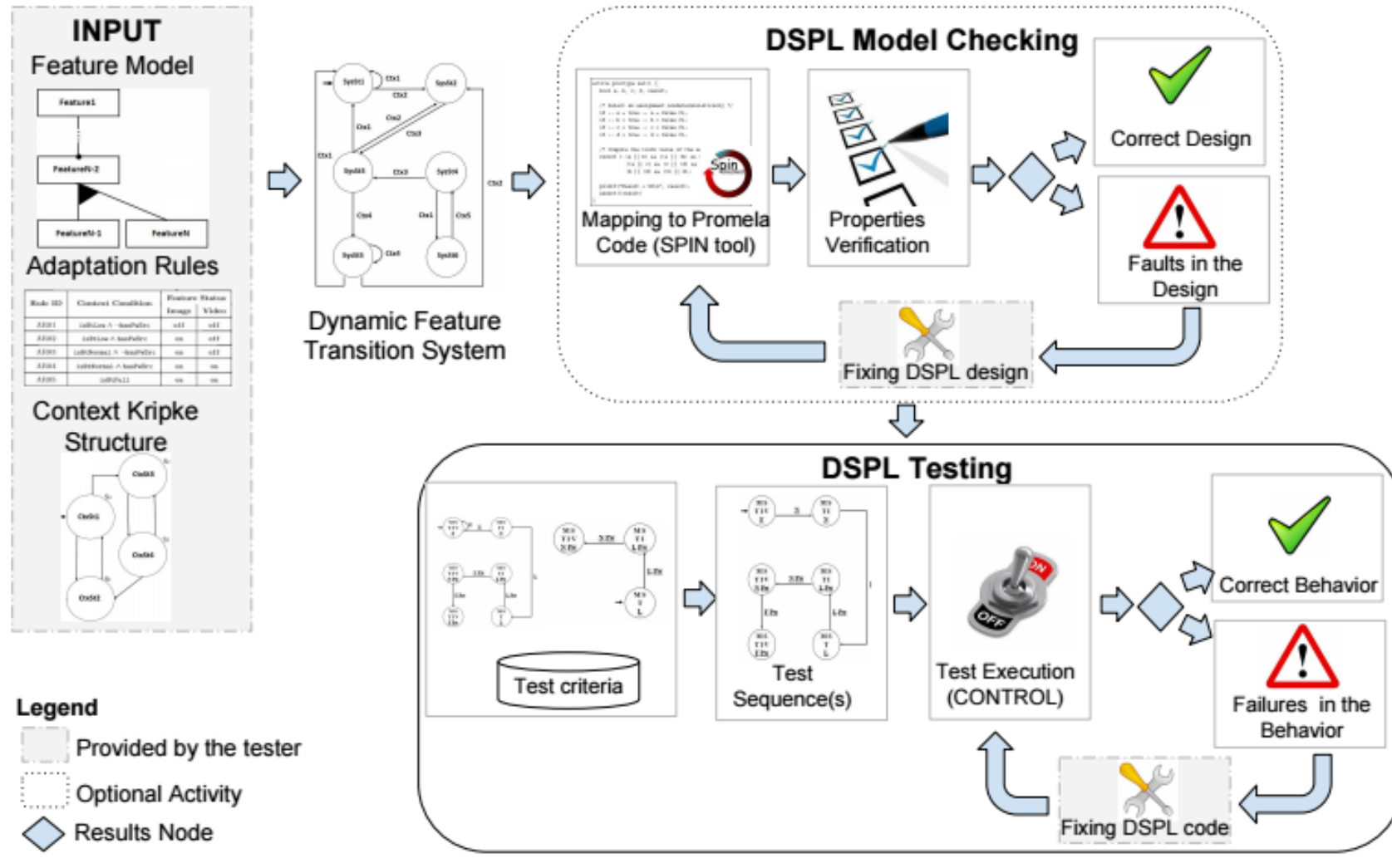


Treinamento – TestDAS tool

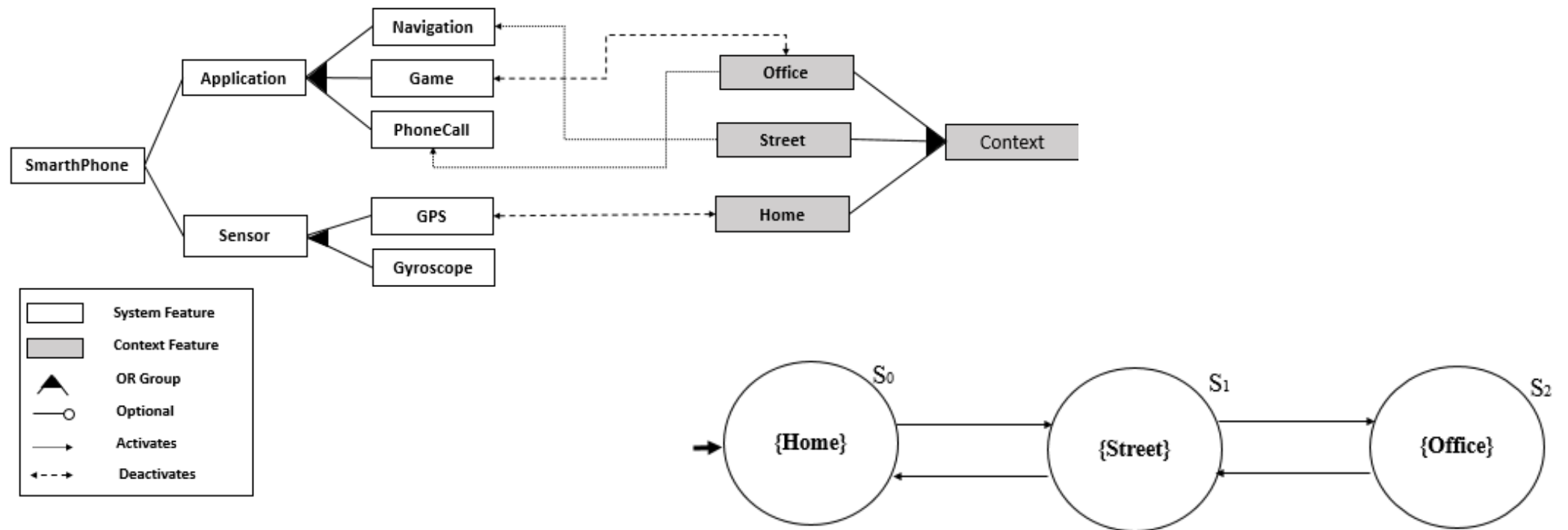
Ismayle Santos (July, 2017)

