coach Recommendation Input card with Sample Input

- Updated **Output Card** for Training Recommendations

## Output

×

Title

Training Recommendations

Prompt ⓘ

Type @ to reference a card

Using the **Skill Gap Analysis** and **Coach Recommendation** suggest the most relevant training programs to close the identified gaps.

When generating recommendations, follow these guidelines:

Map each skill gap to specific training resources

Choose the most appropriate courses, videos, articles, hands-on labs, or practice modules.

Explain briefly why each

Figure 8 Output Card for Training Recommendations including input card Coach Recommendation

- An **Output Card** for a suggested **schedule** is added.

# Output

×

Title

Schedule

Prompt ⓘ

Type @ to reference a card

Using the training recommendations provided in the **Training Recommendations** , generate a personalized learning schedule for the learner.

The schedule should reflect:

The learner's skill level

Time availability

Preferred learning formats

Recommended courses or labs (e.g., AWS Skill Builder, Udacity)

Break the schedule into a daily or weekly

Figure 9 - Output Card for a schedule is added.



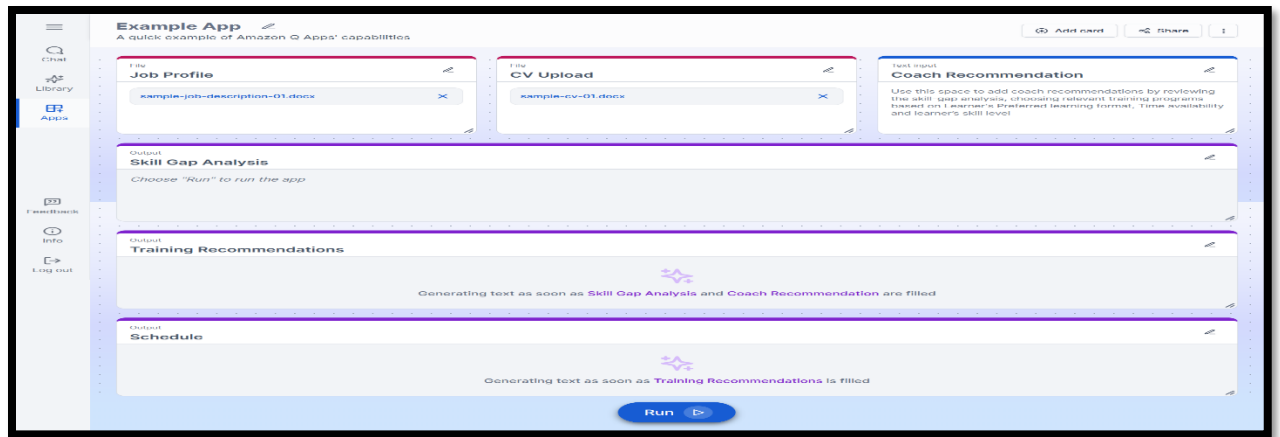


Figure 10 - The Structure of the application

- Functionality of added components is tested and confirmed.

Updated interface screenshot is submitted.

