

Project Architecture

To develop 7Wonders Service, the following languages and technologies are used:

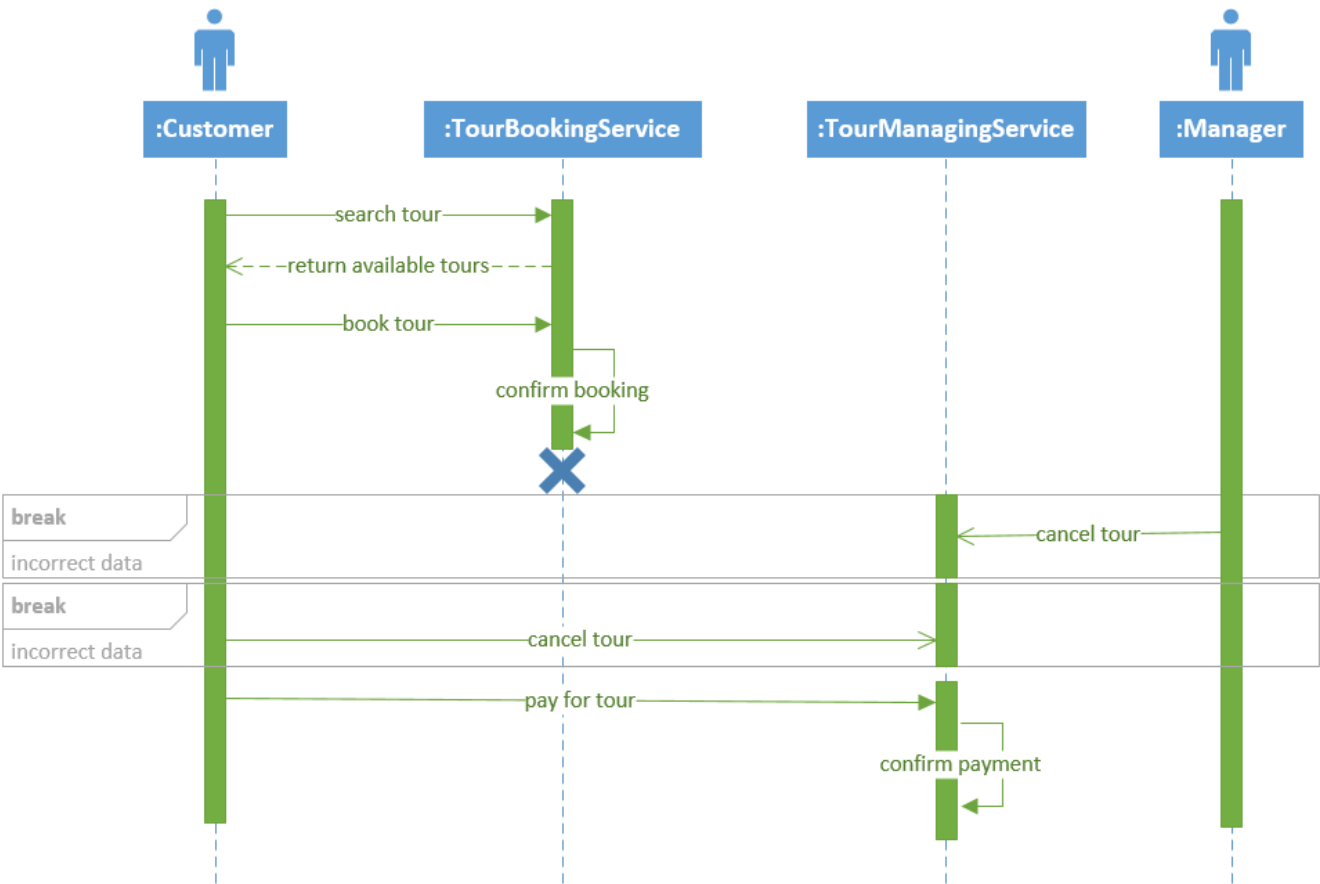
- Languages:
 - Back-end
 - C# 5.0
 - Front-end
 - Javascript
 - HTML 5
 - CSS 3
- Technologies
 - Entity Framework 6
 - ASP .NET WEB API 2
 - Knockout
- Relationship database management system:
 - Microsoft SQL Server
- Web Server:
 - IIS

7Wonders consists of tour booking system that includes search engine and booking process and manager and administration parts.

We decided to create our application as ASP .NET Web Api project. We found it overwhelming to create separate business logic layer so mainly the logic is located in Web Api controllers.

