

Subject Code: 2CS1010402	Subject Title: Desktop Application Development-II
Pre-requisite:	VB.NET Form Designing , properties , method , events

Course Objective:

This course is focus to make the students aware of Client – Server architecture. Role of clients, Designs, Events, then role of Server, Data storing techniques. Learners will learn about data store in file system. Understand the concept of ADO.NET architecture. Data store into SQL server with all major process

Teaching Scheme(Hours per week)				Evaluation Scheme (Marks)								
Lecture	Tutorial	Practical	Credit	Theory				Practical				Total
				University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
				Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	Min. Marks	Max. Marks	
3	-	4	5	28	70	12	30	12	30	8	20	150

Subject Contents			
Sr. No.	Topics	Total Hours	Weight (%)
1.	Introduction of Client – Server Process : Introductions about Client – Server architecture , Comparison of Client – Server , characteristics of client process , characteristics of server process, Desktop base Client server process , Web base Client server process. Concept of Front-End and Back-End. Comparison of Front-end and Back-end. Web base front-end and back-end technology for project development.	10	20
2.	File handling in Desktop Application Development: Basic of File handling, File handling in VB.NET with library and importance. Introduction to Stream writer class with its methods. Introduction to Stream reader class with its methods. Store data and Read in / from the File from VB.NET Form. Introduction of encryption data store in File using File handling	10	20
3.	ADO.NET Architecture : Difference between ADO and ADO.NET , use of ADO.NET with its features. ADO.NET architecture. Classes of ADO.NET – Connection, Command, Adapter, Dataset, Data Reader with all the methods of each.	10	20
4.	Data Interaction using ADO.NET: By the use of ADO.NET perform Insert, Update, Delete the data from Front-end to Back-end. Authentication and Authorization in Front-End Back-End with signup and login process. Wizard base Insert, Update, Delete and Search process.	9	20
5.	Reports and Charts : Introduction of report , Types of report : Simple and Crystal report in VB.NET. Report. Creating Simple report. Introduction to Crystal report. Introduction to chart. Comparison of Report and Chart. Creating chart in VB.NET	9	20

Course Outcomes:

At the end of this course, the student would be able

- To understand Client – Server process for software development.
- To learn importance of Front-End and Back-End in software development.
- To implement data interaction with File as well as Database with encryption process.
- To understand and implement about data interaction (Insert , update , delete , search) with backend.
- To understand signup and login process with authentication and authorization.
- To understand reports – charts and implementing in software development.

List of References:

1. Mastering in Visual Basic .NET by Evangelos Petroutsos – BPB publication
2. An Introduction to programming using Visual Basic .NET by David I. Schneider – PHI Publications
3. Programming in VB.NET for Beginners by Keyur Shah & Parimal Patel – Books India Publication
4. Programming by VB.NET by Dr. ShyamChavda – Books India Publication.

E-Resources/ Web Links:

- <https://www.tutorialspoint.com/vb.net/index.htm>
- <https://www.javatpoint.com/vb-net>
- <https://www.guru99.com/vb-net-tutorial.html>
- <https://docs.microsoft.com/en-us/dotnet/visual-basic/>
- <http://vb.net-informations.com/>
- <https://www.youtube.com/user/abhijeetwithnewlearn>

List of Experiments:

Note: The experiment list provided beneath is for reference only. The course teacher may change/formulate it as per his/her methodology and requirement.

1. Create VB.NET application to insert data from Form into File.
2. Create VB.NET application to read data from File and display at Form.
3. Create VB.NET application to store ASCII value into file (concept of encryption).
4. Create VB.NET application to insert Form record into SQL Database using coding method.
5. Create VB.NET application to update Form record into SQL Database using coding method.
6. Create VB.NET application to delete Form record into SQL Database using coding method.
7. Create VB.NET application to search Form record into SQL Database using coding method.
8. Create VB.NET application to Signup Form record into SQL Database using coding method
9. Create VB.NET application to Login Form record into SQL Database using coding method
10. Create VB.NET application to insert, update, delete and search data using wizard method
11. Create VB.NET application to create simple report.
12. Create VB.NET application to create formatted simple report.
13. Create VB.NET application to create simple chart.
14. Create VB.NET application to create formatted chart.
15. Create VB.NET application to create crystal report.