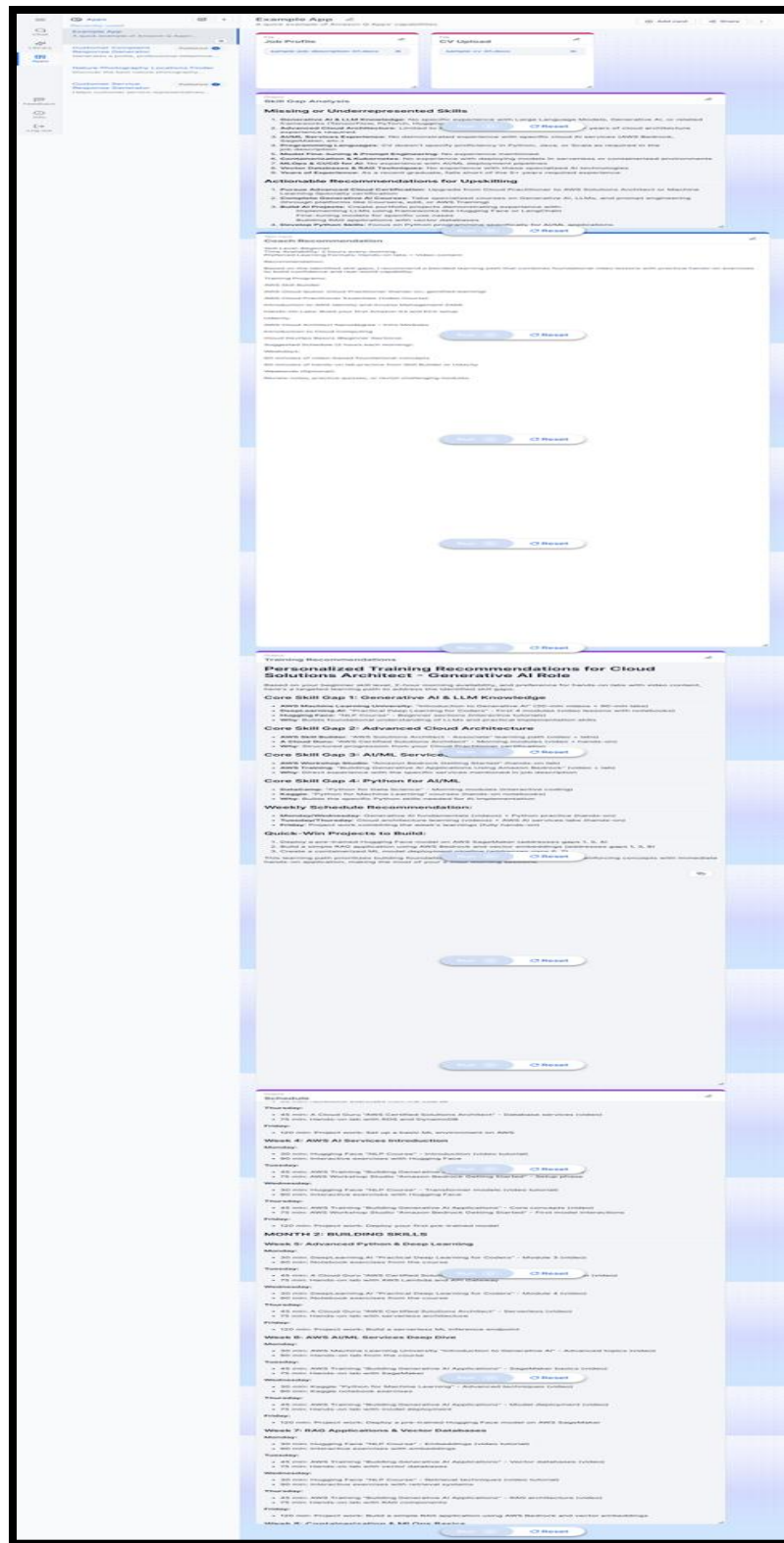


Figure 11 Updated Working Interface

Output

Training Recommendations

## Personalized Training Recommendations for Cloud Solutions Architect - Generative AI Role

Based on your beginner skill level, 2-hour morning availability, and preference for hands-on labs with video content, here's a targeted learning path to address the identified skill gaps:

### Core Skill Gap 1: Generative AI & LLM Knowledge

- **AWS Machine Learning University:** "Introduction to Generative AI" (30-min videos + 90-min labs)
- **DeepLearning.AI:** "Practical Deep Learning for Coders" - First 4 modules (video lessons with notebooks)
- **Hugging Face:** "NLP Course" - Beginner sections (interactive tutorials)
- **Why:** Builds foundational understanding of LLMs and practical implementation skills

### Core Skill Gap 2: Advanced Cloud Architecture

- **AWS Skill Builder:** "AWS Solutions Architect - Associate" learning path (video + labs)
- **A Cloud Guru:** "AWS Certified Solutions Architect" (video + hands-on)
- **Why:** Structured progression from your Cloud

Run

Reset

Figure 12 - Training Recommendation Sample Response

Output

Schedule

12-Week Personalized Learning Schedule

Cloud Solutions Architect - Generative AI Path

Learner Profile:

- Skill Level: Beginner
- Time Availability: 2 hours every morning
- Preferred Learning Format: Hands-on labs + Video content

MONTH 1: FOUNDATIONS

Week 1: Python & Generative AI Basics

Monday:

- 30 min: DataCamp "Python for Data Science" - Introduction module (video)
- 90 min: DataCamp interactive coding exercises

