**Lab Guide**

IBM Business Automation Manager Open Edition

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Hands-on Lab

Creating an Exam with Watsonx Orchestrate and Gen AI

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# Introduction

In this Lab you build an exam using watsonx Orchestrate and Generative AI.

The four components used in the lab are:

* **Watsonx.AI** – to generate the exam questions.

See <https://www.ibm.com/products/watsonx-ai>

* **Monday** – to store and triage exam questions ready for publication.

See <https://ibm.monday.com/boards/6171654226>

If you don’t have access to this board, request access from your instructor

* **Cloudant** – to store the published exam.

See <https://www.ibm.com/products/cloudant>

* **React** – to try the exam

See <https://vizquiz.1apbmbk49s5e.eu-gb.codeengine.appdomain.cloud/?db=wxoexam>

# Create an Exam Question

In this section you will create an exam question and publish it to Monday.com.

1. Login to Watsonx Orchestrate and go to the Team Skills:

A black and red rectangle with a red square

Description automatically generated

1. In the chat, type *exam creator* to invoke the Create Exam Question skill:

A screenshot of a phone

Description automatically generated

1. Go to a Wikipedia page of your choice. For example, choose the page on diamonds:

A screenshot of a computer

Description automatically generated

4. Select the diagram of the diamond crystal and select Copy Image Link:

A screenshot of a computer

Description automatically generated

5. Back in Orchestrate, fill in the Question Generator dialog box. Enter a category of *CHEMISTRY*

, paste from the previous step into the icon field, and then copy and paste the first sentence of the wiki text.

Depending on the Wiki entry you selected, you should see something like this:

A screenshot of a computer

Description automatically generated

6. We are now ready to invoke Watsonx.AI to generate multiple choice questions based on this input. Hit *Apply*

7. After a moment, you will be presented with a dialog box containing the multiple-choice question generated by AI:

A screenshot of a computer

Description automatically generated

8. Modify the generated the question and responses if necessary to make the question better. In the example above, the word CLEAR has been added to the question to make it less ambiguous.

9. Press Apply.

10. After a few moments you should see the following dialog:

A screenshot of a computer

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11. Hit Apply to save the question to Board 6171654226.

# Accept the exam question on the Monday Board

A Monday Board has been created for this lab to allow you to view and triage exam questions created by Orchestrate.

1. Using a browser, navigate <https://ibm.monday.com/boards/6171654226>

**Note:** If you don’t have access to this board, request access from your instructor.

1. Move the status of the question from **New request** to **Approved**:

A screenshot of a computer

Description automatically generated

# Publish the Exam

1. The next step is to publish the questions to a Cloudant database. Back in Orchestrate, type in the Chat *publish exam*:



1. After a few moments you will see the *Publish Exam* dialog. Ensure that the board is set to *6171654226:*

A screenshot of a computer

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1. After a few moments a new dialog appears with the approved exam questions from the Monday Board. Select at least two questions and hit apply (if you select only one question there is a bug that will prevent it from being published)

A screenshot of a computer

Description automatically generated

1. After a moment you should see the following response:



# Run the Exam

The final step is to try out the exam.

1. Using any browser, navigate to: <https://vizquiz.1apbmbk49s5e.eu-gb.codeengine.appdomain.cloud/?db=wxoexam>
2. The exam could take a few minutes to start. After a while you should see all the published questions, including your own:

A triangle shaped object with text below

Description automatically generated

1. Try out the exam and see how many you pass.

Congratulations! You have successfully created a multiple-choice question using Orchestrate and Generative AI.