



TOYOTA ASTRA MOTOR

*Information System & Technology*

## *Unit Test (UT)*

DEVELOPMENT TCAP SYSTEM IMPROVEMENT

*Information System & Technology Division*

PT Toyota-Astra Motor

Version 1.0





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Sign Off				
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## DOCUMENT VERSION HISTORY

Histori Perubahan				
Date Modified	Modified By	Version No.	Type of Change	Brief Description of Change
23/10/2024	Rivaldo	1.0	Initial	

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## Latar Belakang

Saat ini, administrasi pengadaan asesoris kendaraan telah terbantu dengan adanya Aplikasi Conversion & Accessories Administration System (T-CAP), dimana seluruh dokumen asesoris kendaraan yang di butuhkan tersebut telah tersimpan pada database, sehingga memudahkan user untuk melakukan pembuatan dokumen tersebut, mulai dari awal pengadaan hingga asesoris tersebut selesai dan terpasang pada kendaraan. Selain itu, Aplikasi juga mampu melakukan pencarian dari dokumen yang diinginkan. Namun ternyata, ada beberapa yang kurang efisien saat input data, dan ada yang belum sesuai dengan yang di harapkan. Sehingga berdampak pada beberapa permasalahan antara lain sebagai berikut:

1. Proses Penginputan terlalu banyak, sehingga user membutuhkan waktu untuk menginput data.
2. Data Attachment A tidak bisa di edit, sehingga user kesulitan ketika membutuhkan perubahan data pada Attachment A.
3. Penambahan menu Direct Delivery, untuk membantu user dalam mendownload file yang dibutuhkan.

Melihat dampak dari Aplikasi Conversion & Accessories Administration System (T-CAP) saat ini, maka sangat di perlukan perubahan dan penyesuaian di beberapa modul sehingga permasalahan dari beberapa point tersebut di atas bisa teratasi dengan baik.



## Unit Test

### Unit Test Scenario and Result

**T-CAP**

Home > Master Part List > 86

**Project Information**

Project Code	: 000B	Brand	: Toyota
Segment	: Sedan	Project Name	: 86

**Vehicle Information**

Grade	Engine Type	Transmission	Steering Position	Katashiki	Color Code	Color Name
No Data Available					No Data Available	

**Upload File Master Part List**

File Excel \*  No file chosen

Remarks

**History File Master Part List**

Show  entries Search:

No	File	Remarks	Created By	Created Date
1	<a href="#">Download</a>	Test 1	Vitto	9/11/2024 10:55:25 AM
2	<a href="#">Download</a>	Test 2	Vitto	9/11/2024 11:01:37 AM
3	<a href="#">Download</a>	Test 3	Vitto	9/11/2024 11:04:34 AM

Showing 1 to 3 of 3 entries

Tabel 1 Master Part List Test - Scenario 1

Class	MasterPartList.Tests
Method	Public void Create_WhenDataIsValid_ShouldSaveToDatabaseAndRedirect()
Method Desc	Master Part List : Should save to database and redirect
Expected Result	Assert.IsNotNull(result); Assert.AreEqual("Details", result.RouteValues["action"]); Assert.AreEqual("test-id", result.RouteValues["id"]);
Actual Result	MasterPartList.Tests. Create_WhenDataIsValid_ShouldSaveToDatabaseAndRedirect: return success and redirect
Status	Passed
Tested By	NUnit automated testing framework
Date/Time	21/10/2024 11:10:21



**T-CAP**

Home > Engineering Part List > Add File

### Add Engineering Part List

Form File Engineering Part List

Accessories Group \*

Part Category \*

Part Name \*

Document Type \*

File \*  No file chosen

Remarks

Note :

