



26 September 2020

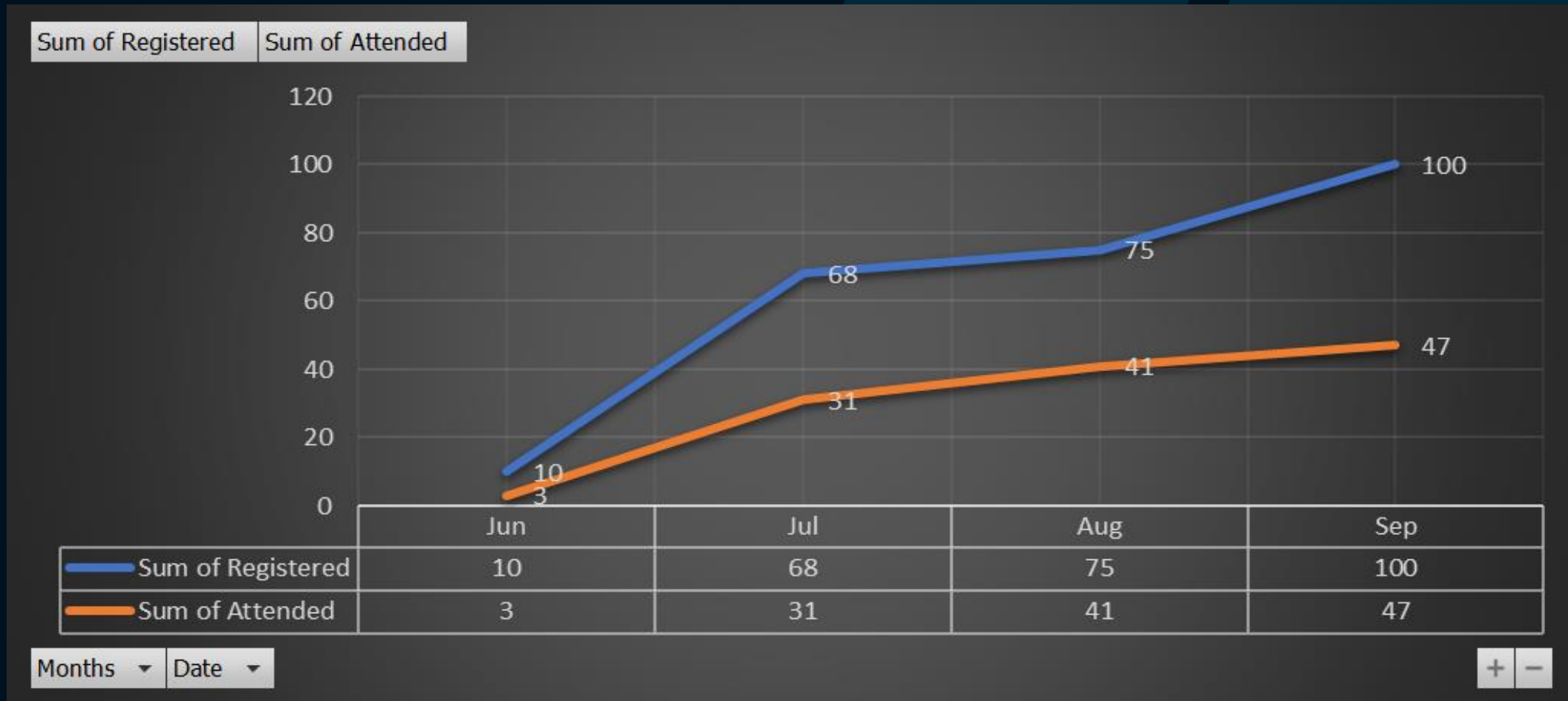
MSDYN365BC – Automated Testing – Introduction.

