

CTIS479 – C# Programming in .NET Framework

2020-2021 Spring

Project Details

Suggested Project Topics

- Globalization
- Security
- Silverlight
- LINQ in C# (other details not covered in class ex LINQ over JSON and XML)
- MVVM
- Report generator such as Crystal Report, FastReport, ReportGenerator, ReportUnit, ReportPortal etc.
- Mobile programming (Xamarin)
 - Explain each step like installation, project creation, how activity screen can be designed. How events can be catch, how gestures can be catch, custom list, database connection. How it is executed. Compare it with android application development. Also, you need to prepare a document which explain each steps and also you need to create a sample project that contains all the steps.
- C# Server and Client Socket program , Threading
- C# Remoting
- Linking native C++ into C# applications, How to use C++ libraries in C#
- Custom Attributes, Annotation
- Implement a complete web based application by using MVC and Entity Framework like Library System, Cinema System etc.
- IIS Server
- Asynchronous programming
- Blazor (An alternative to MVC and Razor)
- NHibernate
- Testing web application by using unit testing by using one of the template such as xunit or nunit, or mstest
- Frameworks or libraries C# developers use (one of the package from NuGet manager)
- Caching data and caching responses
- You may propose other topics.

Requirements of the project:

- Select your topic and get approval from your instructor (**Due date: 22.02.2021, 17:30**). Because of late submission, will **lose 5 pts.** over 100 pts.
- **If you select a topic instead of implementing web application:**
 - This is not a group project. You have to prepare every document and examples alone. If you use any the document and resources of another student, both of you will lose the required percentage of the project.
 - Prepare power point file to explain details of the topic or it could be prepared like a lab guide.
 - Which tools, libraries s should be installed?

- What are the steps to run the code
 - **Examples that you implement must be given**
 - Power point file structure
 - Title page: title of project, name and surname and id, semester.
 - Outline: general sub topics of your project
 - Details of sub topics and the required steps of your project
 - explain the steps with screen shots and explanations, code statements
 - Screen shots of your example. One example is not enough, you need to show all aspects of the selected topic.
 - Include used references
 - Explaining topic is not enough, about the selected topic implementation has to be done.
-
- **If you select implementation of complete web application as a project topic**
 - At most two students can be group
 - Students will get point according to their contribution to project.
 - You need to develop complete web application. Only CRUD operations over the database tables are not enough.
 - Make sure that the designed UI is professional looking.
 - At the last week of the semester, presentations will be done and you had to get presentation appointment from course instructor. **If you do not get appointment and do not present it,** you will get zero although you prepare all the required documents of the project.
 - Because of late submission or late presentation, for each day you will lose 1 pts. over 15 pts.
 - **Due date: last week (25.04.2021, 23:55)**