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| **[Welcome to Week 4!](https://learn.umgc.edu/d2l/le/news/766913/3017823/view?ou=766913)** | Jun 7, 2023 12:01 AM | - |
| Welcome to Week 4. This week we have [Homework 2 - Using DynamoDB](https://learn.umgc.edu/d2l/common/dialogs/quickLink/quickLink.d2l?ou=766913&type=dropbox&rcode=UMUC-1716723) to work on. **Homework 2 is due on June 13, 2023 @ 11:59PM ET.**  **HOMEWORK #2 GUIDANCE**  I have attached a quick video (***from a previous session so dates might be off - but content is accurate***) for Week 4 (~13mins) to go over some items.  In the video, I provide a demo of the working version of the Week 4 [Homework 2 - Using DynamoDB](https://learn.umgc.edu/d2l/common/dialogs/quickLink/quickLink.d2l?ou=766913&type=dropbox&rcode=UMUC-1716723). I cover the various error conditions that you need to make sure you are handling. Some expected error conditions that your application should "gracefully" handle are things like:  1) Searching an empty DB  2) Attempting to initialize the DB more than once  3) Searching for records that do not exist  4) Entering options that are not valid  Keep in mind - for this "demo" I am showing you how to run against a DynamoDB locally for debugging or other types of purpose. However - **your final submitted assignment must run in AWS on your Cloud9IDE instance.** **All of the screen grabs for the assignment for your test cases should come from it running within AWS.** There is a part of the assignment where via a script you must delete all of the created data - I do not demonstrate that in this video. Please make sure to follow all of the required sections of the assignment.  We are in a 400-level class so there are some expectations about your deliverables. This class required SDEV300 as a prerequisite. In SDEV300 - Building Secure Python Applications you learned Python, how to properly comment/document within your applications, how to build functions/classes/modules, error handling with try/except blocks, and how to Pylint your code to PEP8 compliance. All assignments in SDEV300 had a test table. You are expected to be implementing these things in this class - SDEV400. All assignments should be Pylint'ed - if you don't have proper docstrings your Pylint score will be terrible and you will lose 10 points.  **For this assignment - if your code does NOT run - I will not corrected it for you. If you turn in code that does not run - it is an automatic zero. Verify using your AWS Account that the code you submit has no syntax errors and will run properly.**  **Your code is expected to be written in functions. You are expected to have a main() that then calls other functions based on the actions required. The hello\_world.py sample attached to**[**Python Application Template - PyLint Scoring**](https://learn.umgc.edu/d2l/common/dialogs/quickLink/quickLink.d2l?ou=766913&type=news&rcode=UMUC-8184407)**demonstrates this expectation. You must receive an 80% or greater in Pylint on your code. You will lose -10pts for poorly coded Pylint scores.** ****REMEMBER: The Homework 2 is worth 17.5% of your overall grade.**** I will post a sample [Homework 2 - Using DynamoDB](https://learn.umgc.edu/d2l/common/dialogs/quickLink/quickLink.d2l?ou=766913&type=dropbox&rcode=UMUC-1716723) answer June 24, 2023 @ 12:00AM ET for students to review. After this answer is posted - I cannot accept anymore [Homework 2 - Using DynamoDB](https://learn.umgc.edu/d2l/common/dialogs/quickLink/quickLink.d2l?ou=766913&type=dropbox&rcode=UMUC-1716723) submissions. Make sure you get your [Homework 2 - Using DynamoDB](https://learn.umgc.edu/d2l/common/dialogs/quickLink/quickLink.d2l?ou=766913&type=dropbox&rcode=UMUC-1716723) in before the solution is posted June 24, 2023 @ 12:00AM ET. NOTE: The due date for [Homework 2 - Using DynamoDB](https://learn.umgc.edu/d2l/common/dialogs/quickLink/quickLink.d2l?ou=766913&type=dropbox&rcode=UMUC-1716723) is June 13, 2023 @ 11:59PM ET  **COURSE INPUT**  In my example, I load a static set of course data from a JSON file into the database. I have attached my data set - should you wish to use it. My JSON data does **NOT** include the required CourseID field, as this field is auto-generated on the fly during insert in my implementation to make sure it is unique. You could also implement this other ways - but make sure that you input a minimum of 10 records.  **FILTER EXPRESSION TIP**  If you are using the Boto3 Resource connection for your HW#2 you may find yourself building a "FilterExpression" like:  FilterExpression=**And**(\*[(**Key**(key).eq(value))  The **And**and **Key** in the expression are actually **boto3.dynamodb.conditions** functions. Please make sure to import them.....:  from boto3.dynamodb.conditions import **Key**, **And**  Respectfully,  Craig Poma Adjunct Associate Professor [craig.poma@faculty.umgc.edu](mailto:craig.poma@faculty.umgc.edu)  Attachment(s):    |  |  |  |  | | --- | --- | --- | --- | | [courses\_data.json](https://learn.umgc.edu/d2l/common/viewFile.d2lfile/Database/NzUwNDQ0MDE/courses_data.json?ou=766913) (1.14 KB) |  |  |  | | [SDEV400\_Week4\_DynamoDB\_2.mp4](https://learn.umgc.edu/d2l/common/viewFile.d2lfile/Database/NzUwNDQ0MDI/SDEV400_Week4_DynamoDB_2.mp4?ou=766913) (222.29 MB) |  |  |  | | [Week4\_SDEV400\_2023\_Summer\_1.pptx](https://learn.umgc.edu/d2l/common/viewFile.d2lfile/Database/NzUwNDQ0MDM/Week4_SDEV400_2023_Summer_1.pptx?ou=766913) (1.14 MB) |  |  |  | | | |