

Server Structure Documentation



Directory Structure

server/

```
├── src/
|   ├── controllers/ # Request handlers
|   ├── models/ # Database models
|   ├── routes/ # Route definitions
|   ├── services/ # Business logic
|   ├── middleware/ # Custom middleware
|   ├── seeders/ # Database seeders
|   ├── socket.js # Socket.IO configuration
|   └── index.js # Application entry point
└── docs/ # Documentation
    └── package.json # Project configuration
```

Source Code (src /)

Core Directories

- **controllers/**
 - Handles HTTP requests and responses
 - Processes incoming data

- Delegates business logic to services
- Returns appropriate HTTP responses
- **models/**
- Defines database schemas
- Contains Sequelize model definitions
- Manages relationships between models
- Handles data validation rules
- **routes/**
- Defines API endpoints
- Maps URLs to controller functions
- Handles route middleware
- Groups related endpoints
- **services/**
- Contains business logic
- Handles data processing
- Manages complex operations
- Interacts with multiple models
- **middleware/**
- Contains reusable middleware functions
- Handles authentication
- Processes requests before controllers
- Manages error handling
- **seeders/**

- Contains database seed files
- Provides initial data
- Sets up test data
- Manages data migrations

Supporting Files

- **socket.js**
- Configures [Socket.IO](#)
- Manages real-time connections
- Handles WebSocket events
- Broadcasts updates to clients
- **index.js**
- Application entry point
- Sets up Express server
- Configures middleware
- Initializes database connection

Documentation (docs /)

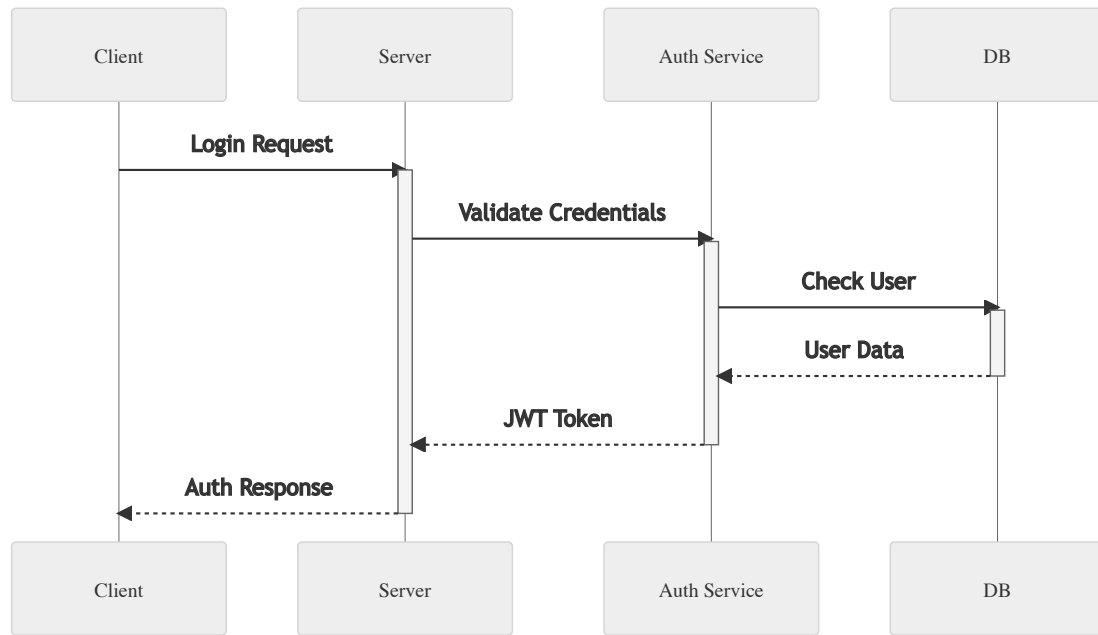
- Contains system documentation
- API specifications
- Database schemas
- Setup instructions

