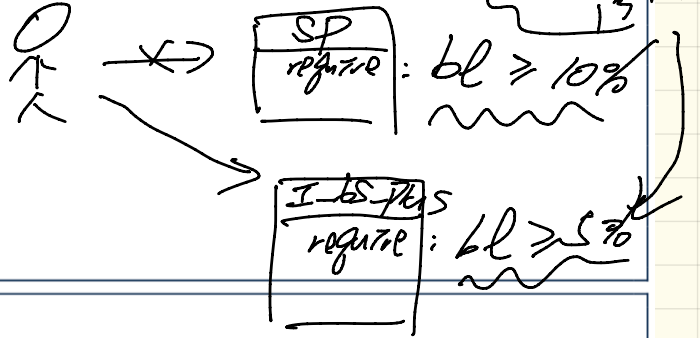


Lecture 14

Monday Oct. 30

e happens today \wedge
 e happens between 9-5 \Rightarrow e happens today

```
class SMART_PHONE
  get_reminders: LIST[EVENT]
  require
     $\alpha$ : battery_level  $\geq$  0.1 -- 10%
  ensure
     $\beta$ :  $\forall e$ : Result |  $e$  happens today
end
```



```
class IPHONE_6S_PLUS
  inherit SMART_PHONE redefine get_reminders end
  get_reminders: LIST[EVENT]
  require else
     $\gamma$ : battery_level  $\geq$  0.05 -- 5%
  ensure then
     $\delta$ :  $\forall e$ : Result |  $e$  happens today between 9am and 5pm
end
```

$bl \geq 10\%$ \Rightarrow $bl \geq 5\%$
 require from SP require from I 6S +

$$P \wedge Q \Rightarrow P$$

$$P \wedge Q \Rightarrow Q$$

$$\textcircled{P} \wedge \text{false} \equiv P$$

$$P \wedge \text{true} \equiv P$$

e happens today \vee e happens tmw $\Rightarrow e$ happens today
 $\left[e \text{ happens tmw} \right]$

```
class SMART_PHONE
  get_reminders: LIST[EVENT]
  require
     $\alpha$ : battery_level  $\geq$  0.1 -- 10%
  ensure
     $\beta$ :  $\forall e$ : Result |  $e$  happens today
end
```

