

Web Based Technologies – Project

News Crawling Project

In this project, you will design a news crawling website that parse news from a particular RSS and instantly updates itself.

You have to design **three** web pages (**RSSparsing.aspx**, **Home.aspx** and **NewsDetail.aspx**) and a class page (**News.cs**) that holds news information.

News.cs

1. Add a class file named **News.cs** into your project (Add New Item, Class). This file will contain information about the news. If you encounter a message which states that this file should be in **App_Code** folder, then select **Yes** and let Visual Studio create the **App_Code** folder for you and put **News.cs** file in this folder. After then, you will be able to use the **News** class in your application like any other classes of .NET library.

```
public class News
{
    public int NewsID;
    public string Title;
    public string Description;
    public string Category;
    public string Author;

    public DateTime PubDate;
    public string ImageUrl;

    public News(int NewsID, string Title, string Description,
string Category, string Author, string PubDate, string ImageUrl)
    {
        this.NewsID = NewsID;
        this.Title = Title;
        this.Description = Description;
        this.Category = Category;
        this.Author = Author;
        this.PubDate = PubDate;
        this.ImageUrl = ImageUrl;
    }
}
```

Design of RSSparsing.aspx

This website will be use to parse the xml in the http://ajans.dha.com.tr/dha_public_rss.php.

The following information about news will be downloaded and stored in a table of database.

You can consider up to 100 news. Each news should be saved with unique id, which is called as **NewsID**. You can use either MSSQL or ACCESS database. Information that are needed to be parsed are:

- **Description**
- **Category**
- **Author**
- **PubDate**
- **ImageUrl**

This information of news are located in <item> tag. Therefore, you should consider only <item> tags when parsing the xml file.

Design of Home.aspx

This website presents the news in a list with a small image and title. An example is illustrated in Fig. 1. You can use gridview or similar web control to show news in listed order.



Fig. 1. News list.

When a news is clicked, then details of news should be displayed in NewsDetail.aspx. It depends on your design. You can cheating from the BookStore application (HW3).

1. You should retrieve all information of news from database.
2. Then store each news into news object by using News.cs
3. Store each news object into an ArrayList.
4. Then bind the ArrayList into your gridview.
5. Items in gridview should be clickable.

The Home.aspx should be updated (reloaded) in every 30 seconds.

Design of NewsDetail.aspx

The details of a news should be displayed in NewsDetail.aspx which is shown Fig. 2. You will be graded based on your design.



Submitting the project

Example; Name-Surname-project#.Zip

The zip file should include the complete visual studio project. You can share with google drive. For this purpose, just, send the link of your project. The report is not necessary, but you should prepare a presentation about your project. You will explain your project in final week. Also, you should prepare a readme.docs that explains how the project works and other details such as requirements and tools.