

ENGINEERING ONLINE

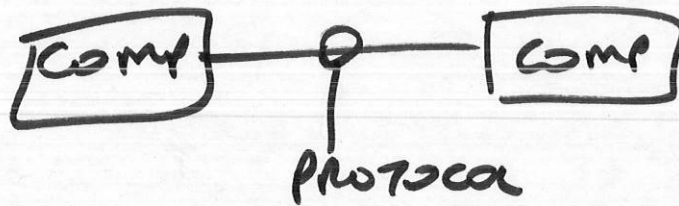
Lecture Notes

Course Number: CSC 513

Instructor: Dr. Singh

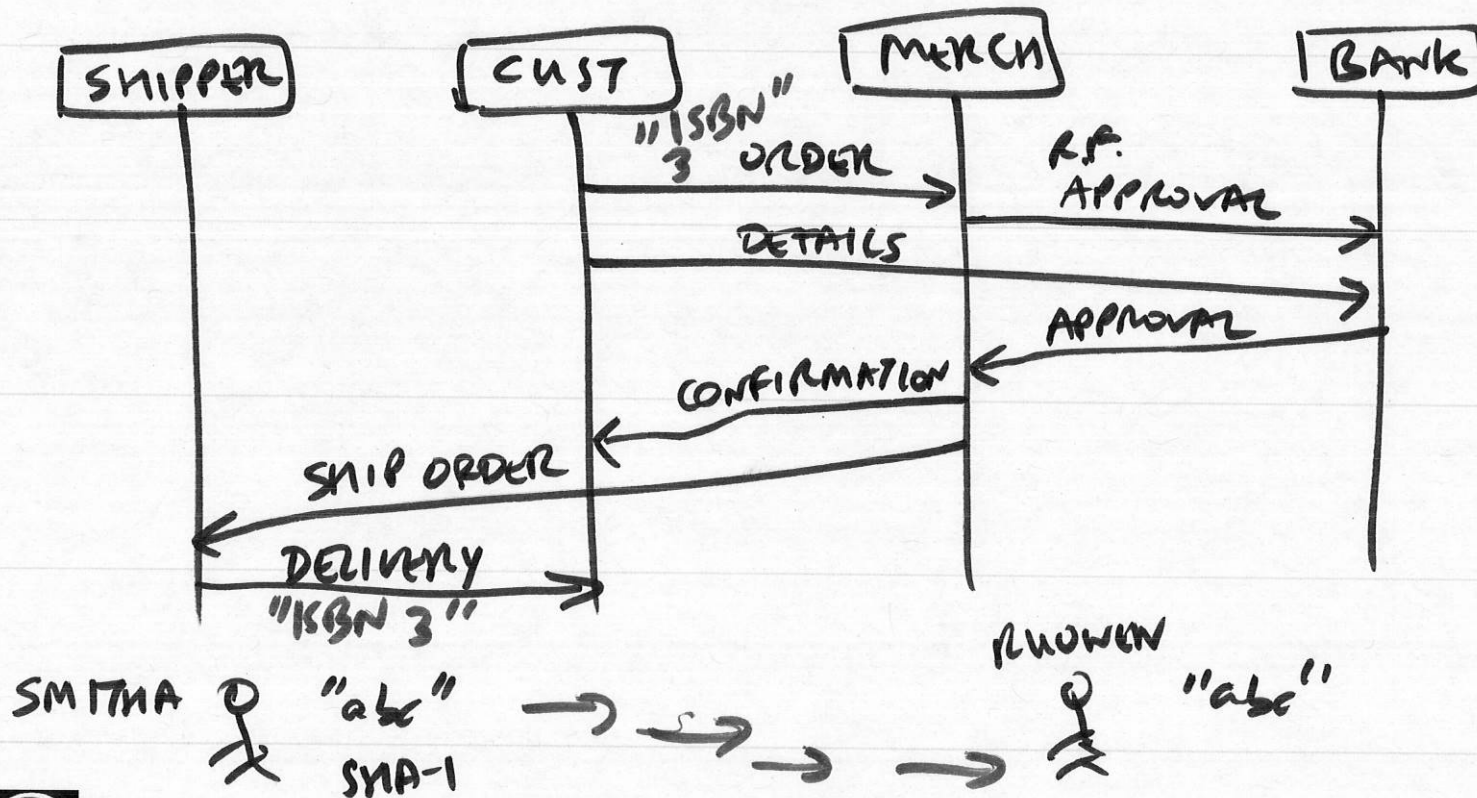
Lecture Number: 9





MSC

ARCH OF AN E-COMMERCE SYSTEM (AT THE BUSINESS LEVEL)



