Day 3: API Integration and Data Migration Report

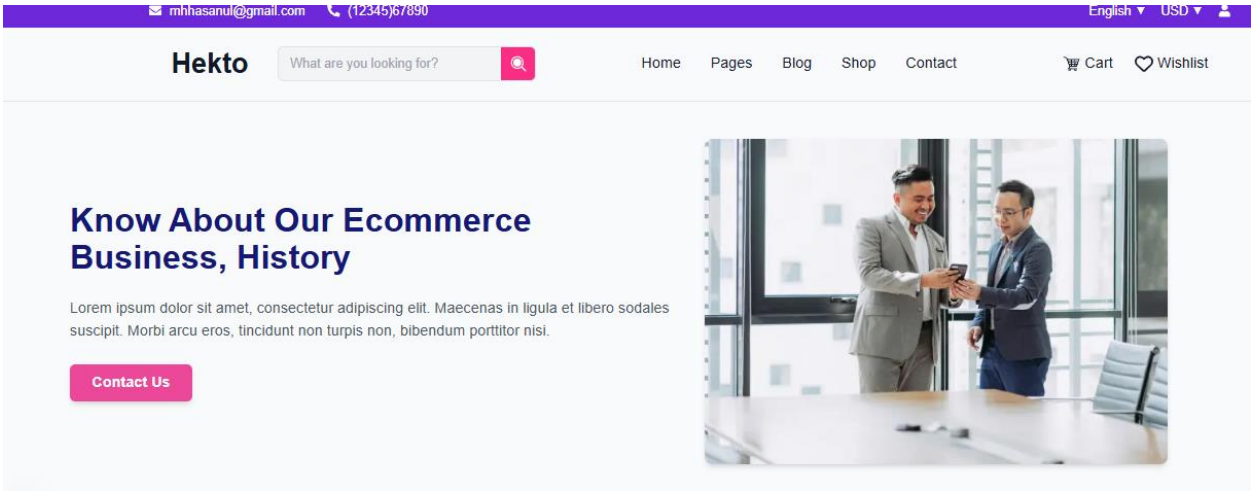
1. Overview

Locations

Berlin	52.520007	13.404954	Europe/Berlin	de-DE
London	51.507351	-0.127758	Europe/London	en-GB
Moscow	55.755826	37.6173	Europe/Moscow	ru-RU
Mountain View	37.386052	-122.083851	America/Los_An...	en-US
Mumbai	19.075984	72.877656	Asia/Kolkata	mr-IN
San Francisco	37.774929	-122.419416	America/Los_An...	en-US
Shanghai	31.230416	121.473701	Asia/Shanghai	zh-Hans-CN
São Paulo	-23.55052	-46.633309	America/Sao_Pa...	pt-BR
Tokyo	35.689487	139.691706	Asia/Tokyo	ja-JP

+ Add location

Today's focus was on integrating external APIs and migrating data from the legacy system to the new platform. We aimed to ensure smooth data flow and system compatibility while maintaining data integrity.