Configuration Files

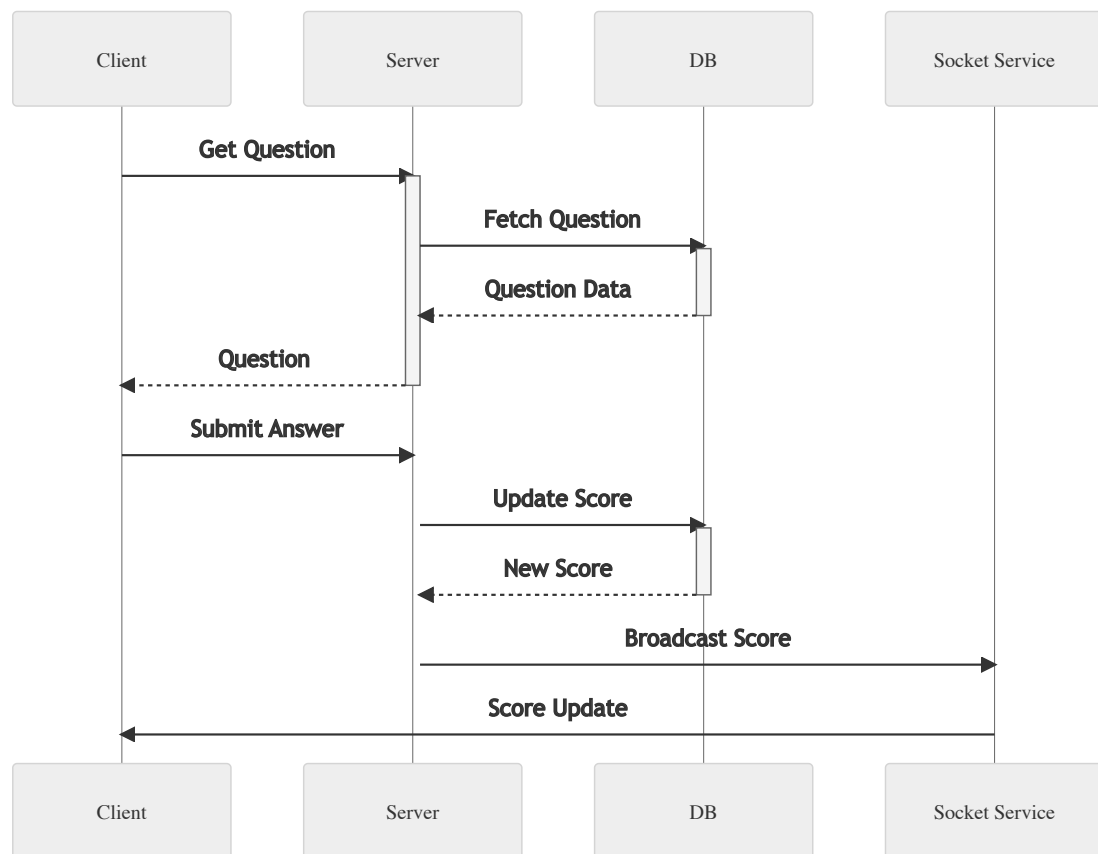
- **package.json**
- Project dependencies
- Script commands
- Project metadata
- Development tools
- **.env**
- Environment variables
- API keys
- Database credentials
- Configuration settings

