1. Introduction

This report summarizes the API integration process, covering key steps, challenges, and solutions.

- 2. Integration Process
- 2.1 Key Steps Identify API requirements, endpoints, and authentication methods.
 - Obtain and securely configure API access.
 - Implement API requests using proper HTTP methods.
 - Handle errors, rate limits, and logging.
 - Optimize performance with caching and pagination.
 - Secure API usage with HTTPS and authentication mechanisms.
 - Test using Postman/curl and deploy with monitoring.
- 2.2 Migration & Tools
 - Assess and map old and new schemas.
 - Develop and test migration scripts.
 - Use tools like Postman, Swagger, AWS DMS, and database migration tools.
- 3. Challenges & Solutions

Challenge Solution

Authentication Use correct API keys and

Issues guidelines.

Rate Limiting Implement request throttling and

caching.

Data Format Validate and adjust schemas as

Mismatch needed.

Downtime & Use retries, fallbacks, and

Failures monitoring.

Migration Automate with scripts and

Complexity thorough testing.

4. Conclusion

Effective API integration requires planning, security, and optimization. Schema adjustments and migration strategies ensure smooth transitions and data integrity.

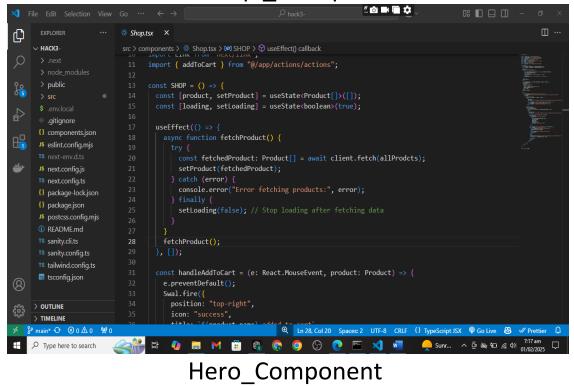
b) Screenshots of:

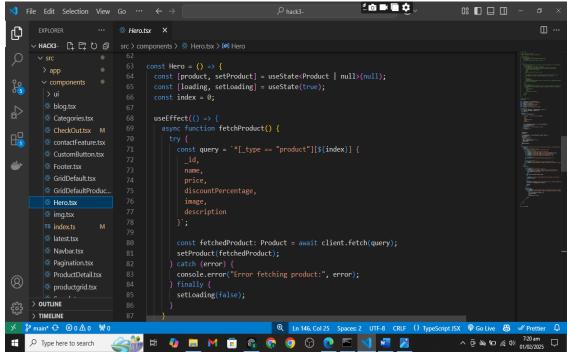
- . Api calls.
- . Data successfully displayed in Fronted
- . Populated Sanity CMS fields.

Screenshots of:

Api calls

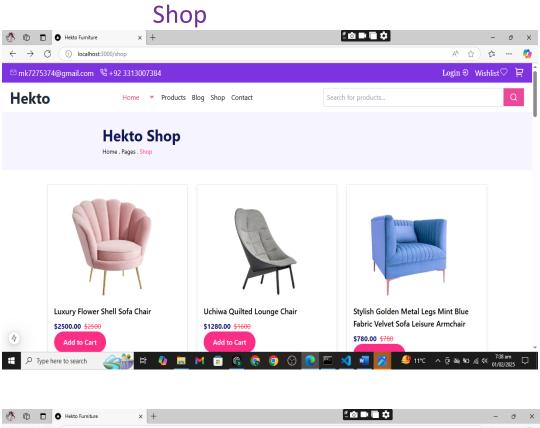
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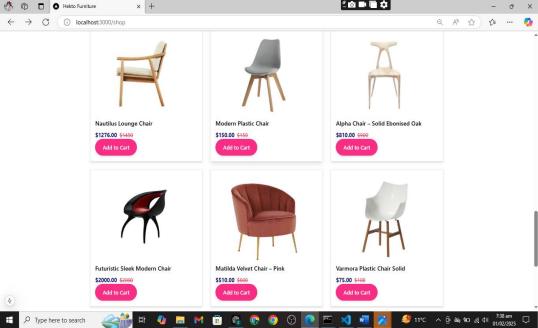




Screenshots of:

Data successfully Displayed in the frontend.





Screenshots of;

Populated Sanity CMS fields.

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                                                                                                 const productSchema = {
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type: 'document',
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                        shopupdate.tsx
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                                                                                                                   type: 'string',
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                                                                                                                   type: 'image',
                           TS index.ts
                                                                                                                   title: 'Image',
                                                                                                                    description: 'Upload an image of the product.'.
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type: 'number', // Changed to 'number
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                        3 const productSchema = {
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                                  name: 'category',
type: 'string',
title: 'Category',
  sanity

✓ schemaTypes

                                      { title: 'Chair', value: 'Chair' }, { title: 'Sofa', value: 'Sofa' },
                                   validation: (Rule: Rule) => Rule.required().error('Category is required').
   TS structure.ts
                             export default productSchema;
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Data migration.

Data Successfully migrated to Sanity Studio

