

Review Processing Code Challenge

Scenario:

You are working on a web application where users can submit reviews for products. Each review includes a rating and a comment. The current implementation involves processing these reviews to find the average rating and list all comments. However, the existing code is inefficient and lacks proper documentation.

Challenge:

1. Add meaningful comments to the code to explain its functionality.
2. Write a brief explanation of what the code does.
3. Identify performance issues in the code and optimize it.

Existing Code:

The following code processes an array of reviews to calculate the average rating and compile a list of comments.

```
function processReviews(reviews) {  
    let sum = 0;  
    let comments = [];  
    for (let i = 0; i < reviews.length; i++) {  
        sum += reviews[i].rating;  
        comments.push(reviews[i].comment);  
    }  
    let averageRating = sum / reviews.length;
```

```
return {  
    averageRating: averageRating,  
    comments: comments  
};  
}
```

Requirements:

- Comment the entire code to explain what each part does.
- Provide a written explanation of the code's overall functionality.
- Optimize the code to improve its performance, readability, and maintainability.

This task will test your ability to understand existing code, improve its documentation, and optimize its performance.