2. Sequence Diagrams

Authentication Flow

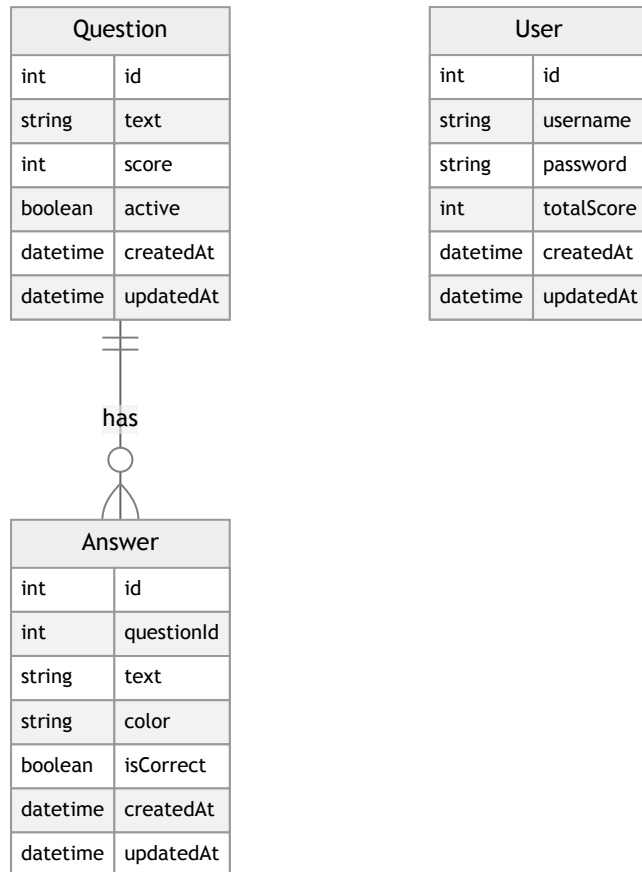


Game Flow



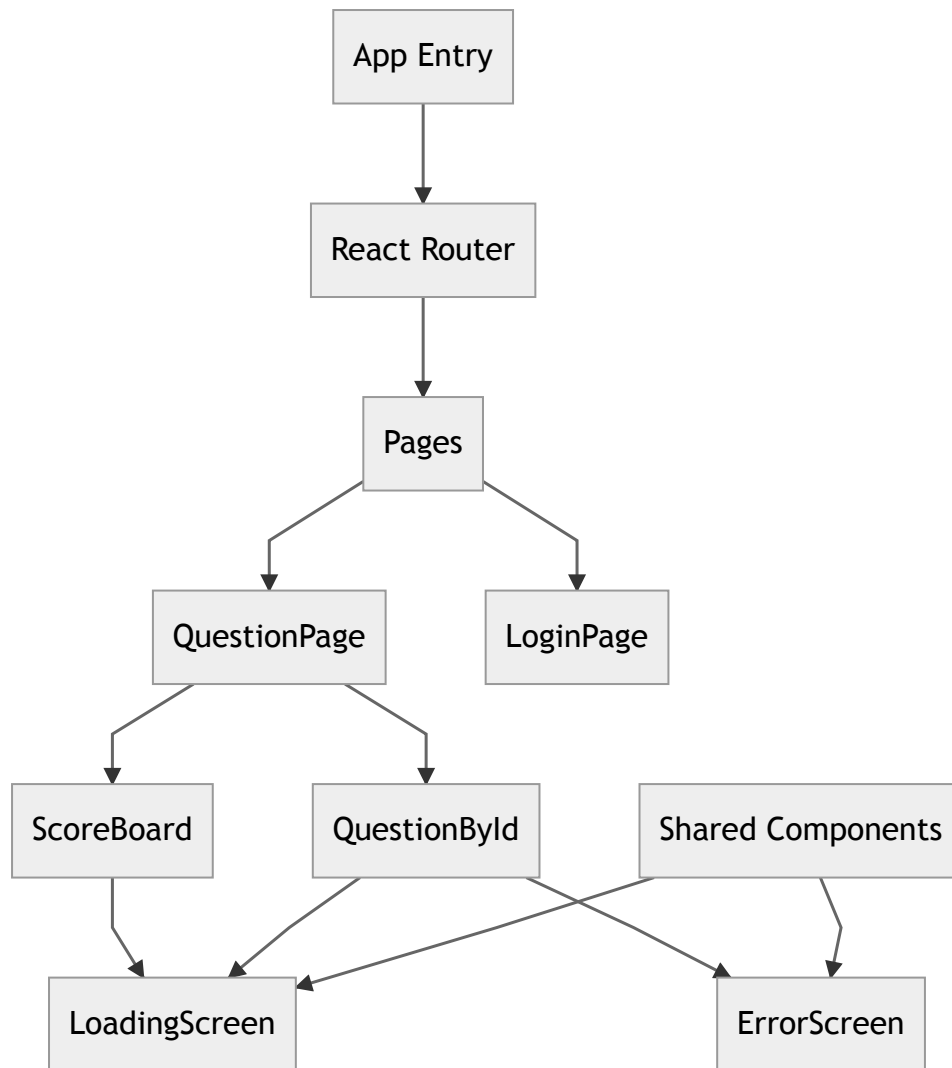
3. Database Schema

Entity Relationship Diagram

