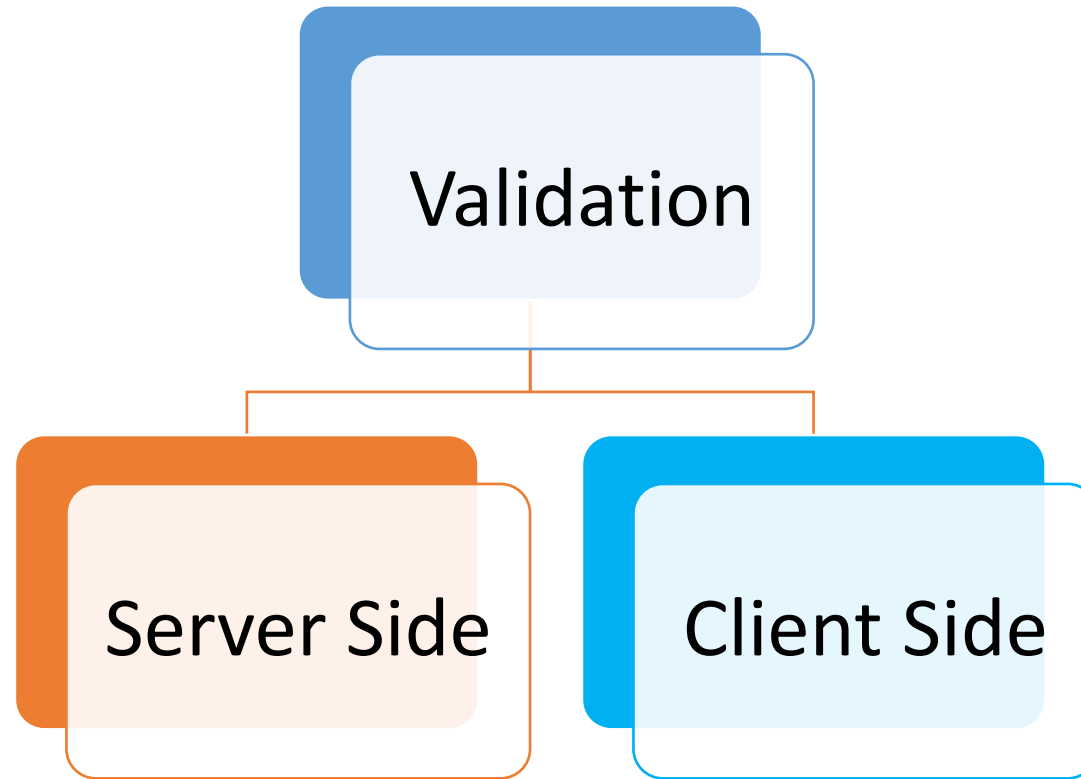# Data Validation and Data Passing

DotNetTricks

Data Validation

- Helps to ensure that the received data is correct and valid.

- Data should be validated at client side and server side.

- Prevent unwanted attack.

Data Validation Techniques

Server Side Validation

- Helps to protect your data from dirty input.

- As a best practice you must use.

- Server Side Validation Ways:

  ➢ Explicit Model Validation (Traditional)

  ➢ Data Annotations Model Validation

DotNet**Tricks**

Client Side Validation

- Make web page highly interactive and user friendly.

- Save a number of request to server.

- Client Side Validation Ways:

  ➢ JavaScript

  ➢ Third Party JS Library/framework

Model State

- A collection of name and value pairs that are submitted to the server during a POST.

- Also contains error messages about each name-value pair, if such errors exist, during a POST action.

- ModelState is a property of a *Controller* instance that inherits *Microsoft.AspNetCore.Mvc.Controller* class.

DotNetTricks

Data Passing Techniques

- ViewData

- ViewBag

- TempData

- Session

- QueryString

- Cookies

ViewData

- A dictionary object that stores value in key-value pair.

- Used to pass data from controller to view.

- Need typecasting for getting data in C#.

- Value becomes null If redirection occurs.

DotNetTricks

ViewBag

- A dynamic property which wraps ViewData.

- Used to pass data from controller to view.

- Don't need typecasting for getting data in C#.

- Value becomes null If redirection occurs.