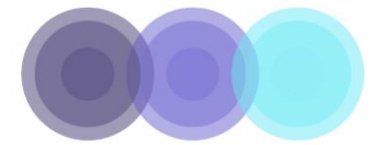
Saurav Dhyani
<https://www.sauravdhyani.com/>



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Participation





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Where Do I Register?

- Register Here – <https://bit.ly/bcopendiscussion>

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Upcoming - NAV Webinars

Hi All,

This page will have links for Next Meeting and also Recording of Past meetings.

If you want to be a presenter in one of these meetings please comment on this page or send me an email and I will be happy to be helped.

Next Meeting -

*** If you have opted in to receive invite every time during last meetings you don't need to register.*

- **Registration Link.** (** Registration Ends on **14th Aug. 2020 - 03:00 PM IST**)
- **Please send your Question** using **this link.**
- **If you have a topic that we should talk about** use **this link.**

Past Meeting Recordings -

1. Meeting 2 - July 04 2020 - Recording Link
2. Meeting 3 - July 11 2020 - Recording Link
3. Meeting 4 - July 18 2020 - Recording Link
4. Meeting 5 - July 25 2020 - Recording Link
5. Meeting 6 - Aug 01 2020 - Recording Link
6. Meeting 7 - Aug 08 2020 - Recording Link



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Don't Need to Register.

No.	First Name	Last Name
1	Steve	Endow
2	Jignesh	Dhandha
3	Amandeep	Sharma
4	tanya	kharbanda
5	Nishant	Srivastava
6	Shahid	Ullah
7	Keshav	Srivastav
8	Nitin	Verma
9	Manish	Ratan
10	Kiran	Deore

No.	First Name	Last Name
11	Bandaru	Srinivasulu
12	Pravin	Dangar
13	Jyotsna	Oberai
14	Veeraprasad	Kurupalli
15	Anil	Pandey
16	Kumar	Gaurav
17	DhanRaj	Bansal
18	Gerardo	Daniel
19	Radheshyam	Shukla



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Automated Testing.

Why Not?

- Developers & Testing?
- Customer Should Test?
- Cost?
- Resources?

Why?

- Same Time and Cost.
- Fast To Execute.
- Reusable.
- Easy To use.



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GIVEN-WHEN-THEN Tags

GIVEN

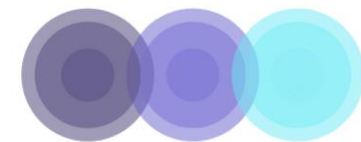
- **set of Preconditions.**

WHEN

- **an event occur.**

THEN

- **What outcome is expected.**



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How Do I Setup Environment?

```
Untitled1.ps1  saascontainercommand_o.ps1* X
1 $containerName = 'sauravbcsaas'
2 $credential = Get-Credential -Message 'Using UserPassword authentication. Please enter credentials for the container.'
3 $auth = 'UserPassword'
4 $artifactUrl = Get-BcArtifactUrl -type 'Sandbox' -version '' -country 'us' -select 'Latest'
5 $licenseFile = 'd:\docker\my.flf'
6 New-BcContainer `
7     -accept_eula `
8     -containerName $containerName `
9     -credential $credential `
10    -auth $auth `
11    -artifactUrl $artifactUrl `
12    -imageName 'saasimage' `
13    -assignPremiumPlan `
14    -includeTestToolkit ←
15    -includeTestLibrariesOnly ←
16    -licenseFile $licenseFile `
17    -memoryLimit 4G `
18    -updateHosts
19
```

Import-TestToolkitToBcContainer

Name: Import-TestToolkitToBcContainer
Module: BcContainerHelper (Imported)

Parameters for "Import-TestToolkitToBcContainer":

containerName:	Temp
credential:	
<input type="checkbox"/> doNotUpdateSymbols	
<input type="checkbox"/> doNotUseRuntimePackages	
ImportAction:	
<input type="checkbox"/> includePerformanceToolkit	
<input type="checkbox"/> includeTestFrameworkOnly	
<input checked="" type="checkbox"/> includeTestLibrariesOnly	
replaceDependencies:	
scope:	
sqlCredential:	
testToolkitCountry:	
<input type="checkbox"/> useDevEndpoint	





























Common Parameters



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Non-Docker Setup?

