LAB 5:

Problem:

1. NullReferenceException when displaying the Courses list in Index or Details.
2. Department name not displayed in Instructor Details or Course Details pages.
3. Error when calling Details action: “The parameters dictionary contains a null entry for parameter 'id' …”
4. Create/Edit pages crashed because the wrong ViewModel (InstructorIndexViewModel) was used instead of InstructorEditViewModel.

Solution:

1. In the InstructorController, I created static lists to simulate a database:

instructors

courses

students

enrollments

departments

1. The reason Department names did not appear was because Course only had a DepartmentID without a real Department reference. I solved it by assigning the Department inside the static constructor of InstructorController:

static InstructorController()

{

foreach (var c in courses)

{

c.Department = departments.FirstOrDefault(d => d.DepartmentID == c.DepartmentID);

}

}

1. In the Index view, when no Instructor was selected, Model.Courses could be null.  
   To fix this, I initialized empty lists inside the ViewModel:

var vm = new InstructorIndexViewModel

{

Instructors = instructors,

Students = students,

Courses = new List<Course>(),

Enrollments = new List<Enrollment>()

};

1. The Details action was originally defined as:

public ActionResult Details(int id)

If the route did not pass id, it caused a crash.  
So I updated it to:

public ActionResult Details(int? id)

{

if (!id.HasValue) return RedirectToAction("Index");

...

}

1. Originally, the Create view was using the wrong model (InstructorIndexViewModel) which had no Instructor property.

I fixed it by introducing and using InstructorEditViewModel:

public class InstructorEditViewModel

{

public Instructor Instructor { get; set; }

public List<Course> AllCourses { get; set; }

public List<int> SelectedCourseIDs { get; set; }

}

Then, in the View:

@model LAB4.Models.ViewModels.InstructorEditViewModel

@Html.LabelFor(m => m.Instructor.LastName)

@Html.TextBoxFor(m => m.Instructor.LastName, new { @class = "form-control" })