TestDAS Overview



Using TestDAS with SmartPhone DSPL

- Context Evolution Model



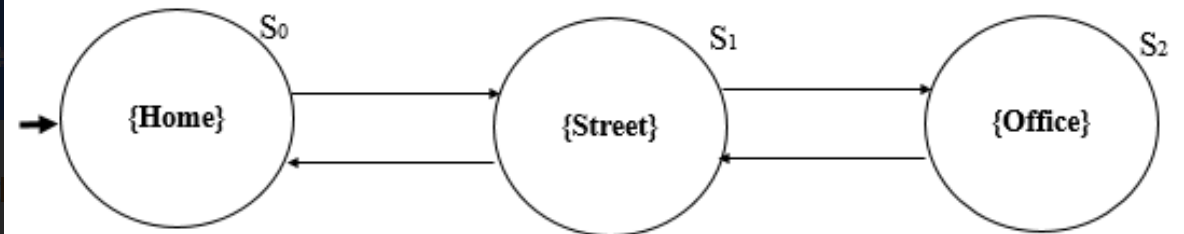
Using TestDAS with SmartPhone DSPL

- Specifying the Context Evolution Model in the TestDAS Tool

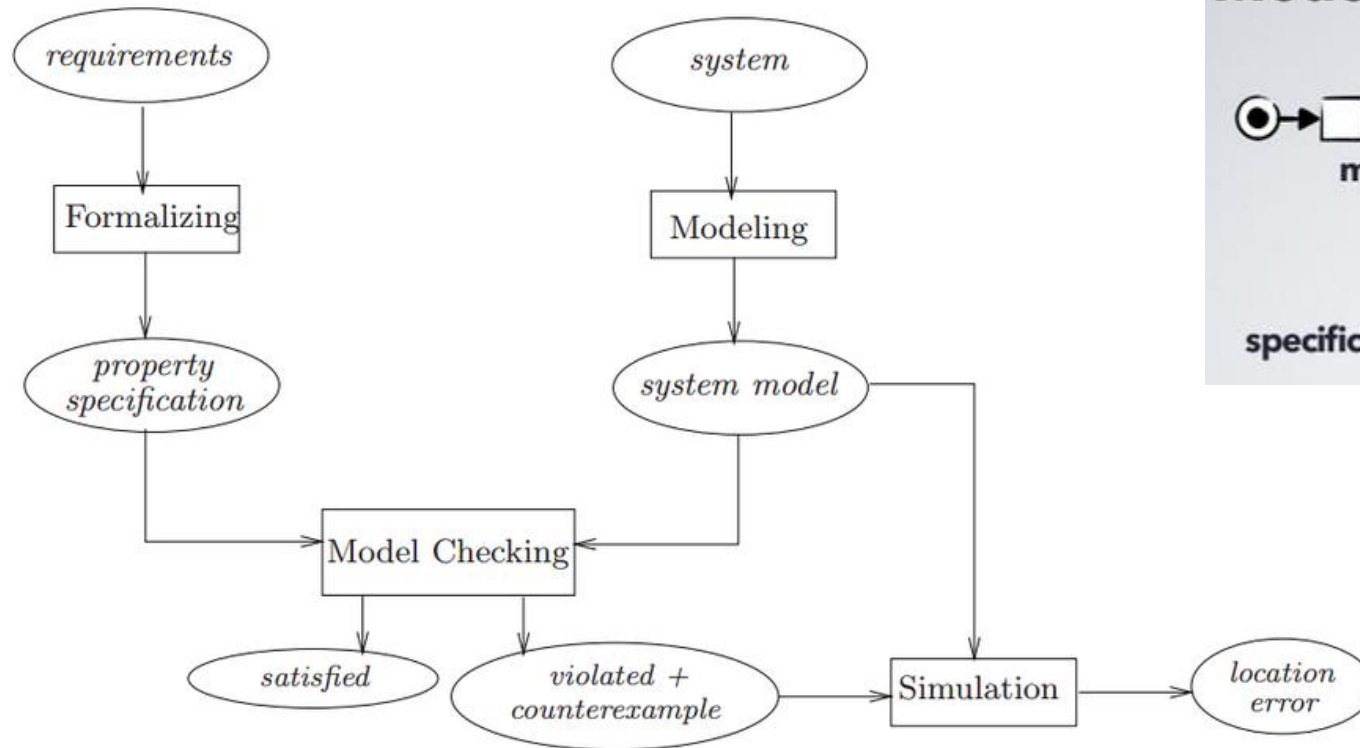
← Phone_Exp.xls

	A	B	C	D	E	F
1	Id		0	1	2	
2		Context State	Office	Home	Street	
3	0	Office		X		
4	1	Home			X	
5	2	Street	X	X		
6						
7						
8						
9						
10						
11						

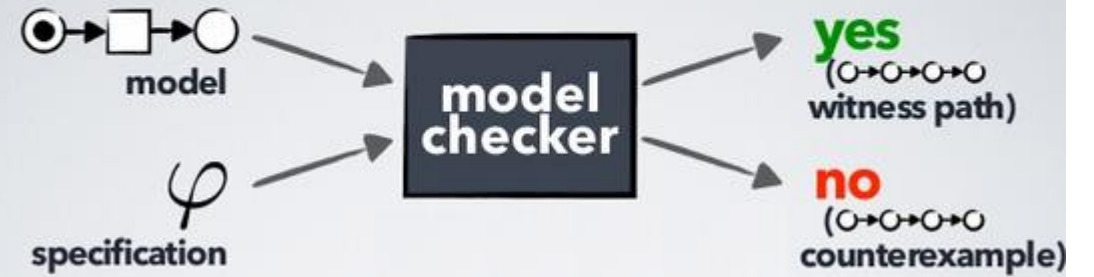
LEITURA



Model Checking



Model checking in a nutshell



Model Checking

LTL Temporal Operators Meaning.

Operator	Meaning
$\bigcirc \phi$	" ϕ is true in the next state of the path."
$\Diamond \phi$	"eventually, ϕ is true in some state in the path."
$\Box \phi$	"always, ϕ is true in all states in the path."

- Example: $\langle \rangle$ BtFull
- Model Checking Log
 - Variables values
 - 0 = false
 - 1 = true

```
356:  proc  5 (Controller:1) Mobiline9.pml:56 (state 7)      [((numAnswers!=4)
358:  proc  6 (AR1:1) Mobiline9.pml:64 (state 4)      [buss!done]
360:  proc  - (pro53:1) _spin_nvr.tmp:127 (state 1)  [(!(!(current)))]
362:  proc  - (pro53:1) _spin_nvr.tmp:127 (state 1)  [(!(!(current)))]
      numAnswers = 4
365:  proc  5 (Controller:1) Mobiline9.pml:57 (state 10)   [else]
367:  proc  5 (Controller:1) Mobiline9.pml:59 (state 15)   [buss!adapted]
spin: trail ends after 368 steps
      BtFull = 0
      BtLow = 1
      Text = 1
      Image = 0
      allEvents = 0
      ShowEvents = 1
      numAnswers = 4
368:  proc  4 (ContextManager:1) Mobiline9.pml:38 (state 48)
```

Using TestDAS with SmartPhone DSPL

- Test Sequence

```
{
  "id":1,
  "contextState":[
    "Home"
  ],
  "expectedFeatureStatus":[
  ],
  "actualFeatureStatus":[
  ]
},
{
  "id":2,
  "contextState":[
    "Street",
  ],
  "expectedFeatureStatus":[
    "Navigation"
  ],
  "actualFeatureStatus":[
  ]
}
```

Thank You