\* Field Harus Diisi / Mandatory

Tabel 2 Engineering Part List Test – Scenario 1

Class	EngineeringPartList.Tests
Method	public void Create_WhenValidFileUploaded_ShouldSaveToDatabase()
Method Desc	Engineering Part List : Should save to database
Expected Result	Assert.IsNotNull(result); Assert.AreEqual("Details", result.RouteValues["action"]); Assert.AreEqual("1", result.RouteValues["id"]);
Actual Result	EngineeringPartList .Tests. Create_WhenValidFileUploaded_ShouldSaveToDatabase : return success to insert database
Status	Passed
Tested By	NUnit automated testing framework
Date/Time	21/10/2024 11:10:21





**T-CAP**

Home > Quality Document > 80 > Add File

### Add Quality Document

Form File Quality Document

Accessories Group \*

Part Category \*

Part Name \*

File \*  No file chosen

Remarks

Note :

\* Field Harus Diisi / Mandatory

**Tabel 3 Quality Document Test – Scenario 1**

Class	QualityDocument.Tests
Method	public void Index_ShouldReturnView_WhenSessionIsValid()
Method Desc	Quality Document : Should save to database
Expected Result	Assert.IsNotNull(result); Assert.AreEqual("Details", result.RouteValues["action"]); Assert.AreEqual("1", result.RouteValues["id"]);
Actual Result	QualityDocument .Tests. Create_WhenValidFileUploaded_ShouldSaveToDatabase : return success to insert database
Status	Passed
Tested By	NUnit automated testing framework
Date/Time	21/10/2024 11:10:21



**T-CAP**

Home > Purchasing Document > Add File

### Add Purchasing Document

Form File Purchasing Document

Accessories Group \*

Part Category \*

Part Name \*

File \*

Remarks

Note :

Field Harus Diisi / Mandatory

**Tabel 4 Purchasing Document Test – Scenario 1**

Class	PurchasingDocument.Tests
Method	public void Create_WhenValidFileUploaded_ShouldSaveToDatabase()
Method Desc	Purchasing Document : Should save to database
Expected Result	Assert.IsNotNull(result); Assert.AreEqual("Details", result.RouteValues["action"]); Assert.AreEqual("1", result.RouteValues["id"]);
Actual Result	PurchasingDocument.Tests. Create_WhenValidFileUploaded_ShouldSaveToDatabase: return success to insert database
Status	Passed
Tested By	NUnit automated testing framework
Date/Time	21/10/2024 11:10:21



T-CAP

Vito  
991497

Menu

Dashboard

Project Registration

Vehicle Information

MPL

Master Part List

Engineering Part List

Quality Document

Purchasing Document

**Attachment A**

TIS / DIS

Direct Delivery

Home > Attachment A > Add File

Add Attachment A

Form File Attachment A

Month \*  
-- Choose Month --

Year \*  
-- Choose Year --

File \*  

Choose File

 No file chosen

Remarks

Save Attachment A

Note :  

\* Field Harus Diisi / Mandatory

Tabel 5 Attachment A Test – Scenario 1

Class	AttachmentADocument.Tests
Method	public void Create_ValidFile_SavesAndRedirects()
Method Desc	Attachment A Document : Should valid file, save and redirect
Expected Result	Assert.IsNotNull(result); Assert.AreEqual("Index", result.RouteValues["action"]);
Actual Result	AttachmentADocument.Tests.Create_ValidFile_SavesAndRedirects: return valid file, save and redirect
Status	Passed
Tested By	NUnit automated testing framework
Date/Time	21/10/2024 11:10:21

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**T-CAP**

Home > Attachment A > Add File

### Add Royalty Report

Form File Royalty Report

Start Month / Year \*

End Month / Year \*

File \*  No file chosen

Remarks

**Save Royalty Report**

Note :

\* Field Harus Diisi / Mandatory

Tabel 6 Attachment A Document – Scenario 2

Class	AttachmentADocument.Tests
Method	public void CreateRoyalty_ValidFile_SavesAndRedirects()
Method Desc	Royalty Report : Should valid file, save and redirect
Expected Result	Assert.IsNotNull(result); Assert.AreEqual("Index", result.RouteValues["action"]);
Actual Result	AttachmentADocument.Tests.CreateRoyalty_ValidFile_SavesAndRedirects: return valid file, save and redirect
Status	Passed
Tested By	NUnit automated testing framework
Date/Time	21/10/2024 11:10:21