- Install Following Extension (minimum) –
 - Microsoft_Any
 - Microsoft_Library Assert
 - Microsoft_Test Runner
 - Microsoft_System Application Test Library
 - Microsoft_Tests-TestLibraries

Name	Date modified	Type	Size
 Microsoft_Library-NoTransactions	05/03/20 5:38 PM	APP File	13 KB
 Microsoft_Tests-Bank	05/03/20 5:17 PM	APP File	139 KB
 Microsoft_Tests-Cash Flow	05/03/20 5:17 PM	APP File	89 KB
 Microsoft_Tests-Cost Accounting	05/03/20 5:17 PM	APP File	112 KB
 Microsoft_Tests-CRM integration	05/03/20 5:17 PM	APP File	217 KB
 Microsoft_Tests-Data Exchange	05/03/20 5:17 PM	APP File	87 KB
 Microsoft_Tests-Dimension	05/03/20 5:17 PM	APP File	197 KB
 Microsoft_Tests-ERM	05/03/20 5:17 PM	APP File	1,997 KB
 Microsoft_Tests-Fixed Asset	05/03/20 5:17 PM	APP File	136 KB
 Microsoft_Tests-General Journal	05/03/20 5:17 PM	APP File	132 KB
 Microsoft_Tests-Graph	05/03/20 5:17 PM	APP File	227 KB
 Microsoft_Tests-Integration	05/03/20 5:17 PM	APP File	128 KB
 Microsoft_Tests-Invoicing	05/03/20 5:17 PM	APP File	124 KB
 Microsoft_Tests-Job	05/03/20 5:17 PM	APP File	242 KB
 Microsoft_Tests-Local	05/03/20 5:17 PM	APP File	570 KB
 Microsoft_Tests-Marketing	05/03/20 5:17 PM	APP File	186 KB
 Microsoft_Tests-Misc	05/03/20 5:18 PM	APP File	653 KB
 Microsoft_Tests-Permissions	05/03/20 5:17 PM	APP File	56 KB
 Microsoft_Tests-Physical Inventory	05/03/20 5:17 PM	APP File	52 KB
 Microsoft_Tests-Prepayment	05/03/20 5:17 PM	APP File	55 KB
 Microsoft_Tests-Rapid Start	05/03/20 5:17 PM	APP File	79 KB
 Microsoft_Tests-Report	05/03/20 5:17 PM	APP File	104 KB
 Microsoft_Tests-Resource	05/03/20 5:18 PM	APP File	152 KB
 Microsoft_Tests-Reverse	05/03/20 5:17 PM	APP File	78 KB
 Microsoft_Tests-SCM	05/03/20 5:17 PM	APP File	2,819 KB
 Microsoft_Tests-SINGLESERVER	05/03/20 5:17 PM	APP File	154 KB
 Microsoft_Tests-SMB	05/03/20 5:17 PM	APP File	163 KB
 Microsoft_Tests-SMTP	05/03/20 5:17 PM	APP File	21 KB



