

## Definition

A cookie is a small piece of data stored on the client's machine by a web browser, typically to track and store information about the user. Cookies are used for session management, user authentication, and website personalization. The server sends them to the client's browser and then includes them in subsequent requests to the server.

Cookies are stored as strings in key-value pairs

## Cookie Implementation on Razor Pages

### Create a cookie

```
Response.Cookies.Append("NameOfCookie", "ValueOfCookie");
```

### Reading a cookie

```
string value = Request.Cookies["name"];
```

Note: A name of a non-existent cookie returns null.

### Configuring Cookies with Cookie Options

```
var cookieOptions = new CookieOptions
{
    Expires = DateTime.Now.AddDays(number) // Cookie expires in {number} days
    HttpOnly = false (default) //Cookie is accessible to client-side code
    Secure = false (default) //True only allows HTTPS requests
}
```

### Adding Cookie Options to cookie

```
Response.Cookies.Append("name", "value", "cookieOptions);
```

Note: More options are found in source 1 (short read)

## One Lining Cookie with options

```
// Assuming you have the user's email stored in a variable named userEmail  
string userEmail = "user@example.com";
```

```
// Set a cookie named "UserEmail" with the user's email and an expiration time of  
1 day
```

```
Response.Cookies.Append  
("UserEmail", userEmail, new Microsoft.AspNetCore.Http.CookieOptions  
{  
    Expires = DateTime.Now.AddDays(numberOfDays)  
});
```

Note: Looks ugly so I suggest creating a separate CookieOptions

## ChatGPT Adding Emails to Cookie

### 1. Create a Form to Enter Email (Razor View):

html


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```
<!DOCTYPE html>  
<html>  
<head>  
    <title>Email Form</title>  
</head>  
<body>  
    <form method="post" action="/Home/SaveEmail">  
        <label for="email">Enter your email:</label>  
        <input type="email" id="email" name="email" required />  
        <button type="submit">Save Email</button>  
    </form>  
</body>  
</html>
```

## 1. Controller Action to Save Email (C# - Controller):

Assuming you have a controller named `HomeController`:

csharp

 Copy code

```
using Microsoft.AspNetCore.Mvc;

public class HomeController : Controller
{
    [HttpPost]
    public IActionResult SaveEmail(string email)
    {
        // Validate the email format (you may want to add more robust validation)
        if (IsValidEmail(email))
        {
            // Set a cookie named "UserEmail" with the entered email and expiration t
            Response.Cookies.Append("UserEmail", email, new Microsoft.AspNetCore.Http
            {
                Expires = DateTime.Now.AddDays(30)
            });
        }

        // Redirect to another view or perform other actions as needed
        return RedirectToAction("Index"); // Replace "Index" with the name of your vi
    }

    private bool IsValidEmail(string email)
    {
        try
        {
            var addr = new System.Net.Mail.MailAddress(email);
            return addr.Address == email;
        }
        catch
        {
            return false;
        }
    }
}
```

## Sources

1. [https://www.learnrazorpages.com/razor-pages/cookies#:~:text=You%20create%20or%20set%20a,MyCookie%22%2C%20%22value1%22\)%3B](https://www.learnrazorpages.com/razor-pages/cookies#:~:text=You%20create%20or%20set%20a,MyCookie%22%2C%20%22value1%22)%3B)
2. <https://www.youtube.com/watch?v=KE2jLFz85aw>

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