

ASP.NET MVC5 TOPICS

| Sn.No | Topics | Reference |
|-------|--------------------------------------|---|
| 1. | OOPs Concept | |
| 2. | Data Types, Literals and Variables | |
| 3. | Program Control Statement | |
| 4. | Arrays, Jagged Arrays, and ArrayList | |
| 5. | For vs Foreach loop | |
| 6. | Exception Handling | |
| 7. | MVC Architecture | https://www.tutorialsteacher.com/mvc/mvc-architecture |
| 8. | Routing | https://www.tutorialsteacher.com/mvc/routing-in-mvc |
| 9. | Action Method and Action Verbs | https://www.tutorialsteacher.com/mvc/action-method-in-mvc https://www.tutorialsteacher.com/mvc/actionverbs-in-mvc |
| 10. | Action Selector | https://www.tutorialsteacher.com/mvc/action-selectores-in-mvc |
| 11. | Model and Views | https://www.tutorialsteacher.com/mvc/mvc-model https://www.tutorialsteacher.com/mvc/mvc-view |
| 12. | Razor Syntax | https://www.tutorialsteacher.com/mvc/razor-syntax |
| 13. | Layout View | https://www.tutorialsteacher.com/mvc/layout-view-in-asp.net-mvc |
| 14. | Partial View | https://www.tutorialsteacher.com/mvc/partial-view-in-asp.net-mvc |
| 15. | ViewBag, ViewData, TempData | https://www.tutorialsteacher.com/mvc/viewbag-in-asp.net-mvc https://www.tutorialsteacher.com/mvc/viewdata-in-asp.net-mvc https://www.tutorialsteacher.com/mvc/tempdata-in-asp.net-mvc |
| 16. | Sessions and ViewModel Concept | |
| 17. | SqlDataAdapter and SqlDataReader | |

Hands-On Practical

| Sn. no | Exercise |
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| 1. | Create a console application to accept the side of a square and print the area of the square |
| 2. | Create a console application that finds numbers of digits and alphabets in a given string |
| 3. | Print the string in reverse order |
| 4. | Implement Binary Search tree. |
| 5. | Find minimum height of binary tree using inorder and level order. |
| 6. | <p>Create a project in which :</p> <p>Create a Employee db and perform crud operation on that.</p> <p>1.Employee Table Schema: 1.EmployeeId 2.EmployeeName 3.EmployeeEmail 4.EmployeePassword 5.Mobile Number</p> <p>2.Create a stored prodecure for CRUD.</p> <p>3.then Implement .</p> |
| 7. | <p>Create a project in which Employee will register yourself and get a email on their registered email id and on clicking that link , Employee will able to login.</p> <p>Scenario:</p> <p>Create a table of Employee. 1.EmployeeId (int, PK, Identity) 2.EmployeeName (varchar) 3.EmployeeEmail (varchar) 4.EmployeePassword (varchar) 5.Mobile Number (varchar) 6.Active (bit) 7.createdOn(datetime) 8.modifiedOn (datetime) 9.deletedOn (datetime) 10.isDeleted (bit) 11.guid (uniqueidentifier)</p> |
| 8. | <p>Management System:</p> <p>1.Create database with the name, "Management System"</p> <p>2.Create a table with the name "Student" and "Faculty"</p> <p>3. Student Table:</p> <ul style="list-style-type: none"> • StudentId (int,PK, Identity) • Studentname (varchar) • Emai (varchar) |

- Password (varchar)
- Mobile (varchar)
- Guid (varchar)
- Active (bit)
- createdOn (datetime)
- modifiedOn (datetime)
- deletedOn (datetime)
- isDeleted (bit)
- branchId (int,FK)

4. Faculty Table

- FacultyId (int,PK, Identity)
- Facultyname (varchar)
- Email (varchar)
- Password (varchar)
- Mobile (varchar)
- Guid (varchar)
- Active (bit)
- createdOn (datetime)
- modifiedOn (datetime)
- deletedOn (datetime)
- isDeleted (bit)
- subjectId (int, FK)