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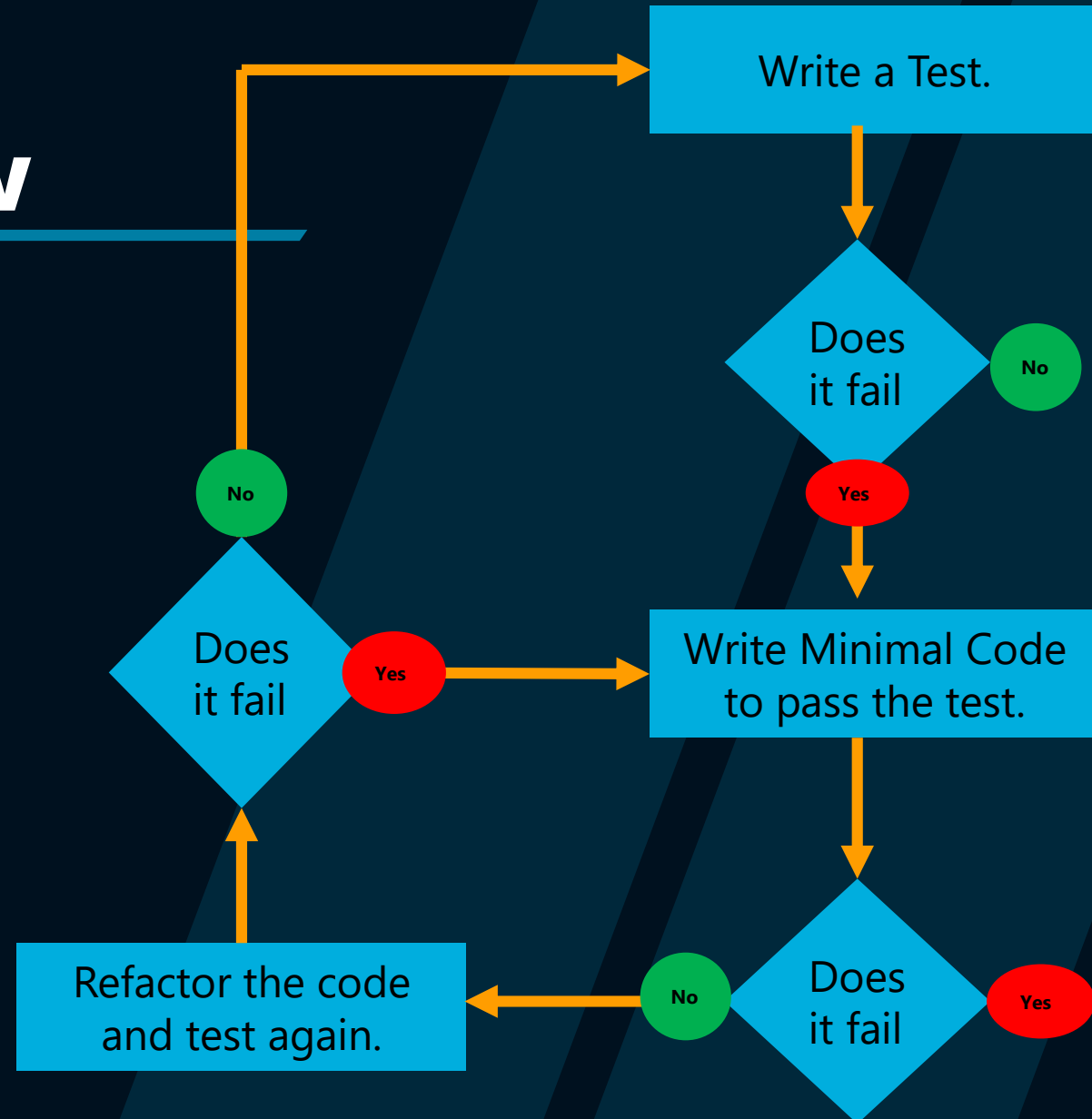
Change in Dev. Methodology.

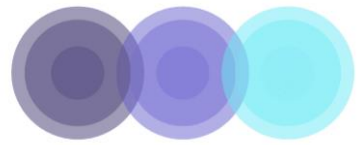
- *With Automated Testing we will need to change our development methodology.*
- *Write Test.*
- *Write App.*
- *Execute Test.*



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Process Flow

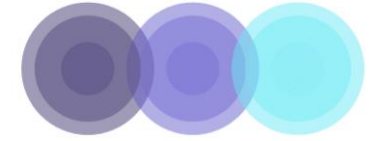




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Customer Requirement?

- We Require a New Field in Customer Card – “Demo Text”.
- When user creates a Sales Quote “Demo Text” should get copied from the customer.



