DynamoDB notes:

I have set up the 5 DynamoDB database tables on my AWS account. Because of the schemaless quality of DynamoDB, we need to be on the same page regarding what attributes our application will use for each entry of each table. I have populated the tables with similar data to what we had in the PostgreSQL database. I will lay out the "schema" that we all should use when accessing the database and then explain my code.

Each of the attribute values is a string unless I specify otherwise

**Users** (user_id, first_name, last_name, email, username, password, last_login, date_created)

- user_id is the partition key and is a number

**Budget** (user_id, budget_id, budget_name, start_date, end_date, total_income, total_expense, description)

- user_id is the partition key and is a number
- budget_id is the sort key and is a number

**Category** (user_id, category_id, category_name)

- user_id is the partition key and is a number
- category_id is the sort key and is a number

**BudgetItem** (budget_id, budget_item_id, category_id, amount)

- budget_id is the partition key and is a number
- budget_item_id is the partition key and is a number

**Transaction** (budget_id, budget_name, transaction_id, category_id, category_name, amount, date, description)

- budget_id is the partition key and is a number
- transaction_id is the sort key and is a number

Note: on the Transaction table I added budget_name and category_name fields so that I didn't have to query for them every time I looked up a transaction.

Notes about the code:

In the "dataAccess" package I created a new package named "Dynamo". I have created a Dao class for each of the tables. In these classes I created an "add item" function that adds the correct item to the correct table. You guys can add additional methods based on your needs. I recognize you might not be familiar with the syntax – there is some pretty good documentation on AWS DynamoDB for Java SDK. If you have questions, let me know. I have not fully completed my Transaction stuff yet but will hopefully finish that tomorrow.

In order for you to be able to run your code locally with access to the DynamoDB database, you need to add the Environment Variables that are shown in the screenshot that I sent in a picture.