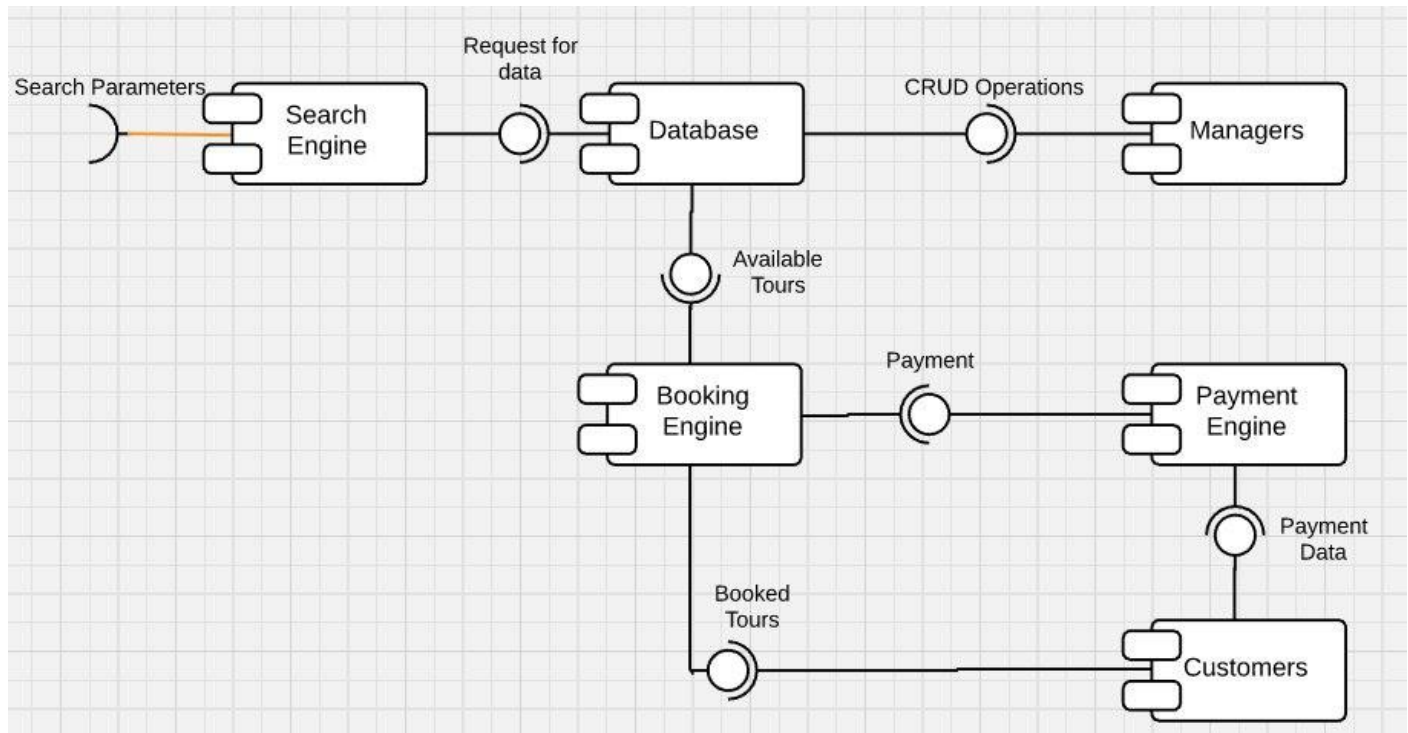
Data transfer objects (DTO) are used as intermediary between controllers and data access layer. This is a more convenient way than using the DAL models directly and passing them to view.

