## **G54SIM: Lecture 4 Worksheet**

End of γ2: Clock=6; Queue=0; Wait=1; PersIn=1; PhoneIn=1; DueNow=0

Entity	Time cell	Availability	Next Activity
(1) Personal enquirer arrival machine	9	FALSE	Personal Arrival
(2) Phone call arrival machine	9	FALSE	Phone Call
(3) Clerk	9	FALSE	EndService

Random numbers left over: 3,6,4,8

End of α3: Clock= ; Queue= ; Wait= ; PersIn= ; PhoneIn= ; DueNow=

Entity	Time cell	Availability	Next Activity		
(1) Personal enquirer arrival machine			Personal Arrival		
(2) Phone call arrival machine			Phone Call		
(3) Clerk					

End of β3: Clock= ; Queue= ; Wait= ; PersIn= ; PhoneIn= ; DueNow=

	Entity	Time cell	Availability	Next Activity
(1) Perso	onal enquirer arrival machine		FALSE	Personal Arrival
(2) Phon	e call arrival machine		FALSE	Phone Call
(3) Clerk				

End of y3: Clock= ; Queue= ; Wait= ; PersIn= ; PhoneIn= ; DueNow=

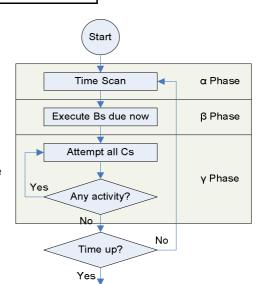
Entity	Time cell	Availability	Next Activity		
(1) Personal enquirer arrival machine		FALSE	Personal Arrival		
(2) Phone call arrival machine		FALSE	Phone Call		
(3) Clerk					

## **Phases**

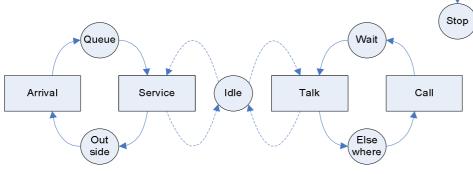
 $\alpha$ -Phase: Find out when the next event is due, move simulation clock to that time, put all entities due to engage in a B at that time into the DueNow list

 $\beta$ -Phase: Execute activities of entities in the DueNow list

 $\gamma\text{-Phase}$ : Executive must attempt each C in turn by checking if the condition in the test heads are satisfied



## **Activity Cycle Diagram**



B1 = Arrival; B2 = EndOfService; B3 = Call; B4 = EndOfTalk

C1 = BeginService; C2 = BeginTalk