VALENTINA

TENNIS CLUB MANAGEMENT

USE CASE DIAGRAM:

TENNIS CLUB MANAGEMENT SYSTEM

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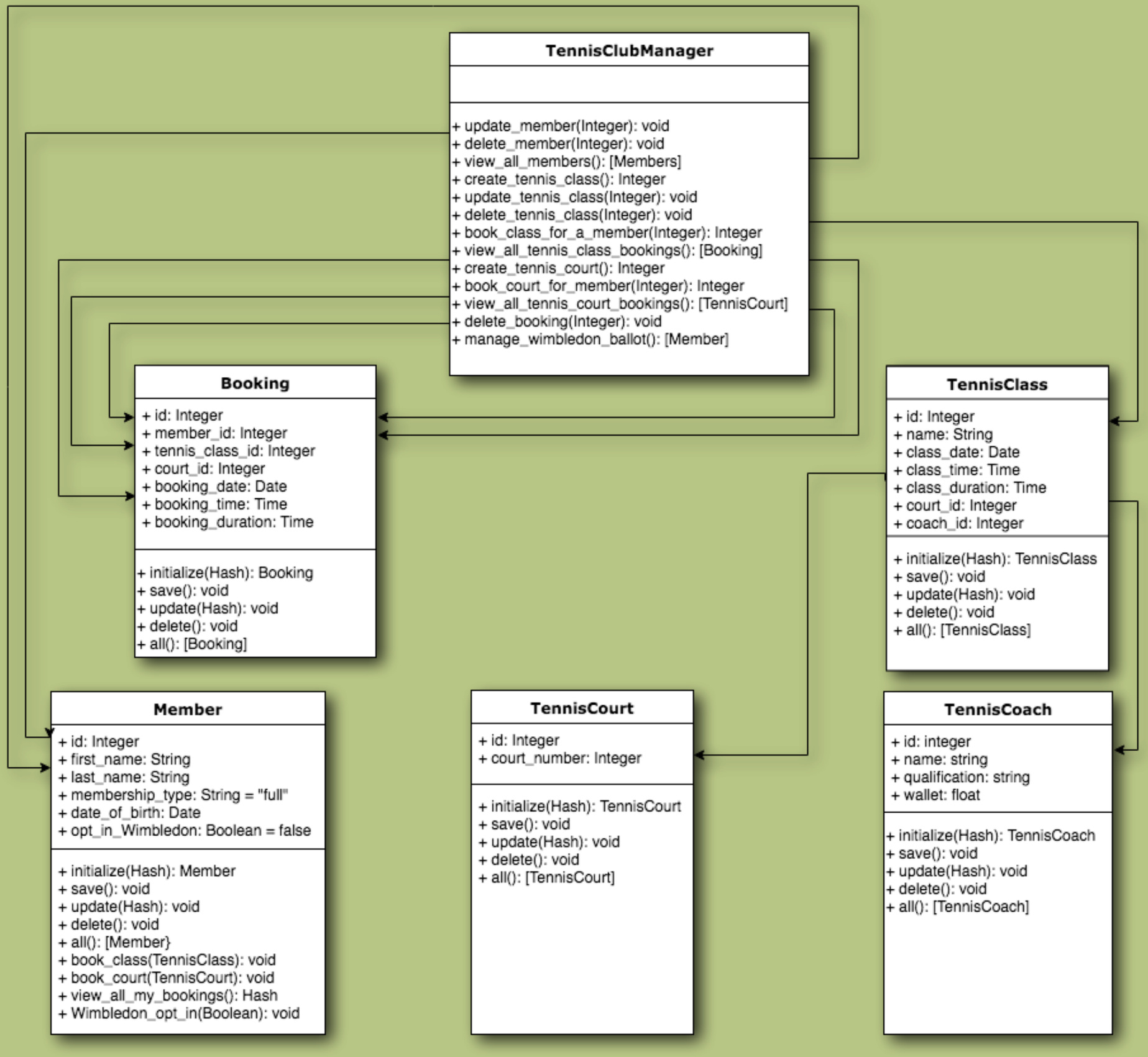
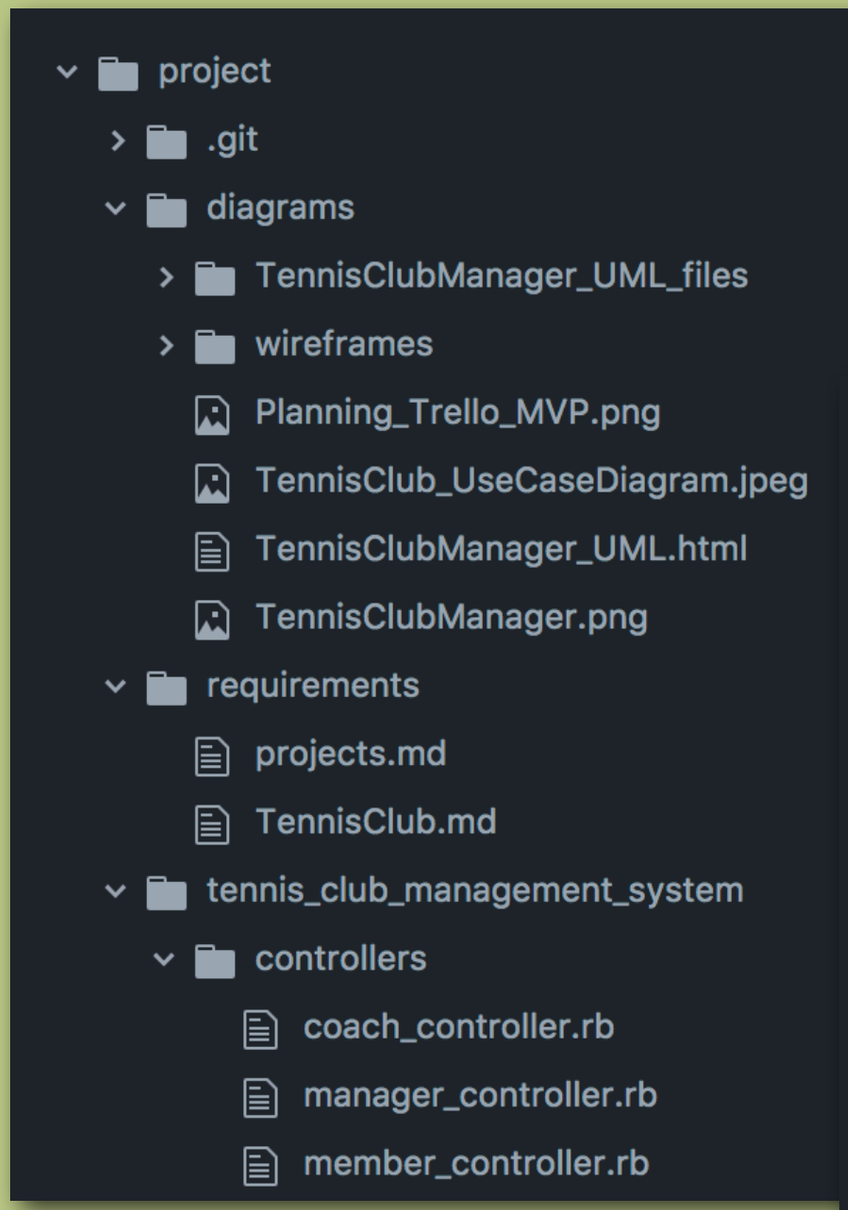