SMITHA

"abc"



"abc"

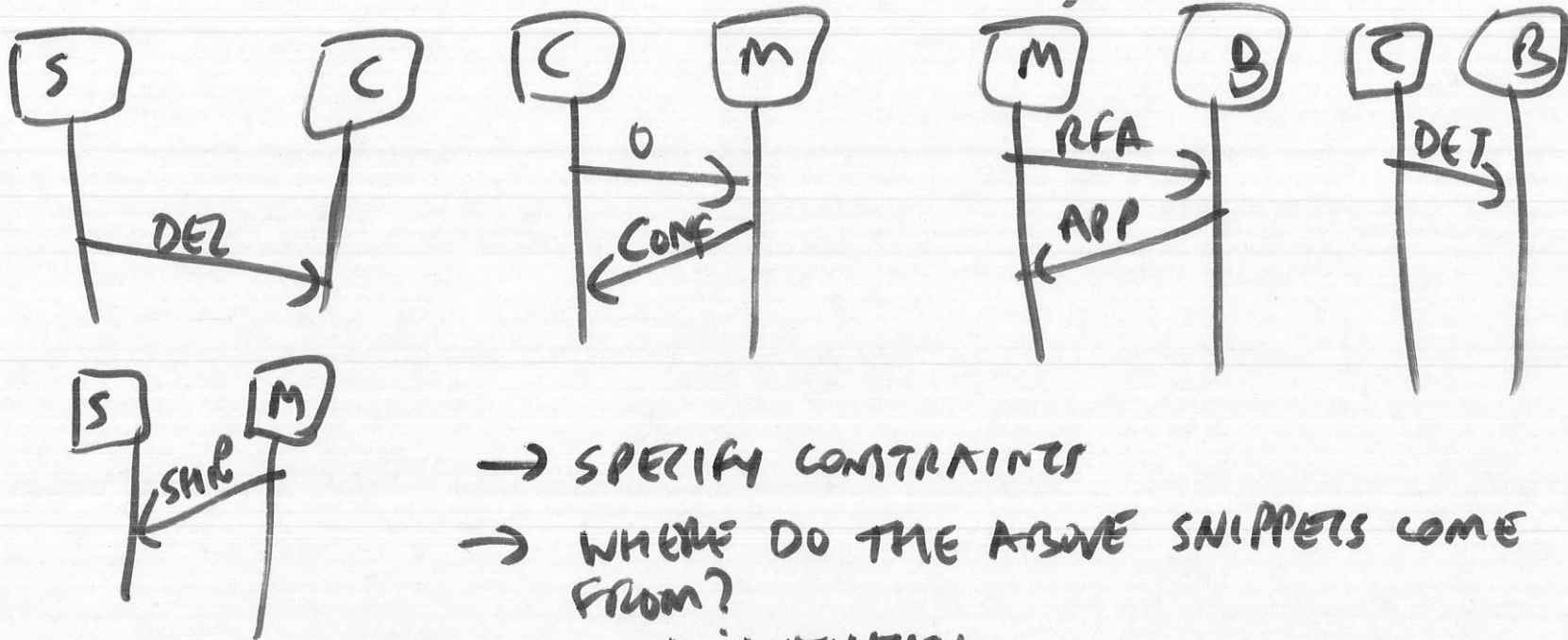


return

"abc"



MODULARIZE THE DESIGN (SO WE CANE PARTS OF IT EASILY)