Sequence diagram



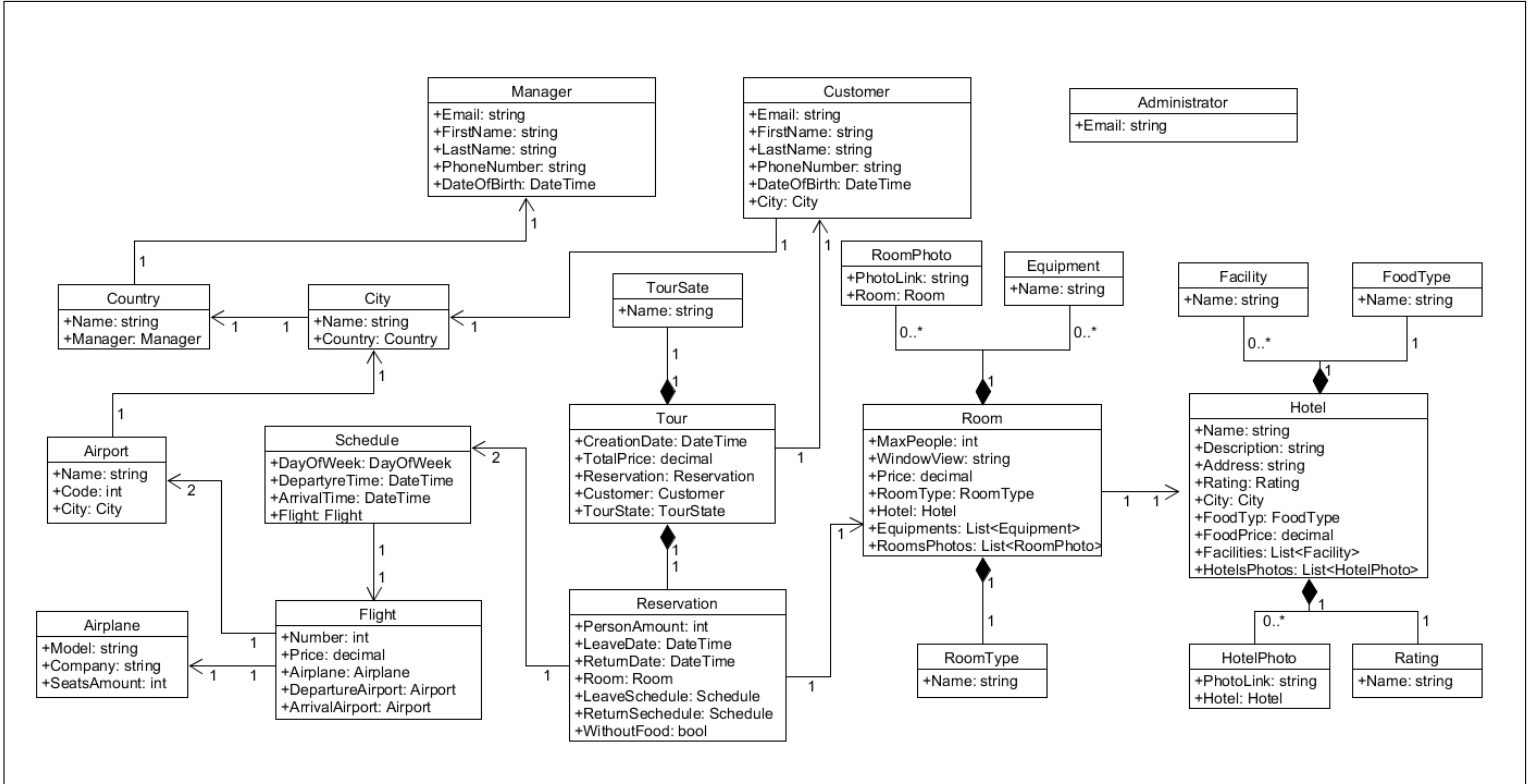
UML sequence diagram for tour booking

Component and dependency diagram



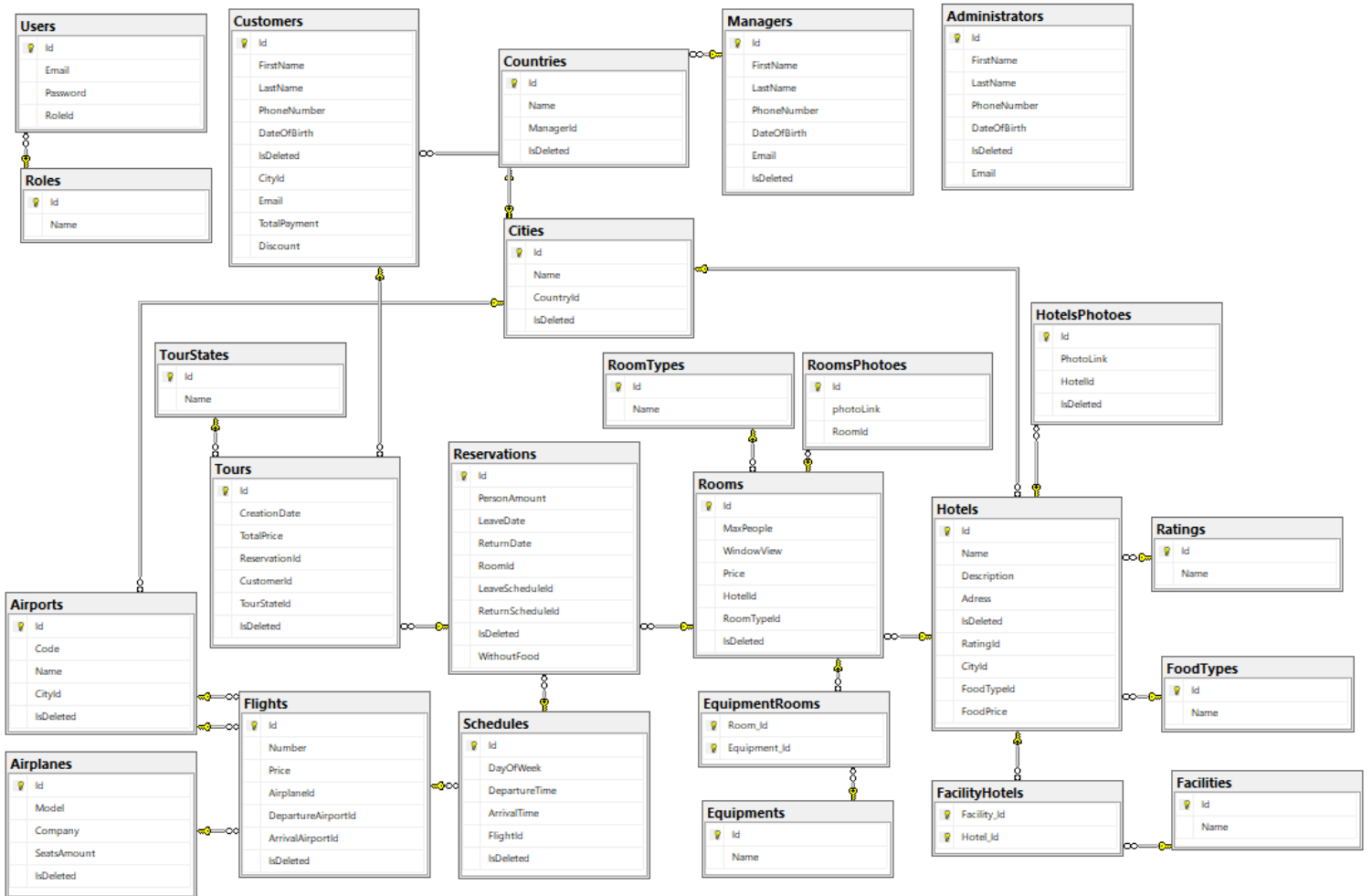
UML component and dependency diagram for tour booking