**T-CAP**

Home > TIS / DIS Documents > Add File

### Add TIS / DIS Document

Form File TIS / DIS Document

Accessories Group \*

Part Category \*

Part Name \*

TIS File \*  No file chosen

DIS File \*  No file chosen

Remarks

**Save TIS / DIS Document**

Note :

\* Field Harus Diisi / Mandatory

Tabel 7 TIS / DIS Test – Scenario 1

Class	TisDisDocument.Tests
Method	public void Create_ValidFiles_SavesAndRedirects()
Method Desc	TIS DIS : Should valid files, saves and redirect
Expected Result	Assert.IsNotNull(result); Assert.AreEqual("Details", result.RouteValues["action"]); Assert.AreEqual(id, result.RouteValues["id"]);
Actual Result	TisDisDocument.Tests.Create_ValidFiles_SavesAndRedirects: return valid file, saves and redirect
Status	Passed
Tested By	NUnit automated testing framework
Date/Time	21/10/2024 11:10:21



**T-CAP**

Home > Direct Delivery > Add Direct Delivery

### Add Direct Delivery

Form Direct Delivery

Month \*

Scheme

Model

Buyer \*

Destination

Part Category \*

Volume

Part Name

Part Number

RSP \*

Profit \*

Note :

\* Field Harus Diisi / Mandatory

Tabel 8 Direct Delivery Test – Scenario 1

Class	DirectDeliveryController.Tests
Method	public void Create_ValidRspAndProfitValues_RedirectsToIndex()
Method Desc	Direct Delivery : Should valid values, redirect to index
Expected Result	Assert.IsNotNull(result); Assert.AreEqual("Index", result.RouteValues["action"]);
Actual Result	DirectDeliveryController.Tests. Create_ValidRspAndProfitValues_RedirectsToIndex: return valid values, redirect to index
Status	Passed
Tested By	NUnit automated testing framework
Date/Time	21/10/2024 11:10:21



**T-CAP**

Home > Direct Delivery > Direct Delivery

### Upload Direct Delivery

Form Upload Direct Delivery

**NOTES - only excel format can be uploaded !**

Download Sample EXCEL file [HERE](#)

File Excel \*  No file chosen

**Upload Data**

Menu

- Dashboard
- Project Registration**
- Vehicle Information
- MPL
- Master Part List
- Engineering Part List
- Quality Document
- Purchasing Document
- Attachment A
- TIS / DIS
- Direct Delivery

Tabel 9 Direct Delivery Test – Scenario 2

Class	DirectDeliveryController.Tests
Method	public void Upload_FileUploaded_SuccessInsertsDataToDatabase()
Method Desc	Direct Delivery : Should return success insert data to database
Expected Result	Assert.IsNotNull(result); Assert.AreEqual("Index", result.RouteValues["action"]); Assert.AreEqual("Success Insert Database, Success : 1, Failed : 0", controller.TempData["msg"]);
Actual Result	DirectDeliveryController.Tests. Upload_FileUploaded_SuccessInsertsDataToDatabase: Return success insert data to database
Status	Passed
Tested By	NUnit automated testing framework
Date/Time	21/10/2024 11:10:21



## Unit Test Evidence

Evidence Unit Test – Scan QR Code C:

The screenshot shows the Visual Studio Test Explorer interface. On the left, a tree view lists 9 test items under 'UnitTestTCAP (9)', all marked with green checkmarks. The 'Duration' column shows 750 ms for the root and individual tests. On the right, the 'Group Summary' pane shows 'UnitTestTCAP' with 'Tests in group: 9' and 'Total Duration: 750 ms'. Below this, 'Outcomes' shows '9 Passed' with a green checkmark.