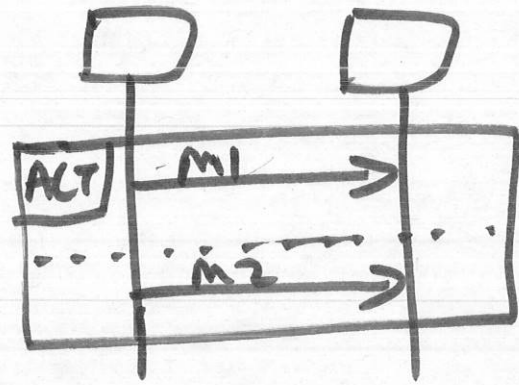
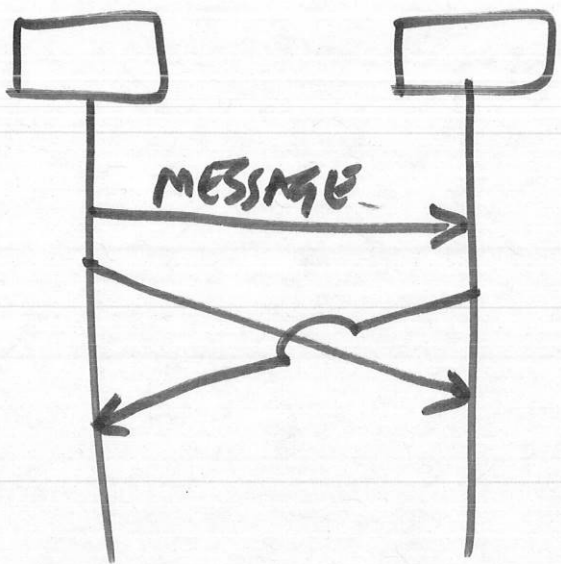
- SPECIFY CONSTRAINTS
- WHERE DO THE ABOVE SNIPPETS COME FROM?