Entity-relationship diagram



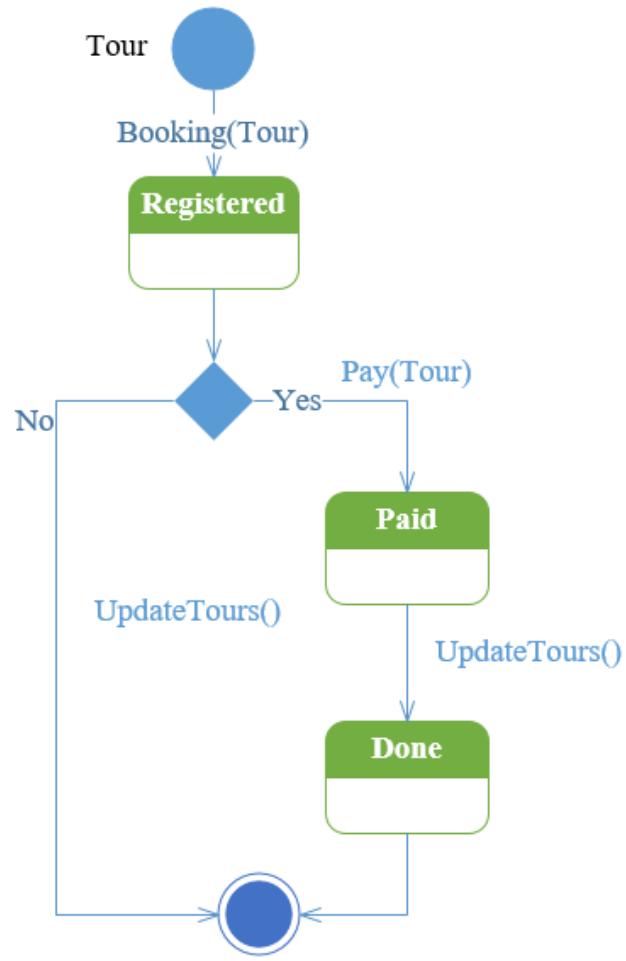
UML entity-relationship diagram for tour booking

Database schema



Data base diagram

UML state machine diagram



UML tour state diagram