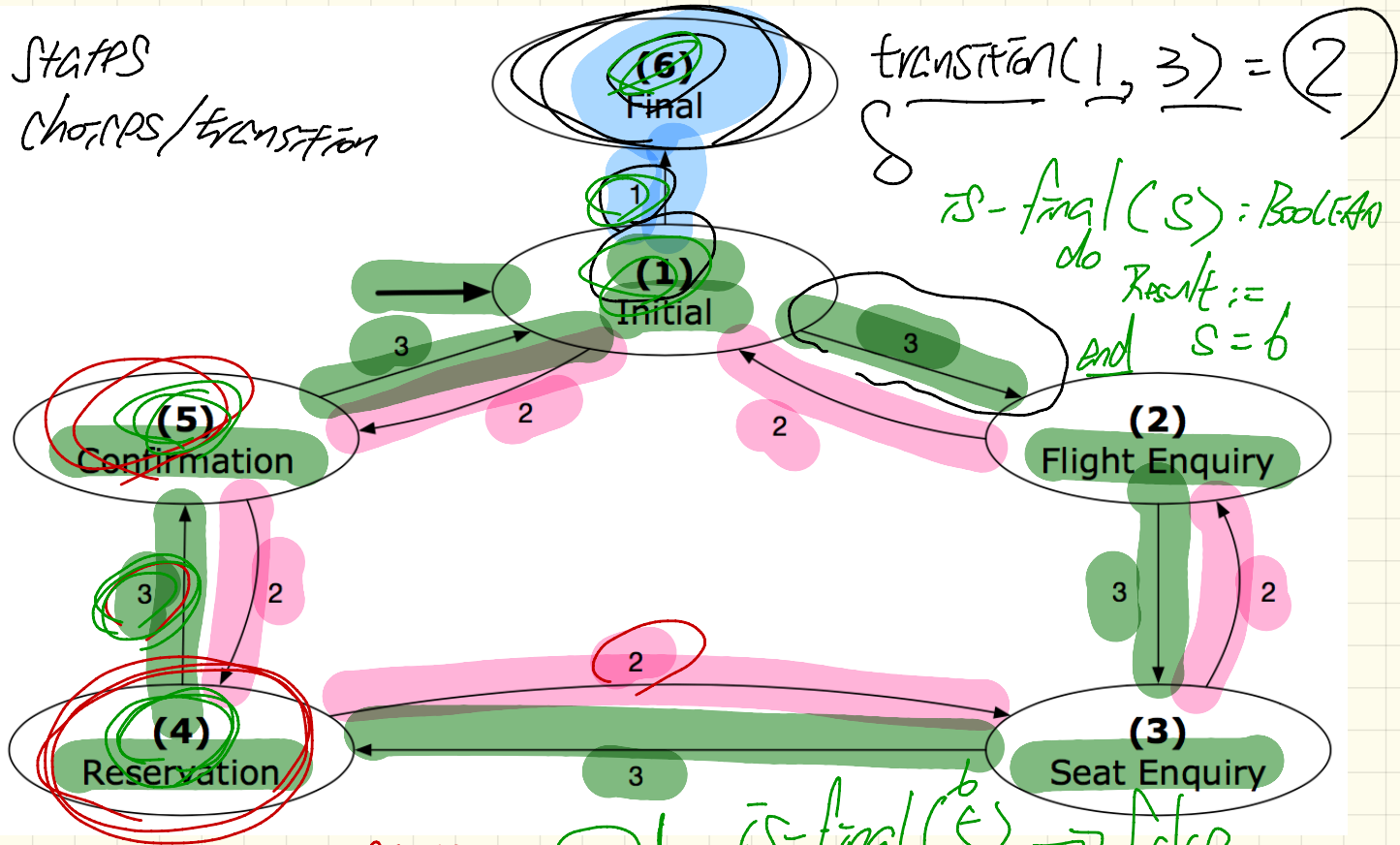
```
class IPHONE_6S_PLUS
  inherit SMART_PHONE redefine get_reminders end
  get_reminders: LIST[EVENT]
  require else
     $\gamma$ : battery_level  $\geq$  0.15 -- 15%
  ensure then
     $\delta$ :  $\forall e$ : Result |  $e$  happens today (or) tomorrow
end
```

Is the precondition of I-6S-PLUS ok?

$bl \geq 10\% \Rightarrow bl \geq 15\%$

e.g. (11%)

STATES
CHOICES / TRANSITION



Current state: (4)
choice: (3)

is-final(s) → false
transition(4, 3) returns (5) b

```
1.Initial_panel:
  -- Actions for Label 1
2.Flight_Enquiry_panel:
  -- Actions for Label 2.
3.Seat_Enquiry_panel:
  -- Actions for Label 3.
4.Reservation_panel:
  -- Actions for Label 4
5.Confirmation_panel:
  -- Actions for Label 5
6.Final_panel:
  -- Actions for Label 6
```

```
3.Seat_Enquiry_panel:
```

```
from
```

```
  Display Seat Enquiry Panel
```

```
until
```

```
  not (wrong answer or wrong choice)
```

```
do
```

```
  Read user's answer for current panel
```

```
  Read user's choice  C for next step
```

```
  if wrong answer or wrong choice then
```

```
    Output error messages
```

```
  end
```

```
end
```

```
Process user's answer
```

```
case  C in
```

```
  2: goto 2.Flight_Enquiry_panel
```

```
  3: goto 4.Reservation_panel
```

```
end
```