Test	Duration	Tr...	Error...
UnitTestTCAP (9)	750 ms		
AttachmentADocument.Tests (2)	750 ms		
AttachmentADocumentControllerTests (2)	750 ms		
Create_ValidFile_SavesAndRedirects	< 1 ms		
CreateRoyalty_ValidFile_SavesAndRedirects	750 ms		
DirectDelivery.Tests (2)	< 1 ms		
DirectDeliveryControllerTests (2)	< 1 ms		
Create_ValidRspAndProfitValues_RedirectsT...	< 1 ms		
Upload_FileUploaded_SuccessInsertsDataT...	< 1 ms		
EngineeringPartList.Tests (1)	< 1 ms		
EngineeringPartListControllerTests (1)	< 1 ms		
Create_WhenValidFileUploaded_ShouldSav...	< 1 ms		
MasterPartList.Tests (1)	< 1 ms		
MasterPartListControllerTests (1)	< 1 ms		
Create_WhenDataValid_ShouldSaveToDat...	< 1 ms		
PurchasingDocument.Tests (1)	< 1 ms		
PurchasingDocumentControllerTests (1)	< 1 ms		
Create_WhenValidFileUploaded_ShouldSav...	< 1 ms		
QualityDocument.Tests (1)	< 1 ms		
QualityDocumentControllerTests (1)	< 1 ms		
Create_WhenValidFileUploaded_ShouldSav...	< 1 ms		
TisDisDocument.Controllers (1)	< 1 ms		
TisDisDocumentControllerTests (1)	< 1 ms		
Create_ValidFiles_SavesAndRedirects	< 1 ms		

- CI/CD

```
\c9NTwtyH6\0\vd1\tpap\TCAD2.Tests\TCAD2.Tests.csproj]
44 C:\Gitlab-Runner\builds\c9NTwtyH6\0\vd1\tpap\TCAD2.Tests\AttachmentADocumentControllerTest.cs(12,8): warni
ng CS0219: The variable 'actualValue' is assigned but its value is never used [C:\Gitlab-Runner\builds\c9NTw
tyH6\0\vd1\tpap\TCAD2.Tests\TCAD2.Tests.csproj]
45 C:\Gitlab-Runner\builds\c9NTwtyH6\0\vd1\tpap\TCAD2.Tests\RoyaltyReportControllerTest.cs(11,17): warning CS
0219: The variable 'expectedValue' is assigned but its value is never used [C:\Gitlab-Runner\builds\c9NTwt
yH6\0\vd1\tpap\TCAD2.Tests\TCAD2.Tests.csproj]
46 C:\Gitlab-Runner\builds\c9NTwtyH6\0\vd1\tpap\TCAD2.Tests\RoyaltyReportControllerTest.cs(12,8): warning CS0
219: The variable 'actualValue' is assigned but its value is never used [C:\Gitlab-Runner\builds\c9NTwtyH6
\0\vd1\tpap\TCAD2.Tests\TCAD2.Tests.csproj]
47 4 Warning(s)
48 0 Error(s)
49 Time Elapsed 00:00:13.21
50 $ dotnet test .\TCAD2.Tests\TCAD2.Tests.csproj
51 Determining projects to restore...
52 All projects are up-to-date for restore.
53 TCAD2.Tests -> C:\Gitlab-Runner\builds\c9NTwtyH6\0\vd1\tpap\TCAD2.Tests\bin\Debug\net6.0\TCAD2.Tests.dll
54 Test run for C:\Gitlab-Runner\builds\c9NTwtyH6\0\vd1\tpap\TCAD2.Tests\bin\Debug\net6.0\TCAD2.Tests.dll (.N
ETCoreApp,Version=v6.0)
55 Microsoft (R) Test Execution Command Line Tool Version 17.3.3 (x64)
56 Copyright (c) Microsoft Corporation. All rights reserved.
57 Starting test execution, please wait...
58 A total of 1 test files matched the specified pattern.
59 Passed! - Failed: 0, Passed: 9, Skipped: 0, Total: 9, Duration: 29 ms - TCAD2.Tests.dll
(net6.0)
61 Cleaning up project directory and file based variables
63 Job succeeded
```





## Lampiran

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