

## ASSIGNMENT-2

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Section : C

### 1. E-Commerce Store – Product & Orders

// User Schema

```
const user = {  
  name: { type: String, required: true },  
  email: {  
    type: String,  
    required: true,  
    unique: true,  
  },  
  password: { type: String, required: true },  
  createdAt: { type: Date, default: Date.now }  
};
```

// Product Schema

```
const product = {  
  title: { type: String, required: true },  
  description: { type: String, required: true },  
  price: { type: Number, required: true, min: 0 },  
  category: { type: String, required: true },  
  stock: { type: Number, required: true, min: 0 },  
  createdAt: { type: Date, default: Date.now }  
};
```

```
// Order Schema
```

```
const order = {  
  userId: { type: ObjectId, required: true, ref: 'User' },  
  products: [{  
    productId: { type: ObjectId, required: true, ref: 'Product' },  
    quantity: { type: Number, required: true, min: 1 }  
  }],  
  totalAmount: { type: Number, required: true, min: 0 },  
  orderDate: { type: Date, default: Date.now },  
  status: { type: String, enum: ['pending', 'shipped', 'delivered', 'cancelled'] }  
};
```

```
// Review Schema
```

```
const review = {  
  userId: { type: ObjectId, required: true, ref: 'User' },  
  productId: { type: ObjectId, required: true, ref: 'Product' },  
  rating: { type: Number, required: true, min: 1, max: 5 },  
  comment: { type: String },  
  createdAt: { type: Date, default: Date.now }  
};
```

## 2. Online Course Platform – Instructors & Students

```
// User Schema
```

```
const user = {  
  name: { type: String, required: true },  
  email: {  
    type: String,  
    required: true,  
    unique: true  
  },  
  role: { type: String, required: true, enum: ['student', 'instructor'] },  
  createdAt: { type: Date, default: Date.now }  
};
```

```
// Course Schema
```

```
const course = {  
  title: { type: String, required: true },  
  instructorId: { type: ObjectId, required: true, ref: 'User' },  
  category: { type: String, required: true },  
  price: { type: Number, required: true, min: 0 },  
  createdAt: { type: Date, default: Date.now },  
  lessons: [{  
    title: { type: String, required: true },  
    videoURL: { type: String, required: true },  
    duration: { type: Number, required: true, min: 1 } // in minutes  
  ]  
};
```

```
// Enrollment Schema
```

```
const enrollment = {  
  userId: { type: ObjectId, required: true, ref: 'User' },  
  courseId: { type: ObjectId, required: true, ref: 'Course' },  
  enrolledAt: { type: Date, default: Date.now },  
  progress: { type: Number, default: 0, min: 0, max: 100 }  
};
```

### 3. Event Booking System – Organizers & Attendees

```
// Author Schema
```

```
const author = {  
  name: { type: String, required: true },  
  email: {  
    type: String,  
    required: true,  
    unique: true,  
  
  },  
  bio: { type: String },  
  createdAt: { type: Date, default: Date.now }  
};
```

```
// Article Schema
```

```
const article = {
```

```
title: { type: String, required: true },
content: { type: String, required: true },
authorId: { type: ObjectId, required: true, ref: 'Author' },
tags: [{ type: String }],
published: { type: Boolean, default: false },
createdAt: { type: Date, default: Date.now },
updatedAt: { type: Date }
};
```

// Comment Schema

```
const comment = {
  articleId: { type: ObjectId, required: true, ref: 'Article' },
  userName: { type: String, required: true },
  commentText: { type: String, required: true },
  postedAt: { type: Date, default: Date.now }
};
```

#### 4. Blogging Platform – Authors & Articles

// Author Schema

```
const author = {
  name: { type: String, required: true },
  email: {
    type: String,
```

```
    required: true,  
    unique: true,  
  
  },  
  bio: { type: String },  
  createdAt: { type: Date, default: Date.now }  
};
```

```
// Article Schema
```

```
const article = {  
  title: { type: String, required: true },  
  content: { type: String, required: true },  
  authorId: { type: ObjectId, required: true, ref: 'Author' },  
  tags: [{ type: String }],  
  published: { type: Boolean, default: false },  
  createdAt: { type: Date, default: Date.now },  
  updatedAt: { type: Date }  
};
```

```
// Comment Schema
```

```
const comment = {  
  articleId: { type: ObjectId, required: true, ref: 'Article' },  
  userName: { type: String, required: true },  
  commentText: { type: String, required: true },  
  postedAt: { type: Date, default: Date.now }  
};
```

## 5. Subscription App – Users & Plans

// User Schema

```
const user = {  
  name: { type: String, required: true },  
  email: {  
    type: String,  
    required: true,  
    unique: true  
  },  
  signupDate: { type: Date, default: Date.now }  
};
```

// Plan Schema

```
const plan = {  
  name: { type: String, required: true },  
  price: { type: Number, required: true, min: 0 },  
  features: [{ type: String }],  
  billingCycle: { type: String, required: true, enum: ['monthly', 'yearly'] },  
  createdAt: { type: Date, default: Date.now }  
};
```

// Subscription Schema

```
const subscription = {  
  userId: { type: ObjectId, required: true, ref: 'User' },
```

```
planId: { type: ObjectId, required: true, ref: 'Plan' },  
startDate: { type: Date, required: true },  
endDate: { type: Date },  
isActive: { type: Boolean, default: true }  
};
```