DotNetTricks
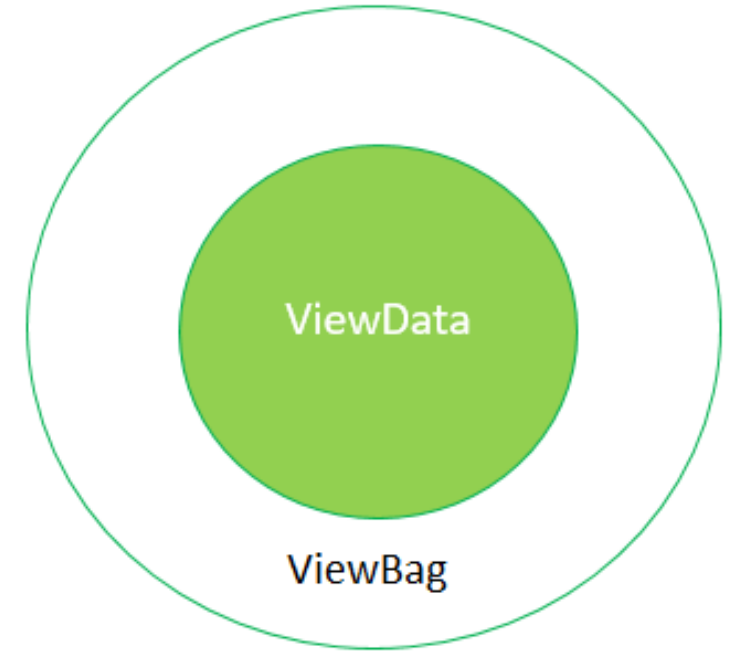
TempData

- A dictionary object that stores value in key-value pair.

- Used to pass data from current request to subsequent request.

- Need typecasting for getting data in C#.

- Internally use session for storing values till ASP.NET Core 1.x.

- From ASP.NET Core 2.0, the cookie TempData provider is now the default TempData provider means you no longer need to setup session support to make use of the TempData features

Data Passing
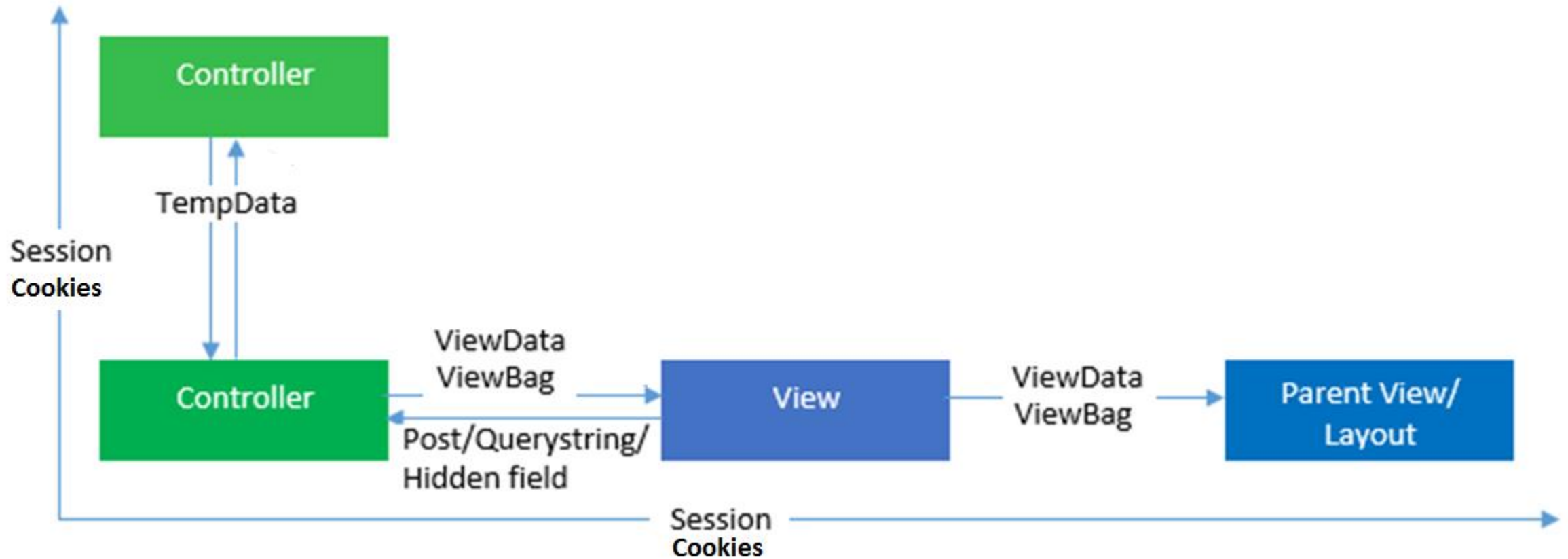
Session

- Used to pass data within ASP.NET Core MVC app.

- Persist Data for a user session (default 20m).

- Need typecasting for getting data in C#.

QueryString

- Used to pass data within MVC app using parameters in Url.

- Don't recommended to pass sensitive information.

- Has Url length limitation.

Browser	Length Limitation
IE	2,083
Edge	81578
Chrome	100k
Firefox	100k
Safari	80k

Cookies

- Used to save data at client side.

- Persistent cookies are stored as a text file on client computer.

- Non-persistent cookies are stored in browser memory.