1. What method is used to get and display requested data?

OnGetAsync

1. What method is used to save changes to the data?

OnPostAsync

1. Briefly describe the difference between FirstOrDefaultAsync and SingleOrDefaultAsync when retrieving data.

SingleOrDefaultAsync when retrieving data fetches more data than FirstOrDefaultAsync, and will throw an exception if there is more than one entity that fits the filter part.

FirstOrDefaultAsync Doesn’t verify if there is more than one entity returned from a query and will not throw an exception if there is more than one entity that fits the filter part.

1. When is FindAsync not a good alternative to FirstOrDefaultAsync and SingleOrDefaultAsync?

If you are looking for other entities find Async is unable to return more than one

1. By default, how is the student id passed to the Details page?

It is passed through the URL using a query string

1. Adding "{id:int}" to the @page directive allows the student id to be passed as an integer instead of a query string?
2. Why is it not a good idea to use @page "{id:int}" globally (for all pages)?

The pages that would never have an id like home and about would always error because it will require that all pages have an id.

1. What is the purpose of the AsNoTracking method when retrieving Enrollment details?

AsNoTracking improves performance when entities returned aren’t updated in the current context

1. Briefly discuss the process of how the enrollment data gets displayed.

The enrollment data is displayed by using FirstOrDefaultAsync to fetch the enrollment data for the student based off their id.

1. What method is used to actually update the student object with data posted from the form during the create process?

TryUpdateModelAsync<Student>();

1. The term “overposting” is used when binding data from a form to an entity framework model. What does this mean?

This means that overposting occurs when we are turning our user input into our data that we are storing.

1. What is the difference between the domain/application model and the view model?

Domain/application model contains all of the properties of the entity but the view model only contains the properties needed for the UI layer.

1. How does a view model prevent overposting?

The view model only contains the properties that are displayed to the user to update.

1. When is FindAsync preferable during a fetch from the database?

FindAsync is preferable when you want to fetch the primary key from the database.

1. What object monitors whether entities are in sync with their corresponding row in the database?

DBContext

1. List the five states that an entity could possibly be in during run time?

Added, Unchanged, Modified, Deleted, and Detached.

1. What method is responsible for issuing the appropriate SQL command based on the above states?

SaveChangesAsync

1. What two things happen if a Remove action fails to complete?

DB exception is caught and the Delete pages GetOnAsync Method is called with saveChangesError = true.