INTUITION
 STANDARD (ROSETTANET) 2/07
 PARTNER INTERFACE PROCESSOR (PIPs)
 MISNOMER ↓

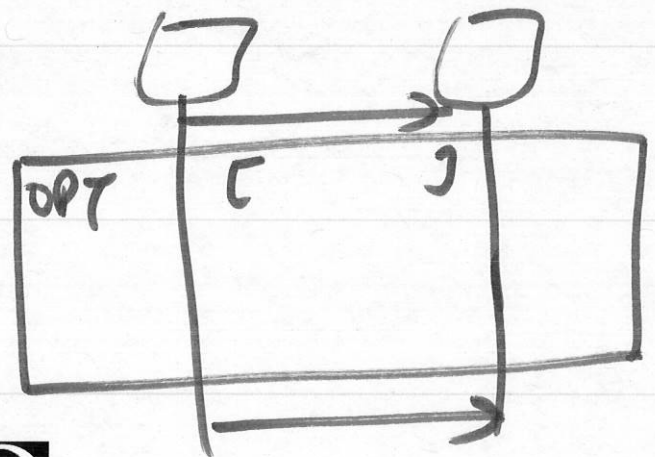


TIME ↓

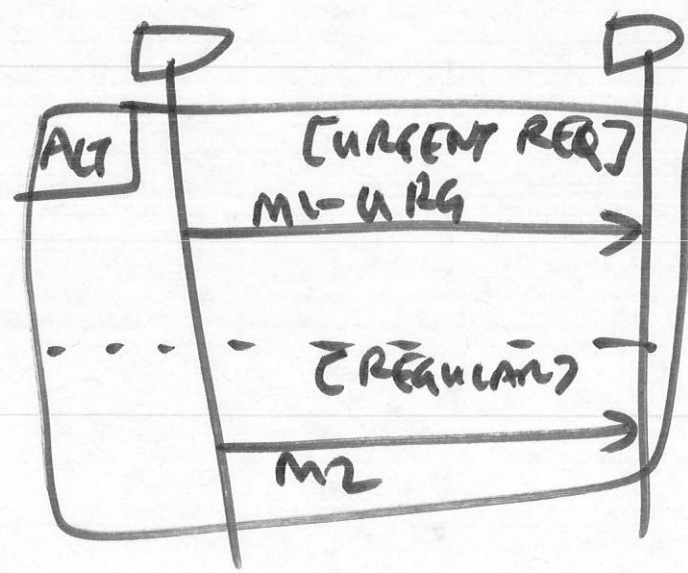
SEQUENCE
OF EVENTS

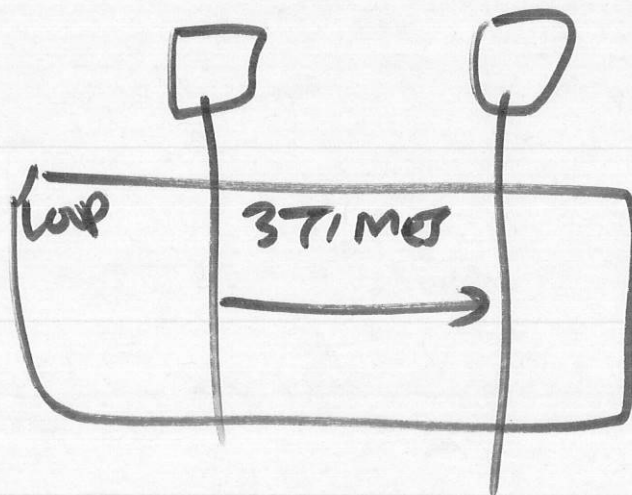
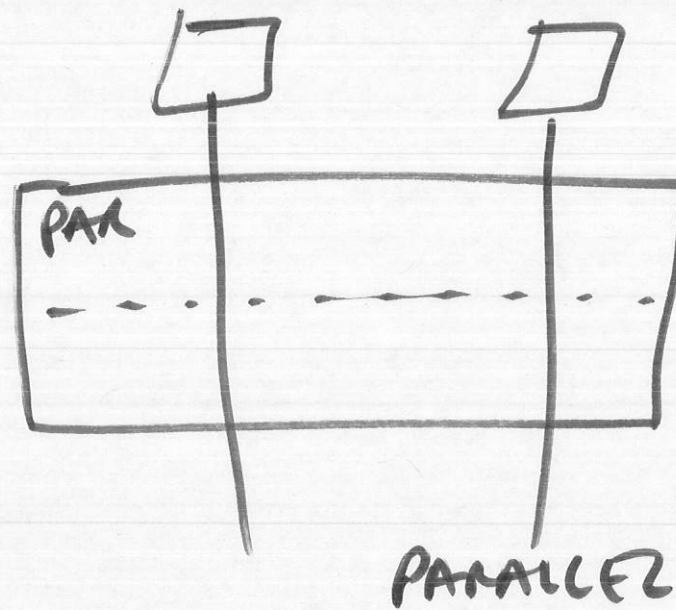
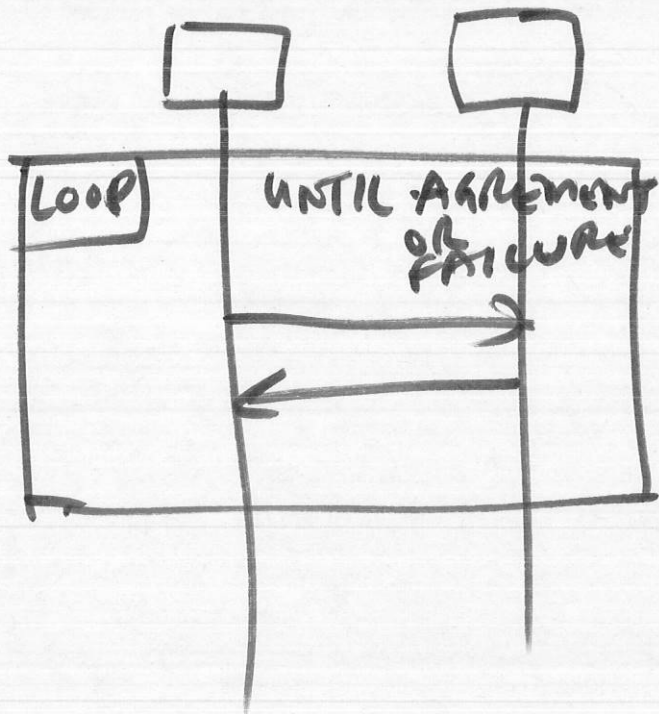


TYPICALLY
STATE
A GUARD
ON
EACH
CHOICE



OPTIONAL





CHANNEL
UNICAST

ONE SENDER ; ONE RECEIVER

WHAT ARE SOME (FUNDAMENTAL) PROPERTIES THAT A CHANNEL MAY HAVE ?

SYNCHRONOUS 

SEND \Rightarrow RECV (AT THE "SAME" TIME)

BIDIRECTIONAL ?

vs



RELIABLE \leftarrow INTEGRITY

DATA IS NOT CORRUPTED IN TRANSIT

MESSAGES CAN'T CROSS

SECURITY

ACCESS CONTROL

BUFFER SIZE

RECV \Rightarrow SENT (SAME TIME FOR SYNCH)

