

```
1 using System;
2 using System.Collections.Generic;
3 using System.ComponentModel.DataAnnotations;
4 using System.ComponentModel.DataAnnotations.Schema;
5 using System.Text;
6
7 namespace DatabaseConnect.Entities
8 {
9     class Entities
10     {
11     }
12
13     [Table("tblAuthor")]
14     public class Author
15     {
16         [Key]
17         public int AuthorID { get; set; }
18         public string Name { get; set; }
19         public IEnumerable<AuthorBook> AuthorBooks { get; set; }
20     }
21
22     [Table("tblBook")]
23     public class Book
24     {
25         [Key]
26         public int BookID { get; set; }
27         public string Title { get; set; }
28         public int PageCount { get; set; }
29         public Cover Cover { get; set; }
30         public IEnumerable<AuthorBook> AuthorBooks { get; set; }
31         [NotMapped]
32         public IList<String> Authors { get; set; }
33         public String ISBN { get; set; }
34         public String DeweyDecimal { get; set; }
35         public String FicID { get; set; }
36         public int CoverID { get; set; } // Order matters
37     }
38
39     [Table("tblAuthorBook")]
40     public class AuthorBook
41     {
42         public Author Author { get; set; }
43         public int AuthorID { get; set; }
44         public Book Book { get; set; }
45         [ForeignKey("Book")]
46         public int BookID { get; set; }
47     }
48
49     [Table("tblCovers")]
50     public class Cover
51     {
52         [Key]
```

```
53     public int CoverID { get; set; }
54     public int BookID { get; set; }
55     public List<Book> Books { get; set; }
56     public String Base64Encoded { get; set; }
57 }
58
59 [Table("tblUsers")]
60 public class User
61 {
62     [Key]
63     public int UserID { get; set; }
64     public String FullName { get; set; }
65     public String SchoolID { get; set; }
66     public String PasswordHash { get; set; }
67     public String Salt { get; set; }
68     [NotMapped]
69     public String Password { get; set; }
70     public int TokenVersion { get; set; }
71 }
72
73 [Table("tblUType")]
74 public class UType
75 {
76     [Key]
77     public int UTypeID { get; set; }
78     public String UTypeName { get; set; }
79     public Boolean WriteAccess { get; set; }
80     public int CheckoutLimit { get; set; }
81 }
82
83 [Table("tblUserUType")]
84 public class UserUType
85 {
86     public User User { get; set; }
87     public int UserID { get; set; }
88     public UType UType { get; set; }
89     public int UTypeID { get; set; }
90 }
91
92 [Table("tblCheckouts")]
93 public class Checkout
94 {
95     [Key]
96     public int ID { get; set; }
97     public User User { get; set; }
98     public int UserID { get; set; }
99     public Book Book { get; set; }
100     public int BookID { get; set; }
101     public Boolean Active { get; set; }
102     public DateTime CheckoutDate { get; set; }
103     public DateTime DueDate { get; set; }
104     public int Renewals { get; set; }
```

```
105     }
106
107     [Table("tblReservations")]
108     public class Reservation
109     {
110         [Key]
111         public int ID { get; set; }
112         public User User { get; set; }
113         public int UserID { get; set; }
114         public Book Book { get; set; }
115         public int BookID { get; set; }
116         public DateTime Datetime { get; set; }
117         public Boolean Active { get; set; }
118     }
119 }
120
```