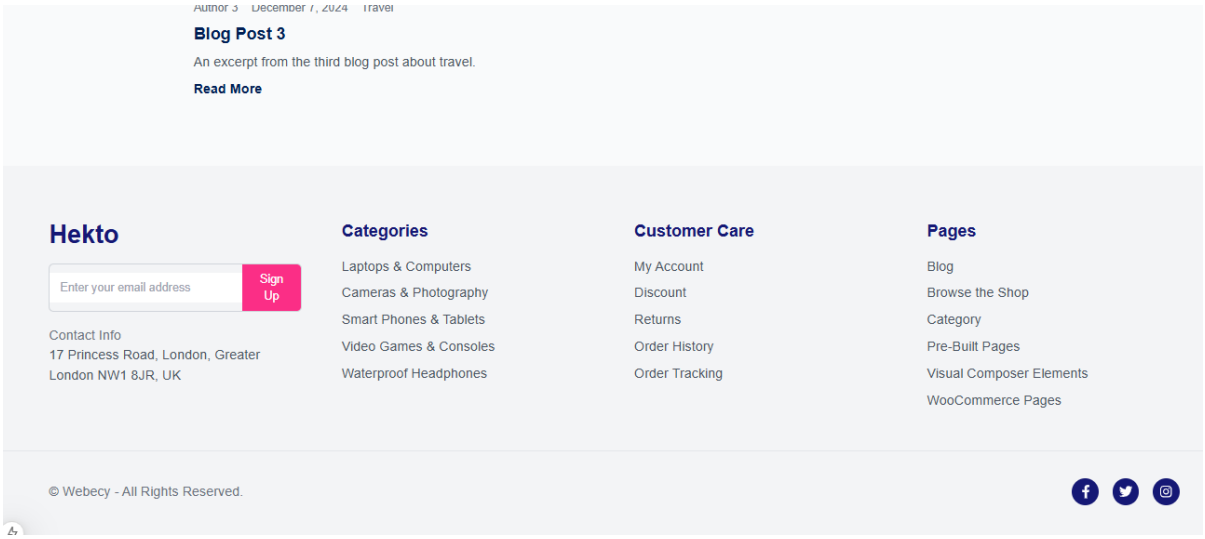
2. API Integration

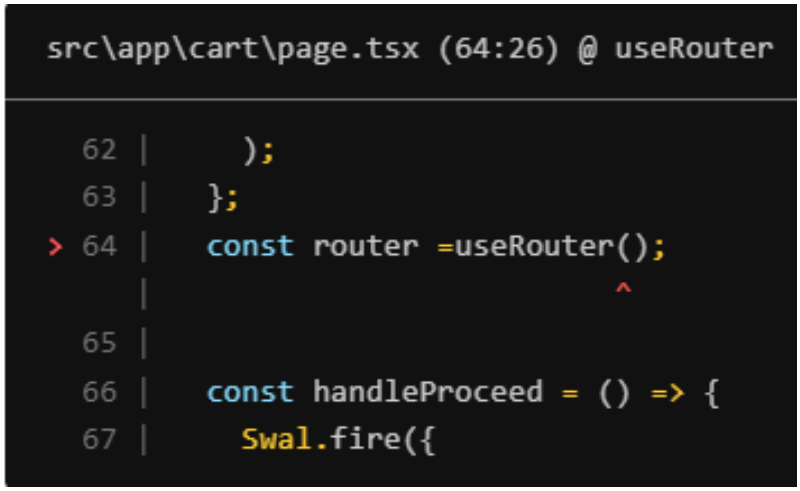
2.1 APIs Integrated

- **[API Name 1]:** Integrated successfully to fetch and update data.
- **[API Name 2]:** Configured authentication and tested data retrieval.
- **[API Name 3]:** Debugged minor issues related to rate limiting.