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Customer Requirement.

GIVEN

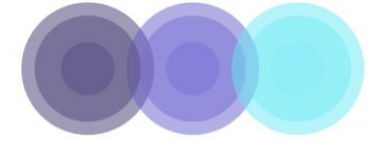
- A Customer with Demo Text.

WHEN

- A Sales Quote is Created.

THEN

- Demo Text in Sales Quote is populated from Customer.



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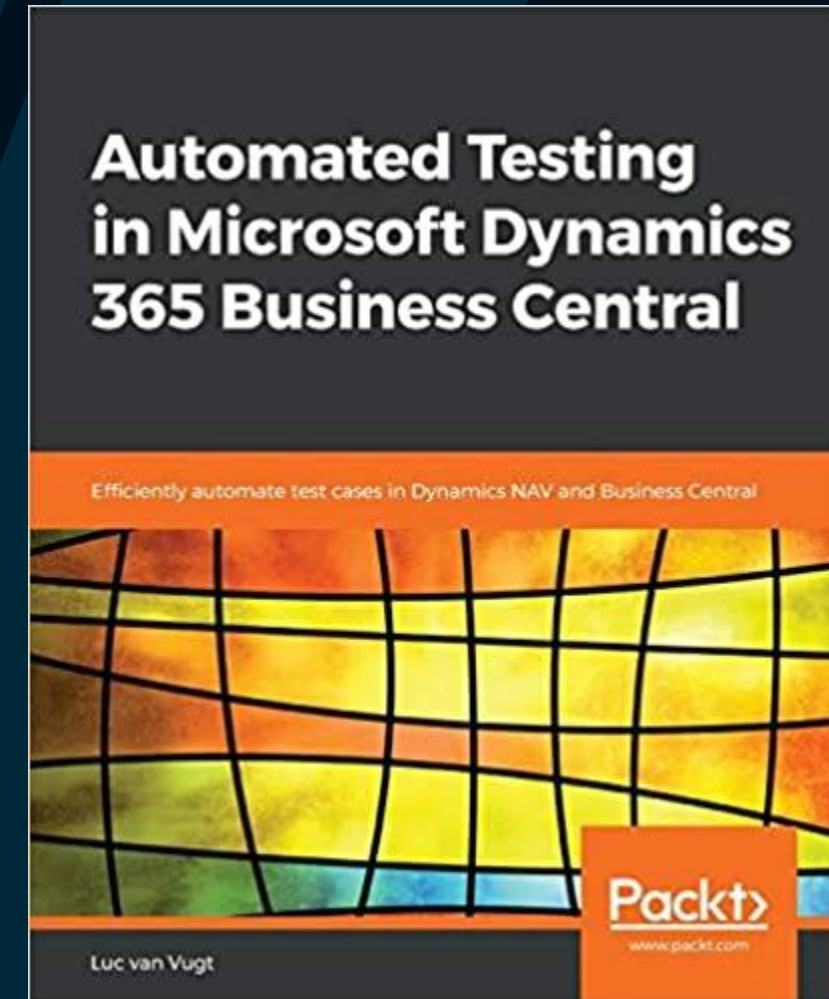
DEMO



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References.

- **Clone repo** - <https://github.com/postsaurav/alsamples.git>
- **Link** - <https://github.com/postsaurav/alsamples>
- **Business Central – Testing the Application**
<https://docs.microsoft.com/en-us/dynamics365/business-central/dev-itpro/developer/devenv-testing-application>
- **Book**
<https://www.amazon.in/Automated-Testing-Microsoft-Dynamics-Business/dp/1789804930>



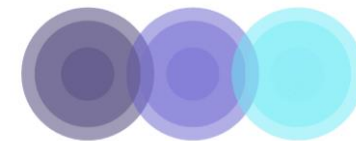


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Next Week Topic?

- Vote Here - <http://etc.ch/Uect>





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THANK YOU!

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