5.Branch Table

- BranchId (int,PK,Identity)
- BranchName (varchar)
- createdOn (datetime)
- modifiedOn (datetime)
- deletedOn (datetime)
- isDeleted (bit)

6.Subject Table

- SubjectId (int,PK)
- SubjectName (varchar)
- createdOn (datetime)
- modifiedOn (datetime)
- deletedOn (datetime)
- isDeleted (bit)

7.Assignment Table

- AssignmentId (int,PK)
- Name (varchar)
- Path (varchar)
- Type (varchar)
- facultyId (int, FK)
- createdOn (datetime)
- modifiedOn (datetime)
- deletedOn (datetime)

| | |
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| | <ul style="list-style-type: none"> • isDeleted (bit) <p>8. Student and Faculty can register a site and after registration they get an confirmation email then on clicking confirmation link, their active become 1 and able to login on the site. So Create registration and login for faculty and student. Faculty can be able upload the assignment from their dashboard (faculty dashboard) so that student can download that assignment from their dashboard (Student dashboard).</p> <p>9. Insert data into branch and subject table.</p> <p>10. On register as a student, Student can select their branch id and in View all the branch name is shown but in db branch id will save in student table.</p> <p>11. On Register as a faculty, Faculty can select their subject id and in View all the subject name is shown but in db subject id will save in student table.</p> <p>12..Student have only read and download access for assignments.</p> |
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Assessment

- I. The XYZ Inc. is a leading IT Organization. The employees are provided with the assets like, Computer Machines, Laptops etc. The Organization want to replace their existing manual asset tracking system with a robust Software application. As a developer you are required to design and develop a software solution that handles the asset tracking features that includes, Managing assets, Tagging assets and d-tagging the assets.

A. Database Design

1. Create a database with the name, "AssetManagement" using the MS SQL Server on your machine locally.
2. Create a table, "Employee" in the above database with the following specification.

| Column Name | Data Type | Constraint/Specification |
|---------------|-------------|--------------------------|
| EmployeeID | VARCHAR(10) | PRIMARY KEY |
| EmployeeName | VARCHAR(20) | Not Null |
| DateOfJoining | DATE | Not Null |
| Location | VARCHAR(20) | Not Null |
| Email | VARCHAR(30) | Not Null |
| Phone | VARCHAR(10) | Not Null |

3. Insert two records into Employee Table
4. Create a table, "Asset" in the "AssetManagement" database with the following specification.

| Column Name | Data Type | Constraint/ Specification |
|-----------------|-------------|-------------------------------|
| ASSETID | INT | Identity(1000, 1) PRIMARY KEY |
| ASSETTYPE | VARCHAR(20) | LAPTOP/DESKTOP/VOIP/DATACARD |
| SERIALNO | VARCHAR(20) | Not Null |
| PROCUREMENTDATE | DATETIME | Not Null |
| TAGGINGSTATUS | VARCHAR(9) | DEFAULT"FREE POOL" |

5. Create a Table, "AssetTagging" in the "AssetManagement" database with the following .

| Column Name | Data type | Constraint/Specification |
|----------------|-----------|--------------------------|
| AssetTaggingId | INT | PRIMARY |
| EmployeeId | INT | NOT NULL |
| AssetId | INT | NOT NULL |
| Allotment Date | DATETIME | NOT NULL |

6. Insert record into "Asset" table.(Create Records for Asset)
7. Assign the tag to each employee by using "AssetTagging" table (In Which, View Contains the list of "EmployeeId" and AssetId and you have to tag/assign Asset to each employee if One Asset is assigned to any other employee then that Asset removes from the list of AssetId and EmployeeId).
8. Find All the Employee in FreePool (Tagging Status) and All Employee in ODC (Tagging Status)

II. How do you send an email from ASP.NET page? Implement with Asp.net Mvc5 Example.