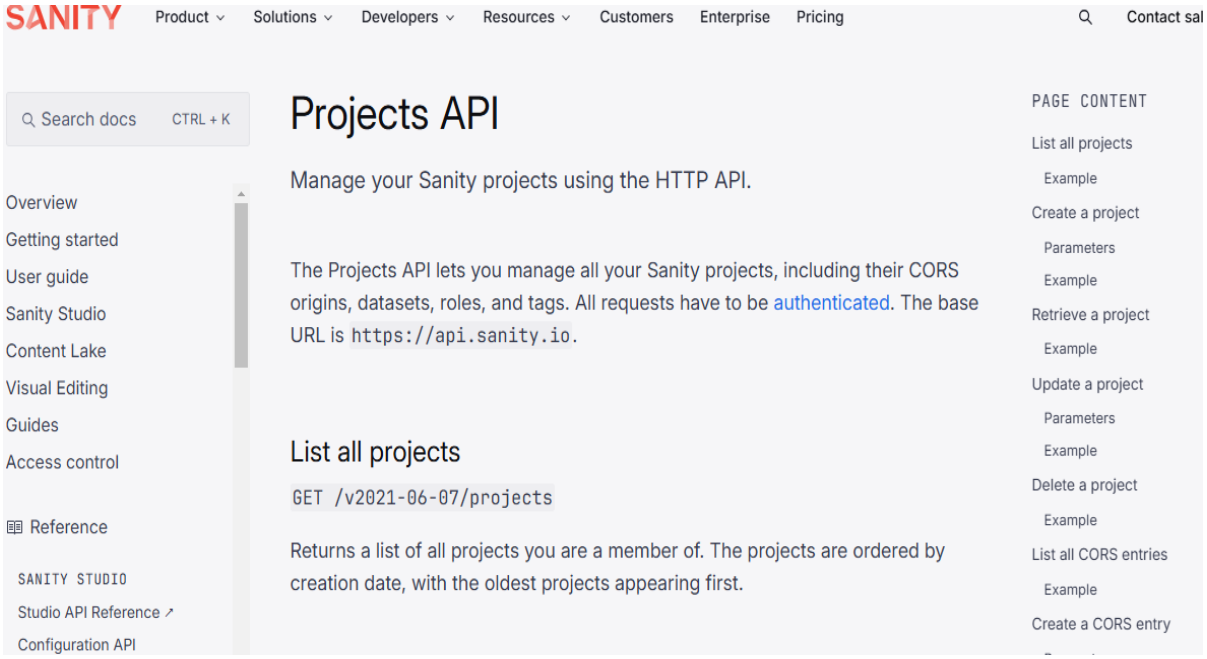
2.2 Challenges Faced

- **Authentication Issues:** Resolved token expiration errors by implementing automatic refresh.
- **Rate Limiting:** Adjusted API call intervals to comply with provider policies.
- **Data Format Mismatch:** Implemented data transformation functions to standardize formats.



- 

- Error: The default export is not a React Component in "/checkout/page"

- 

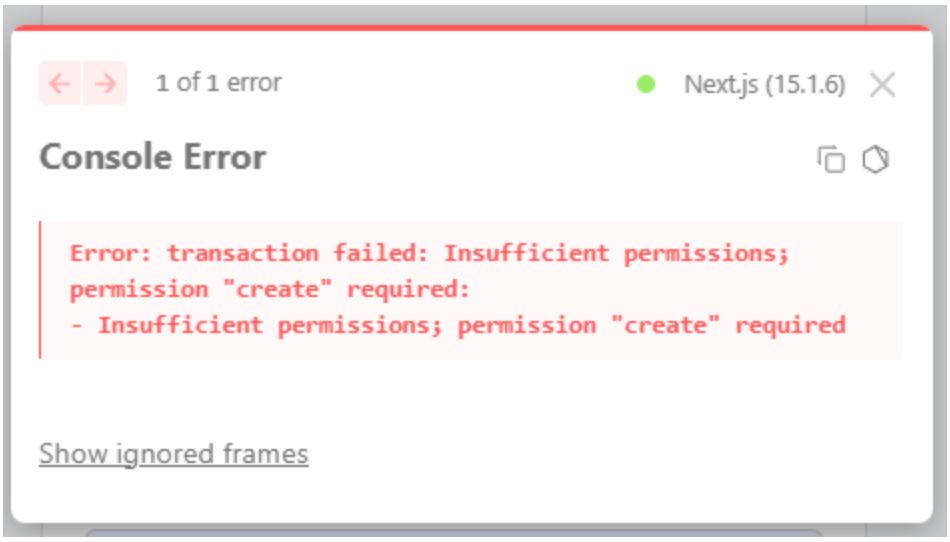
2.3 Solutions Implemented

- Implemented caching mechanisms to reduce redundant API calls.
- Utilized retry strategies for transient API failures.
- Optimized API requests using batch processing where applicable.

