



Instituto Nacional de Ciência
e Tecnologia para Engenharia
de Software

Rede de Laboratórios de Produtividade de Software

Referências e Reuso na TaRGeT

Programa de Capacitação
em Testes de Software



Instituto Nacional de Ciência
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Estrutura do Documento

Use Case Document

1..n

Feature

1..n

Use Case

1..n

Flow

1..n

Step

Schema XML

```
1 <?xml version="1.0" encoding="ISO-8859-1" ?>
2 <phone xmlns="user-view.target.v20071129">
3   <feature>
4     <featureId></featureId>
5     <name></name>
6     <useCase>
7       <id></id>
8       <name></name>
9       <description></description>
10      <setup></setup>
11      <flow>
12        <description></description>
13        <fromSteps></fromSteps>
14        <toSteps></toSteps>
15        <step>
16          <stepId></stepId>
17          <action></action>
18          <condition></condition>
19          <response></response>
20        </step>
21      </flow>
22    </useCase>
23  </feature>
24 </phone>
25
```

Campos Obrigatórios

- Feature
 - Feature ID
- Use Case
 - Use Case ID
- Flow
 - FROM Steps
 - TO Steps
- Step
 - Step ID
 - Step Action
 - Step Response

Como Referenciar Passos

- Do início ao fim de um fluxo

```
From Step: fromSteps (START )  
To Step: toSteps (END )
```

- Dentro de um mesmo Use Case

```
From Step: fromSteps (2M, 3M )  
To Step: toSteps (END )
```

Como Referenciar Passos

- De Use Cases diferentes, mas dentro da mesma Feature

```
From Step: fromSteps UC_01#2M, UC_01#3M
To Step: toSteps END
```

- De Use Cases de Features diferentes

```
From Step: fromSteps 22222#UC_01#2M, 22222#UC_02#3M
To Step: toSteps END
```

Combinação entre Passos

Description: description (There is no enough memory)

From Step: fromSteps (3M, 3A)

To Step: toSteps (END)

Step Id	User Action	System State	System Response
step stepId (1D) stepId	action (Confirm the contact creation. action)	condition (There is no enough phone memory. condition)	response (A dialog is displayed informing that there is no enough memory. [TRS_111166_103] response) step
step stepId (2D) stepId	action (Select OK softkey. action)	condition (condition)	response (The phone goes back to My Phonebook application menu. response) step

Combinação entre Passos

Description: description Create a new contact)
 From Step: fromSteps START)
 To Step: toSteps END)

Step Id	User Action	System State
«step» «stepId» 1M »stepId»	«action» Start My Phonebook application. »action»	«condition» My Phonebook application is installed in the phone. »condition»
«step» «stepId» 2M »stepId»	«action» Select the New Contact option. »action»	«condition» »condition»
«step» «stepId» 3M »stepId»	«action» Type the contact name and the phone number. »action»	«condition» »condition»
«step» «stepId» 4M »stepId»	«action» Confirm the contact creation. [TRS_11111_101] »action»	«condition» There is enough phone memo to insert a new contact. »condition»

«flow» Description: description Insert extended in:
 From Step: fromSteps 3M)
 To Step: toSteps 4M)

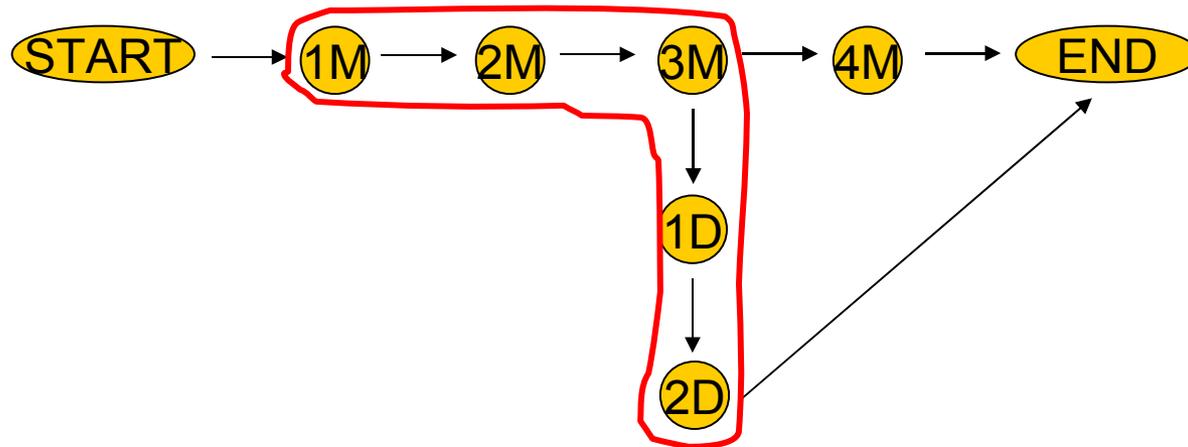
Step Id	User Action	System State
«step» «stepId» 1A »stepId»	«action» Go to context menu and select Extended Information. »action»	«condition» »condition»
«step» «stepId» 2A »stepId»	«action» Fill some of the extended information fields. »action»	«condition» »condition»
«step» «stepId» 3A »stepId»	«action» Press OK softkey. »action»	«condition» »condition»

