

Assignment 2 Solution: Combined Data Models

1. E-Commerce Store

```
user: { name: 'string', email: { type: 'string', unique: true }, password: { type: 'string', minLength:8,
maxLength:20 } }
product: { title: 'string', description: 'string', price: { type: 'number', min: 0 }, category: 'string', stock: {
type: 'number', min: 0 } }
order: { userId: 'ObjectId', products: [{ productId: 'ObjectId', quantity: { type: 'number', min: 1 } }],
totalAmount: { type: 'number', min: 0 }, orderDate: 'Date' }
review: { userId: 'ObjectId', productId: 'ObjectId', rating: { type: 'number', min: 1, max: 5 }, comment:
'string' }
```

2. Online Course Platform

```
courseUser: { name: 'string', email: { type: 'string', unique: true }, role: { type: 'string', enum:
['student', 'instructor'] } }
course: { title: 'string', instructorId: 'ObjectId', category: 'string', price: { type: 'number', min: 0 },
createdAt: 'Date', lessons: [{ title: 'string', videoURL: 'string', duration: { type: 'number', min: 1 } } ] }
enrollment: { userId: 'ObjectId', courseId: 'ObjectId', enrollDate: 'Date' }
```

3. Event Booking System

```
eventUser: { name: 'string', email: { type: 'string', unique: true }, role: { type: 'string', enum:
['organizer', 'attendee'] } }
event: { title: 'string', organizerId: 'ObjectId', location: 'string', startTime: 'Date', endTime: 'Date',
capacity: { type: 'number', min: 1 } }
booking: { eventId: 'ObjectId', attendeeId: 'ObjectId', bookingDate: 'Date' }
```

4. Blogging Platform

```
author: { name: 'string', email: { type: 'string', unique: true }, bio: 'string' }
article: { title: 'string', content: 'string', authorId: 'ObjectId', tags: ['string'], published: 'boolean',
createdAt: 'Date' }
comment: { articleId: 'ObjectId', userName: 'string', commentText: 'string', postedAt: 'Date' }
```

5. Subscription App

```
subscriptionUser: { email: { type: 'string', unique: true }, name: 'string', signupDate: 'Date' }
```

```
plan: { name: 'string', price: { type: 'number', min: 0 }, features: ['string'], billingCycle: { type: 'string',  
enum: ['monthly', 'yearly'] } }  
subscription: { userId: 'ObjectId', planId: 'ObjectId', startDate: 'Date', isActive: 'boolean' }
```