

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 }  
};
```