Combinação entre Passos

Description: description There is no enough memory)
From Step: fromSteps 3M, 3A)
To Step: toSteps END)

Step Id	User Action	System State	System Response
«step «stepId 1D stepId»	«action Confirm the contact creation. action»	«condition There is no enough phone memory. condition»	«response A dialog is displayed informing that there is no enough memory. [TRS_111166_103] response» step»
«step «stepId 2D stepId»	«action Select OK softkey. action»	«condition condition»	«response The phone goes back to My Phonebook application menu. response» step»

Combinação entre Passos



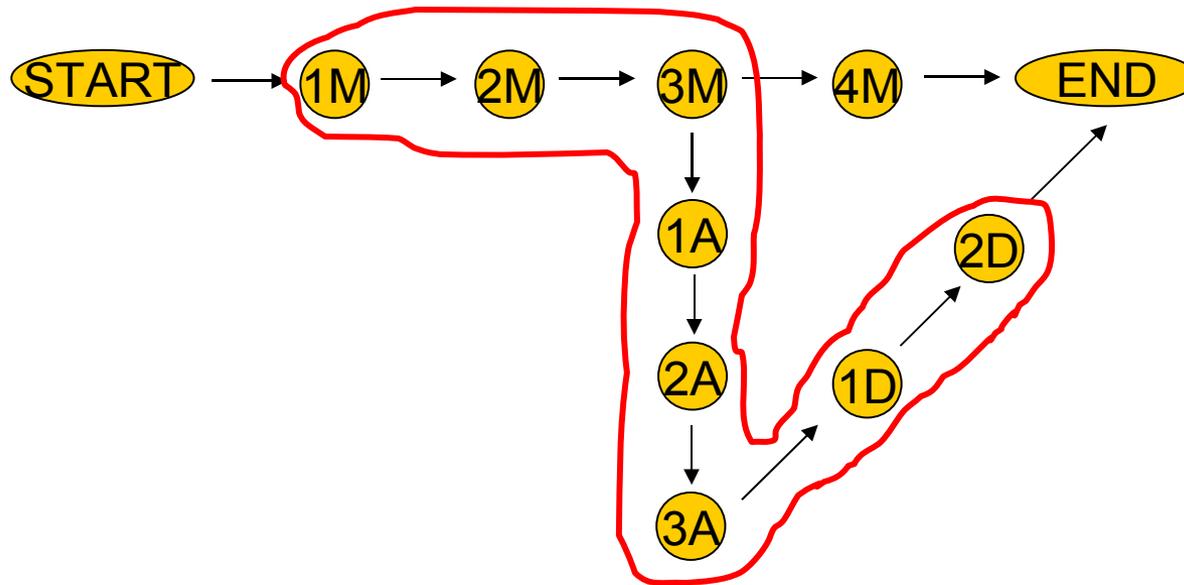
Legenda: — Teste Gerado

Combinação entre Passos

Description: description There is no enough memory)
From Step: fromSteps 3M, 3A)
To Step: toSteps END)

Step Id	User Action	System State	System Response
«step stepId 1D stepId»	«action Confirm the contact creation. action»	«condition There is no enough phone memory. condition»	«response A dialog is displayed informing that there is no enough memory. [TRS_111166_103] response» step»
«step stepId 2D stepId»	«action Select OK softkey. action»	«condition condition»	«response The phone goes back to My Phonebook application menu. response» step»

