```
1
   using System;
 3 namespace MusicStore.Logic
 4
 5
        public class Factory
 6
 7
            public enum PersistenceType
 8
 9
                Csv,
10
                Ser,
11
12
            public static PersistenceType Persistence { get; set; } =
              Factory.PersistenceType.Csv;
13
            private static Context.ContextObject CreateContext()
14
15
                Context.ContextObject result = null;
16
17
                if (Persistence == PersistenceType.Csv)
18
                {
19
                    result = new Context.CsvMusicStoreContext();
20
                }
                else if (Persistence == PersistenceType.Ser)
21
22
23
                    result = new Context.SerMusicStoreContext();
24
25
                return result;
26
            }
27
28
            public static IController<T> CreateController<T>() where T :
              Contracts.IIdentifiable
29
30
                IController<T> result = null;
31
32
                if (typeof(T) == typeof(Contracts.IGenre))
33
                    result = (IController<T>)CreateGenreController();
34
35
36
                else if (typeof(T) == typeof(Contracts.IArtist))
37
38
                    result = (IController<T>)CreateArtistController();
39
40
                else if (typeof(T) == typeof(Contracts.IAlbum))
41
42
                    result = (IController<T>)CreateAlbumController();
43
                else if (typeof(T) == typeof(Contracts.ITrack))
44
45
46
                    result = (IController<T>)CreateTrackController();
47
                }
48
                return result;
49
            public static IController<T> CreateController<T>(object
50
              sharedController) where T : Contracts.IIdentifiable
51
                IController<T> result = null;
52
53
```

```
... ic Store \verb|\Solution| Music Store \verb|\Music Store|. Logic \verb|\Factory.cs|
54
                 if (typeof(T) == typeof(Contracts.IGenre))
55
56
                     result = (IController<T>)CreateGenreController
                                                                                       P
                       (sharedController);
57
                 }
                 else if (typeof(T) == typeof(Contracts.IArtist))
58
59
60
                     result = (IController<T>)CreateArtistController
                       (sharedController);
61
                 }
                 else if (typeof(T) == typeof(Contracts.IAlbum))
62
63
                     result = (IController<T>)CreateAlbumController
 64
                       (sharedController);
65
                 else if (typeof(T) == typeof(Contracts.ITrack))
 66
67
68
                     result = (IController<T>)CreateTrackController
                       (sharedController);
 69
                 }
70
                 return result;
             }
71
 72
 73
             public static IController<Contracts.IGenre> CreateGenreController()
 74
             {
                 return new Controllers.GenreController(CreateContext());
75
76
             }
77
             public static IController<Contracts.IGenre> CreateGenreController
               (object sharedController)
78
 79
                 if (sharedController == null)
80
                     throw new ArgumentNullException(nameof(sharedController));
81
82
                 Controllers.ControllerObject controller =
                                                                                       P
                   (Controllers.ControllerObject)sharedController;
83
                 return new Controllers.GenreController(controller);
84
85
             }
86
             public static IController<Contracts.IArtist> CreateArtistController()
87
88
             {
                 return new Controllers.ArtistController(CreateContext());
89
90
             public static IController<Contracts.IArtist> CreateArtistController
91
               (object sharedController)
92
93
                 if (sharedController == null)
94
                     throw new ArgumentNullException(nameof(sharedController));
95
96
                 Controllers.ControllerObject controller =
                   (Controllers.ControllerObject)sharedController;
97
                 return new Controllers.ArtistController(controller);
98
99
             }
100
101
             public static IController<Contracts.IAlbum> CreateAlbumController()
```

```
...icStore\Solution\MusicStore\MusicStore.Logic\Factory.cs
102
             {
103
                 return new Controllers.AlbumController(CreateContext());
104
             }
105
             public static IController<Contracts.IAlbum> CreateAlbumController
               (object sharedController)
106
                 if (sharedController == null)
107
108
                     throw new ArgumentNullException(nameof(sharedController));
109
110
                 Controllers.ControllerObject controller =
                   (Controllers.ControllerObject)sharedController;
111
                 return new Controllers.AlbumController(controller);
112
113
             }
114
115
             public static IController<Contracts.ITrack> CreateTrackController()
116
                 return new Controllers.TrackController(CreateContext());
117
118
             }
119
             public static IController<Contracts.ITrack> CreateTrackController
               (object sharedController)
120
                 if (sharedController == null)
121
122
                     throw new ArgumentNullException(nameof(sharedController));
123
                 Controllers.ControllerObject controller =
124
                                                                                     7
                   (Controllers.ControllerObject)sharedController;
125
126
                 return new Controllers.TrackController(controller);
127
             }
128
         }
129 }
130
```