Tuesday:

- 45 min: AWS Skill Builder "AWS Solutions Architect" - Introduction module (video)
- 75 min: AWS Skill Builder hands-on lab - Setting up your environment

Run

Reset

Figure 13 Schedule – Sample response

Updated the name of the app to **Career Coach Application** and added a description

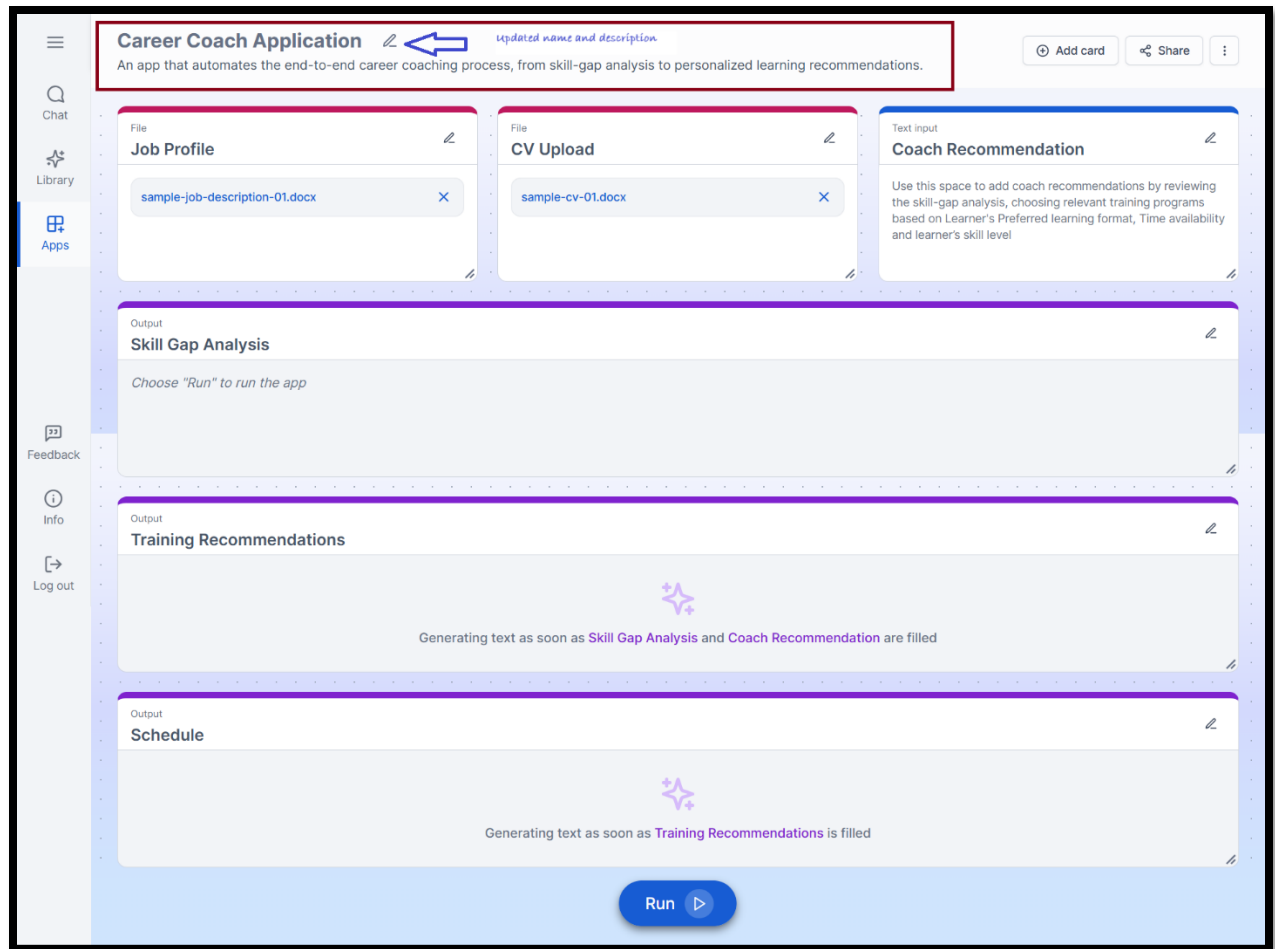


Figure 14 Updated name and description of the app