Combinação entre Passos



Legenda: — Teste Gerado

Combinação entre Passos

«flow Description: description Insert extended information to the contact»

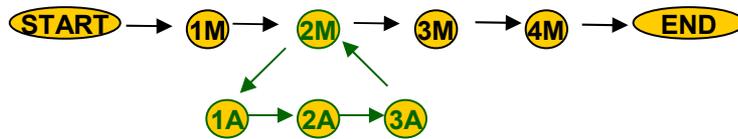
From Step: fromSteps (2M, 3M, 4M)

To Step: toSteps (2M, 3M, 4M)

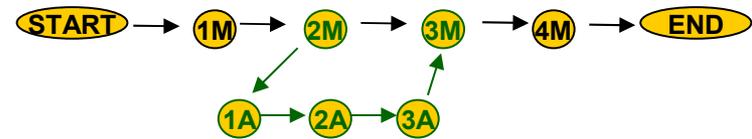
Step Id	User Action	System State	System Response
«step» «stepId» 1 «stepId» »stepId»	«action» Go to context menu and select Extended Information. »action»	«condition» condition»	«response» The extended information form is displayed. [TRS_111166_102] »response» »step»
«step» «stepId» 2 «stepId» »stepId»	«action» Fill some of the extended information fields. »action»	«condition» condition»	«response» Some of the extended information form is filled. »response» »step»
«step» «stepId» 3 «stepId» »stepId»	«action» Press OK softkey. »action»	«condition» condition»	«response» The phone goes back to New Contact form. It is filled with the extended information. »response» »step»