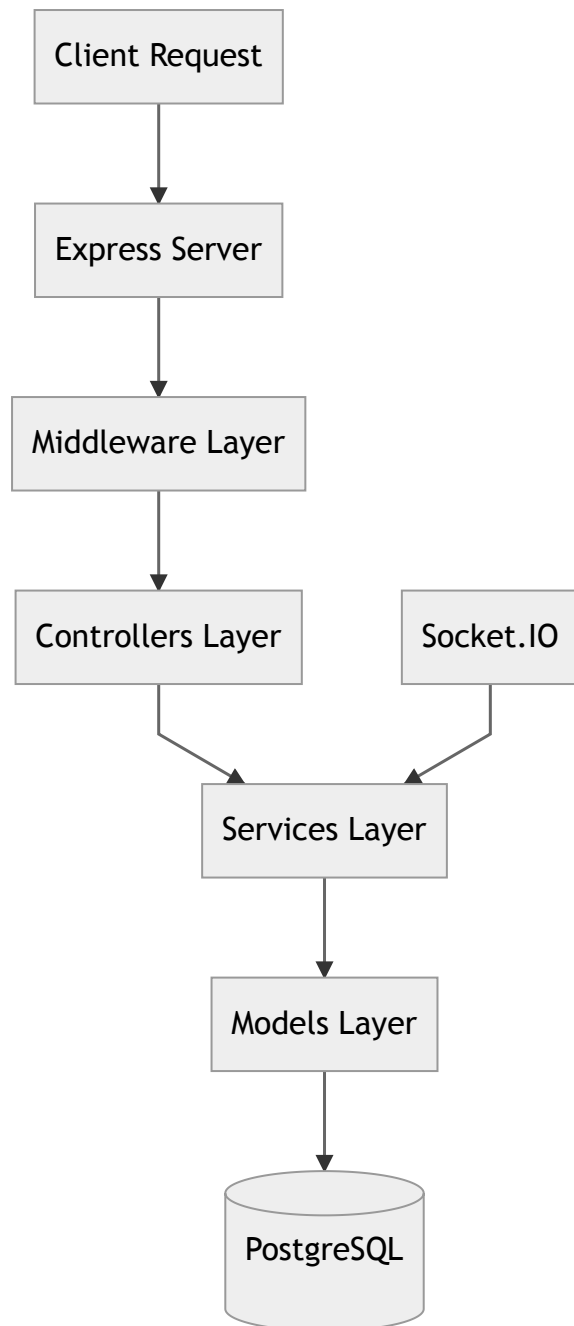


4. Component Diagrams

Frontend Components

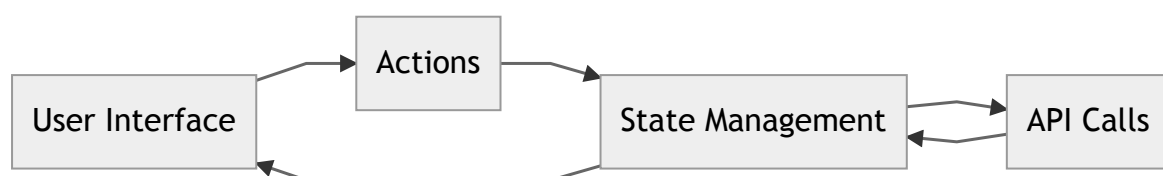


Backend Components



6. Data Flow Diagrams

Frontend Data Flow



Backend Data Flow

