Challenge Description:

You have been given a JSON array representing app reviews. Your task is to create a Node.js API with MySQL database integration that allows filtering and searching of the reviews based on various criteria.

Instructions:

1. Set up a MySQL database with a table named 'reviews' to store the reviews data. The table should have the following columns:

- id (INT, Primary Key)

- appID (VARCHAR)

- appStoreName (VARCHAR)

- reviewDate (DATETIME)

- rating (INT)

- version (VARCHAR)

- countryName (VARCHAR)

- reviewHeading (VARCHAR)

- reviewText (VARCHAR)

- reviewUserName (VARCHAR)

2. Write a Node.js API using Express.js that performs the following actions:

a. Fetch all the reviews from the database.

b. Modify the fetched reviews data to match the following format:

```json

{

"reviews": [

{

"id": 1,

"appID": "com.myntra",

"appStoreName": "iOS",

"reviewDate": "2018-10-23T13:06:02",

"rating": 3,

"version": "v0.1",

"countryName": "US",

"reviewHeading": "Wonderful",

"reviewText": "Excellent application for works in pdf format",

"reviewUserName": "Alice6"

},

...

]

}

```

c. Create a GET endpoint '/reviews' that returns all the reviews in the modified format as JSON.

d. Create a GET endpoint '/reviews/filter' that accepts query parameters to filter the reviews based on the following criteria:

- `appID`: Filter reviews by the specified app ID.

- `appStoreName`: Filter reviews by the specified app store name.

- `rating`: Filter reviews with the specified rating value.

- `countryName`: Filter reviews from the specified country.

e. Create a GET endpoint '/reviews/search' that accepts a query parameter `query` to search for reviews based on the review heading and review text. The API should return the reviews that match the search query.

3. Implement the filtering and searching logic in the respective API endpoints.

4. Test your API endpoints using a tool like Postman or cURL to ensure they return the expected results.

Note: You can use any MySQL library or ORM of your choice to interact with the database.

Evaluation Criteria:

1. Correctly set up the MySQL database with the 'reviews' table.

2. Successfully fetch the reviews from the database using Node.js.

3. Properly modify the fetched reviews data to match the required format.

4. Implement the '/reviews' endpoint that returns all reviews in the modified format.

5. Implement the '/reviews/filter' endpoint that filters the reviews based on the provided query parameters.

6. Implement the '/reviews/search' endpoint that searches for reviews based on the provided search query.

7. Code quality, organization, and adherence to best practices.

8. Error handling and edge case considerations.