Combinação entre Passos

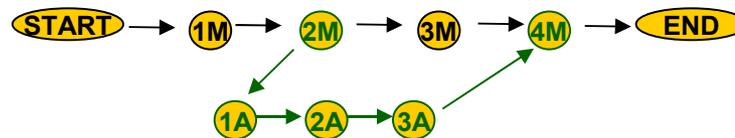
- $T_o \geq FROM$
- $FROM = 2M$



FROM: 2M TO: 2M



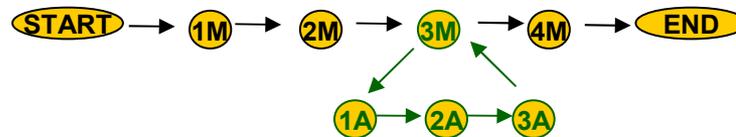
FROM: 2M TO: 3M



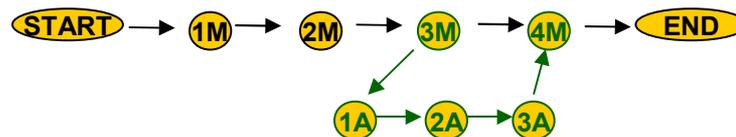
FROM: 2M TO: 4M

Combinação entre Passos

- FROM = 3M



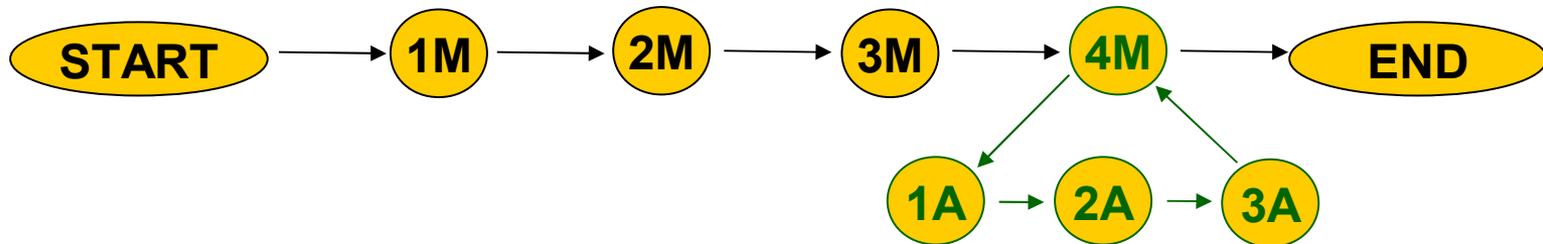
FROM: 3M TO: 3M



FROM: 3M TO: 4M

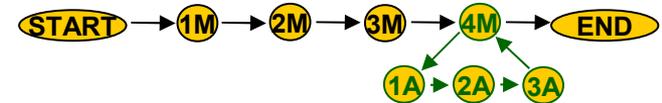
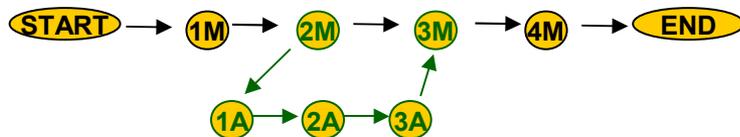
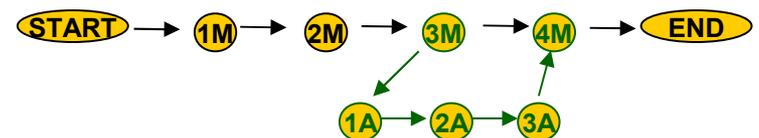
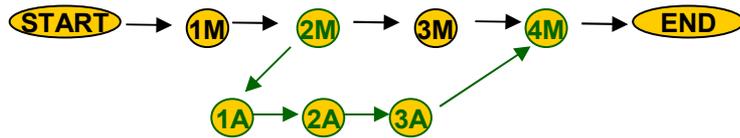
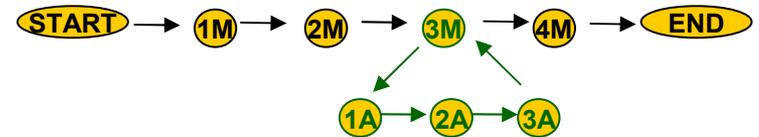
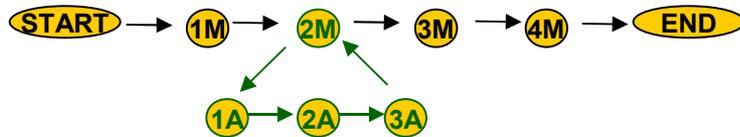
Combinação entre Passos

- FROM = 4M



FROM: 4M TO: 4M

Combinação entre Passos



Erros Comuns

- Referência em minúsculo

To Step: `toSteps (end)`

From Step: `fromSteps (1m, 2m)`

- Auto-referência

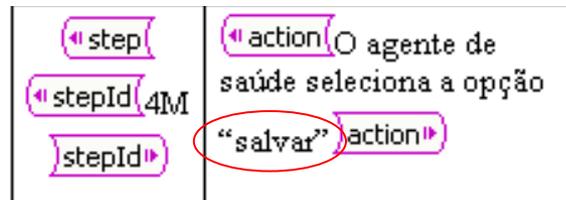
From Step: `fromSteps (2M, 3M)`

To Step: `toSteps (1B)`

Step Id	User Action	System State	System Response
<code>« step</code>	<code>« action (press</code>	<code>« condition (condition »</code>	<code>« response</code> The phone goes back to My Phonebook application
<code>« stepId (1B</code>	Cancel		
<code>» stepId »</code>	<code>softkey. action »</code>		<code>menu. response » step »</code>

Erros Comuns

- Repetição da ação do usuário



From Step: fromSteps 4M)

To Step: toSteps END)

Step Id	User Action	System State	System Response
« step	« action	« condition	« response
« stepId	O agente de	Deve haver aqui a	O sistema verifica
1C	saúde aperta em	condição de que não há espaço	que não existe espaço par
stepId»	“salvar” action»	de armazenamento suficiente	armazenar no servidor e mostra
		no aparelho condition»	a mensagem “Envie os dados
			diretamente ao
			servidor” response» step»

Exercício

Adaptar os casos de uso 01, 02, 03, 05, 06 e 07 do documento ANKOSME-UC.doc à entrada da TaRGeT (1 h)

Resumo

- Contexto - TaRGeT
- Problema – geração de casos de teste errados ou indesejados devido ao conhecimento superficial na ferramenta.
- Solução – Treinamento com o objetivo de esclarecer dúvidas sobre como usar as referências na TaRGeT.
- Avaliação da Solução – evita a repetição de erros básicos de referência durante a formulação do documento de caso de uso.

Sites

Wiki do LabPS

<http://twiki.cin.ufpe.br/twiki/bin/view/LabPS/WebHome>

Twitter do LabPS

http://twitter.com/Rede_LabPS

INES

<http://www.ines.org.br>

Amigos

<http://amigos.ines.org.br>

Cin/UFPE

<http://www.cin.ufpe.br>

Dúvidas





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