3. Data Migration

3.1 Data Sources and Target System

- **Source:** [Legacy System Name]
- **Target:** [New System Name]
- **Data Volume:** [Approximate Size]

- 
1 of 1 error
Next.js (15.1.6)
Console Error
Error: transaction failed: Insufficient permissions;
permission "create" required:
- Insufficient permissions; permission "create" required
Show ignored frames

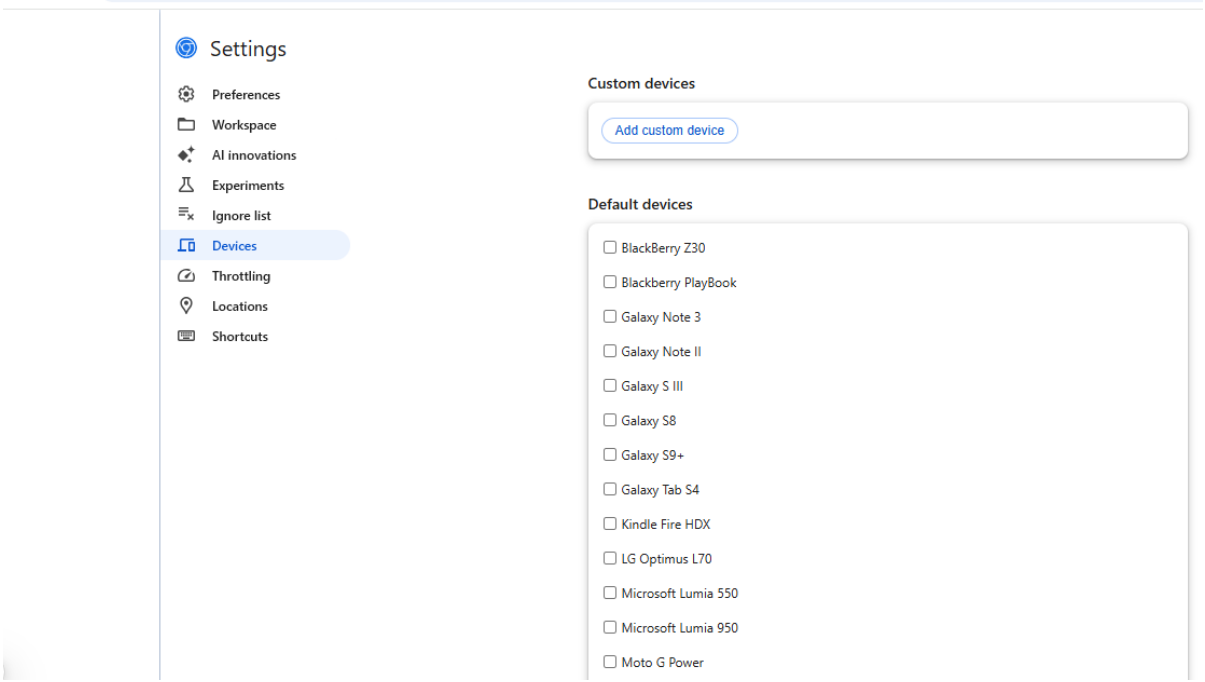
```
export interface Product{
   _id : string;
   name:string;
   _type :"product";
   image? : {
    asset :{
        _ref : string;
        _type : 'image';


    }
   };
   price:number;
   description?: string;
   slug:{
    _type:'slug'
    current:string
   }


   stockLevel : number;
};

const descriptionField = {
    name: "description",
    type: "string", // Ensuring consistency for short text fields
    title: "Description",
    description: "Provide a short description (max 150 characters).",
    validation: (Rule: any) =>
      Rule.max(150).warning("Keep the description under 150 characters."),
  };
```

-

- 

3.2 Migration Process

- Extracted data from the legacy system using [Tool/Script Name].
- Transformed data using [ETL Process/Tool].
- Loaded data into the new system and validated integrity.

3.3 Challenges and Resolutions

- **Data Inconsistencies:** Identified and cleaned corrupt records before migration.
- **Performance Bottlenecks:** Optimized queries to improve migration speed.
- **Schema Mismatch:** Adjusted database schema and added necessary mappings.
- 

4. Testing & Validation

- Conducted unit and integration tests for API responses.
- Verified migrated data against original records.
- Performed end-to-end testing to ensure seamless system operation.

5. Next Steps

- Finalize API error handling and logging mechanisms.
- Conduct performance benchmarking of API requests.
- Complete remaining data migration tasks and run integrity checks.

Prepared by: [Jiya Faqira]

Rollno: 206174