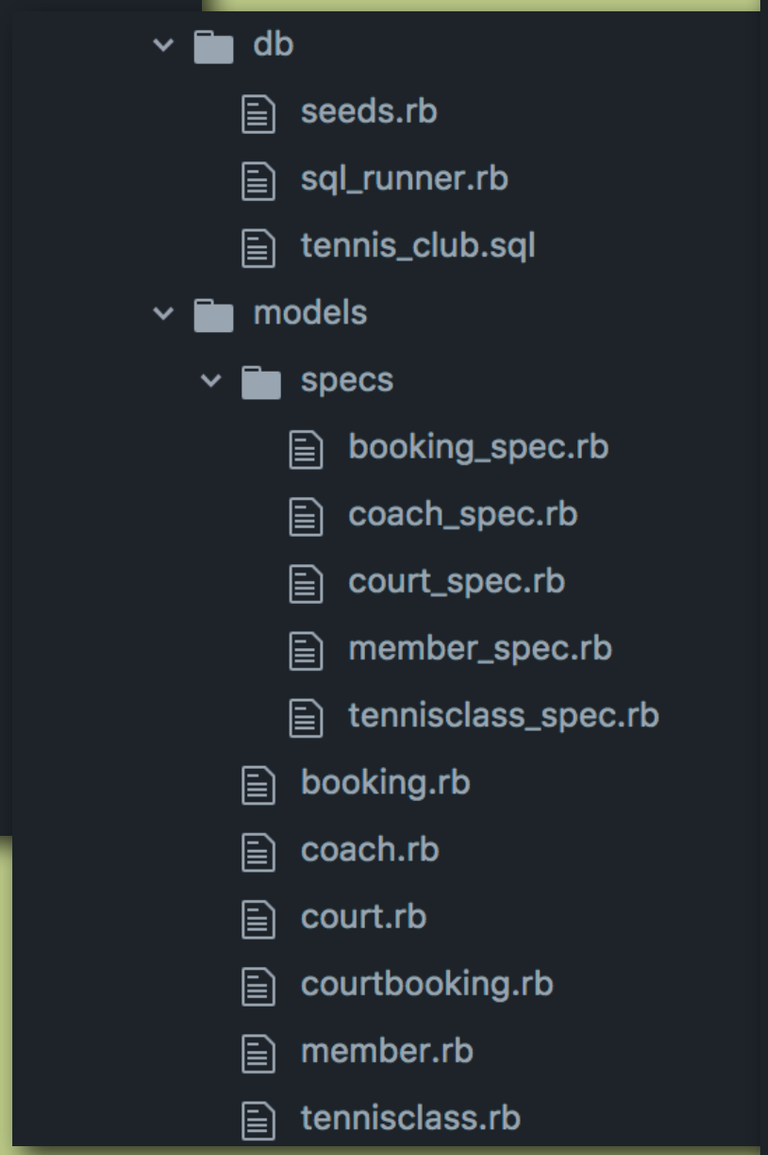
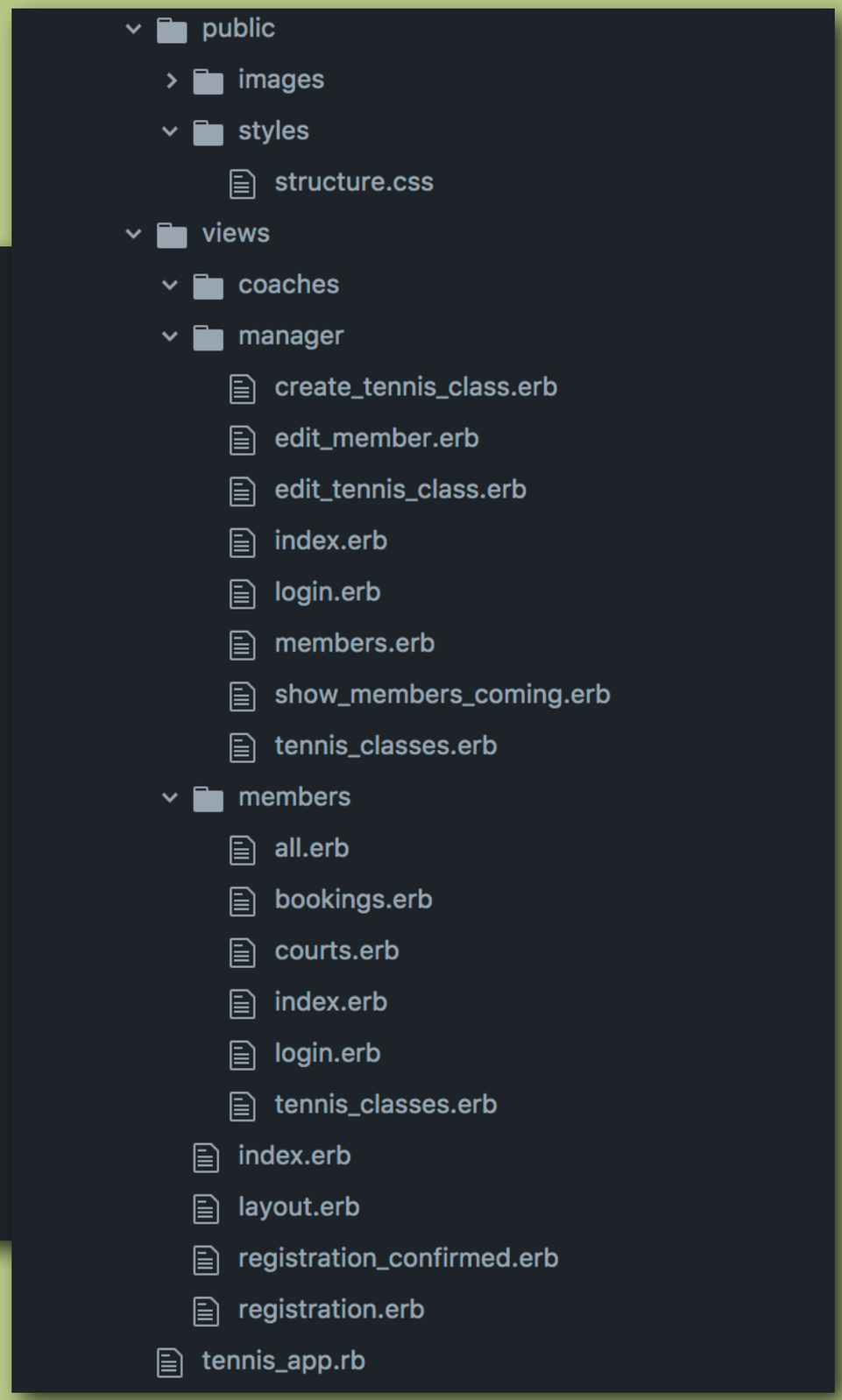
CLASS DIAGRAM:



FROM THEORY TO PRACTICE...







...DEMO...

SOME CODE...

```sql
CREATE TABLE members (
  id SERIAL8 PRIMARY KEY,
  first_name VARCHAR(255),
  last_name VARCHAR(255),
  membership_type VARCHAR(255),
  date_of_birth DATE,
  opt_in_Wimbledon BIT
);

CREATE TABLE courts (
  id SERIAL8 PRIMARY KEY,
  court_number INT2
);

CREATE TABLE coaches (
  id SERIAL8 PRIMARY KEY,
  first_name VARCHAR(255),
  last_name VARCHAR(255),
  qualification VARCHAR(255),
  date_of_birth DATE,
  wallet REAL
);
```

```sql
CREATE TABLE tennis_classes (
  id SERIAL8 PRIMARY KEY,
  name VARCHAR(255),
  class_date DATE,
  class_time TIME,
  class_duration INTERVAL HOUR,
  court_id INT8 REFERENCES courts(id) ON DELETE CASCADE,
  coach_id INT8 REFERENCES coaches(id) ON DELETE CASCADE
);

CREATE TABLE class_bookings (
  id SERIAL8 PRIMARY KEY,
  member_id INT8 REFERENCES members(id) ON DELETE CASCADE,
  tennis_class_id INT8 REFERENCES tennis_classes(id) ON DELETE CASCADE,
  court_id INT8 REFERENCES courts(id) ON DELETE CASCADE,
  booking_date DATE,
  booking_time TIME,
  booking_duration INTERVAL HOUR
);

CREATE TABLE court_bookings (
  id SERIAL8 PRIMARY KEY,
  member_id INT8 REFERENCES members(id) ON DELETE CASCADE,
  court_id INT8 REFERENCES courts(id) ON DELETE CASCADE,
  booking_date DATE,
  booking_time TIME,
  booking_duration INTERVAL HOUR
);
```

KEY LEARNINGS:

1. PLANNING saves hours of coding...
   ...BUT you still need some hours of coding

2. post method needed for security when changing the database, also for deleting

MAIN ONGOING ISSUES:

:(focusing on MVP forces to change the basic structure