## 👨‍💻 Author

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# Travlr Getaways – Database Enhancement (Milestone Four)

## 📁 Overview

This enhancement focuses on improving the MongoDB schema design, validation, and error handling in the \*\*Travlr Getaways\*\* full-stack web application, originally developed during CS 465. This submission aligns with \*\*CS 499 Milestone Four: Enhancement Three – Databases\*\*.

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## 🚀 Enhancements Summary

### 1. ✅ Schema Refactoring

- Embedded `tripSchema` inside `travlrSchema` to properly reflect data hierarchy.

- Added a `destination` field to group related trips logically.

- Enabled automatic `timestamps` for tracking creation and update times.

### 2. 🔍 Field-Level Validation

- Applied Mongoose validation rules (e.g., `required`, `minlength`) to fields like:

- `name`, `length`, `resort`, `perPerson`, `description`, `start`, `image`.

### 3. ⚡ Indexing

- Indexed the `destination` field for improved query/filter performance.

### 4. 🛡️ Error Handling

- Wrapped all MongoDB operations in `try-catch` blocks in `controllers/trips.js` to avoid crashes and improve reliability.

### 5. 🧪 Seed Data Script

- Added `seed.js` under `app\_api/models/` to populate the database with sample trip data for testing.

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## 📂 File Structure & Key Changes

| File Path | Description |

|---------------------------------------|---------------------------------------------------------------------------|

| `app\_api/models/travlr.js` | Updated schema with embedded structure, validation, and | indexing. | |

| `app\_api/controllers/trips.js` | Updated DB operations with error handling and static method usage. | |

| `app\_api/models/seed.js` | Populates MongoDB with sample trip data. |

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## 📌 How to Run the Seed Script

```bash

node app\_api/models/seed.js