MVC Presentation 1 Outline

1. Start by talking about what MVC Is.
   1. Model – Data (View Model)
      1. Simple, Doesn’t do a lot
      2. There is a whole world of back end models we won’t talk about.
      3. Generally model should do business logic. We shouldn’t be doing business logic in the controller.
      4. Lots of different ways to deal with data on the back end we won’t talk about them.
   2. View
      1. Displays data.
      2. Doesn’t do any data processing just shows the user the data.
   3. Controller
      1. Takes URL requests and generates an action.
      2. Connects the dots between the view and the model.
      3. Also connects the dots between the user and the view through a URL.
      4. No business logics should be done here. (Important)
   4. Why MVC?
      1. Easy of development by separating parts out.
      2. TESTING TESTING TESTING
         1. Separation of parts makes testing much easier.
         2. I can test my controller logic without model logic.
         3. Can test model apart from controller.
2. Project structure – Open blank project and talk about a few things.
   1. Index Page.
      1. Next create a controller to serve that page.
         1. Talk about basic controller semantics here.
         2. This will demonstrate basic structure.
      2. Start by creating a very basic index page (hello world).
      3. Use this to talk about convention based routing.
   2. Basic Class page.
      1. Create a ViewModel. Talk about how models should go in the models folder.
         1. Other ways to organize but for the purposes of this presentation you should put your models here.
         2. Point out that this is a dumb model. This model just gives the view the data it needs
         3. Typically you would have a more complex model in the back end to handle logic.
      2. Create a new Controller.
         1. Create a static model that has static data for demonstration purposes.
         2. Create two actions.
            1. Index – displays the data in a list.
            2. Details shows the details for one class.

Show that you can pass in an ID into a function to change the behavior of the view.

Talk about route config file here. Show the default route and why this works.

* + - * 1. Create index view by hand to demonstrate razor.
        2. Show them a short cut for the details page.

1. Create another controller with short cut.
   1. Implements basic CRUD.
   2. Mention that you may need to add stuff to what VS does.
      1. Example the details page we want to display the classes.
      2. Default view created by VS doesn’t do this.
2. General discussion of routing.
   1. Go to Routing config and talk about Convention based routing.
      1. To make special cases you must add route to routing table.
      2. Note Order is important!
      3. Demonstrate a special case.
   2. Talk about attribute routing.
      1. Demonstrate attribute routing.
      2. Talk about special cases.
      3. NOTE ORDER STILL MATERS!
      4. Demonstrate bad example.