LESSON 9

script.ps1

```
try {
  Get-Item x -EA Stop
} catch {
  "Error: $_"
}
```

PS>

try / catch

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POWERSHELL SCRIPTING

LESSON 9

Error Handling

Terminating vs non-terminating errors, try/catch/finally, -ErrorAction and $Error

Two Kinds of Errors



- Non-terminating errors print a red message but the command continues, like Get-ChildItem on …
- Terminating errors stop the command. try and catch only see terminating errors, which is …

01

try, catch and finally

trycatch.ps1

```
try {
    $data = Get-Content .\config.json -ErrorAction Stop | ConvertFrom-Json
    "loaded $($data.name)"
}
catch [System.Management.Automation.ItemNotFoundException] { Write-Warning 'config file missing' }
catch { Write-Error "failed: $($_.Exception.Message)" }
finally { 'done' }
```

- Put risky code in try. Add dash ErrorAction Stop so normal errors become terminating and …
- Inside catch, dollar underscore holds the error. finally always runs, so close connections …

02

-ErrorAction and Preferences

Value	Effect
`Stop`	make it terminating (catchable)
`Continue`	show error, keep going (default)
`SilentlyContinue`	hide error, keep going
`Ignore`	hide and do not record

- dash ErrorAction controls one command: Stop, Continue, SilentlyContinue or Ignore. ...
- Many professionals put ErrorActionPreference equals Stop at the top, like set dash e in Bash.

03

throw and Your Own Errors

throw.ps1

```powershell
function Get-Config {
    param([string]$Path)
    if (-not (Test-Path $Path)) { throw "Config not found: $Path" }
    Get-Content $Path -Raw | ConvertFrom-Json
}
try { Get-Config .\missing.json } catch { "Error: $_" }
```

- throw creates a terminating error with your message. Use it when input is wrong or a …
- Write-Warning and Write-Error are softer: they report a problem but let the caller decide …

04

$Error and Logging

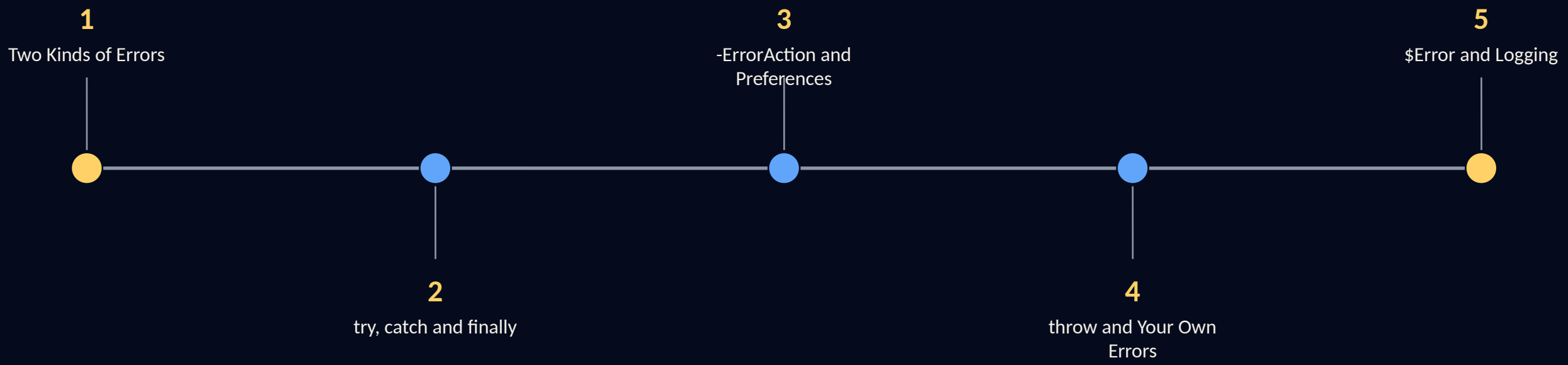
log.ps1

```
Start-Transcript -Path .\run.log -Append
function Write-Log($msg) { "$(Get-Date -Format s) $msg" | Add-Content .\app.log }
try { Restart-Service 'Spooler' -ErrorAction Stop; Write-Log 'restarted' }
catch { Write-Log "FAILED: $($_.Exception.Message)" }
$Error[0].InvocationInfo.ScriptLineNumber
Stop-Transcript
```

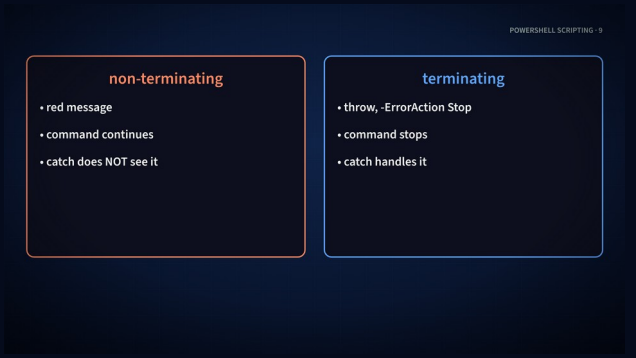
- The automatic variable dollar Error keeps a list of recent errors, newest first. dollar …
- Combine catch with a log function, and Start-Transcript to record a whole session, so you …

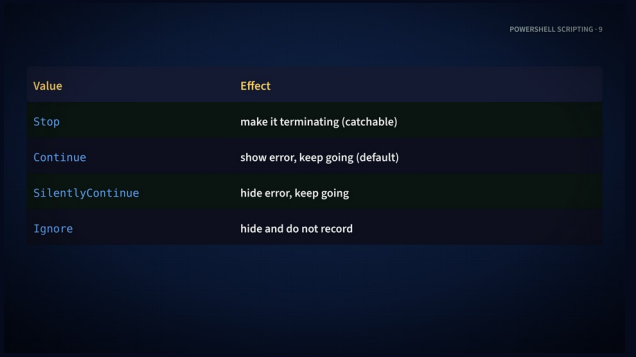
05

Lesson Map


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-ErrorAction and Preferences
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throw and Your Own Errors
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$Error and Logging

Sources and Further Reading





Thank you for watching

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