HARD CONSTRAINT

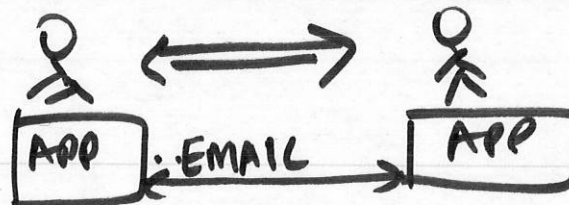
(PRIOR FOR ASYNCH)

CAUSALITY

ASYNCH

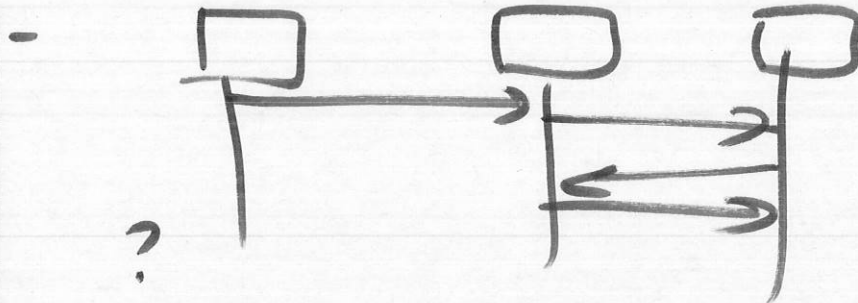
: FIFO vs RAM

: LOSSLESS

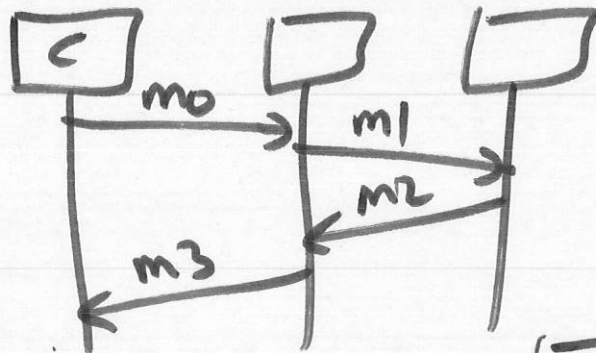


POSSIBLE CHALLENGES

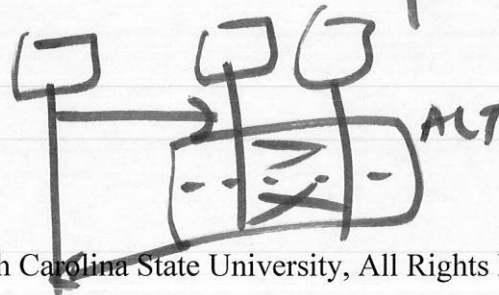
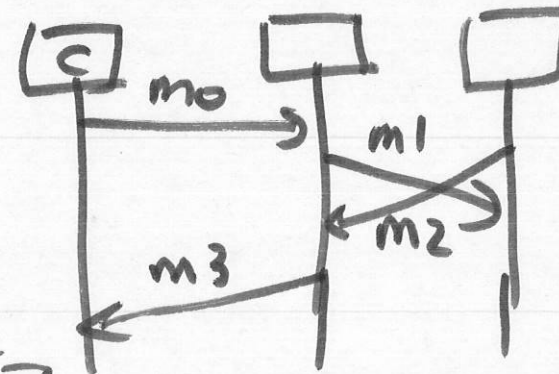
- MESSAGE ORDER IS INCONSISTENTLY OBSERVED
(ASYNCHRONY)

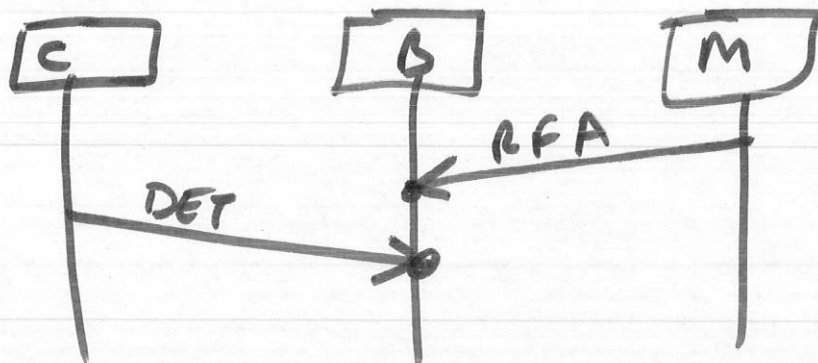


LACK OF REMOTE KNOWLEDGE
(DISTRIBUTION)



VS.

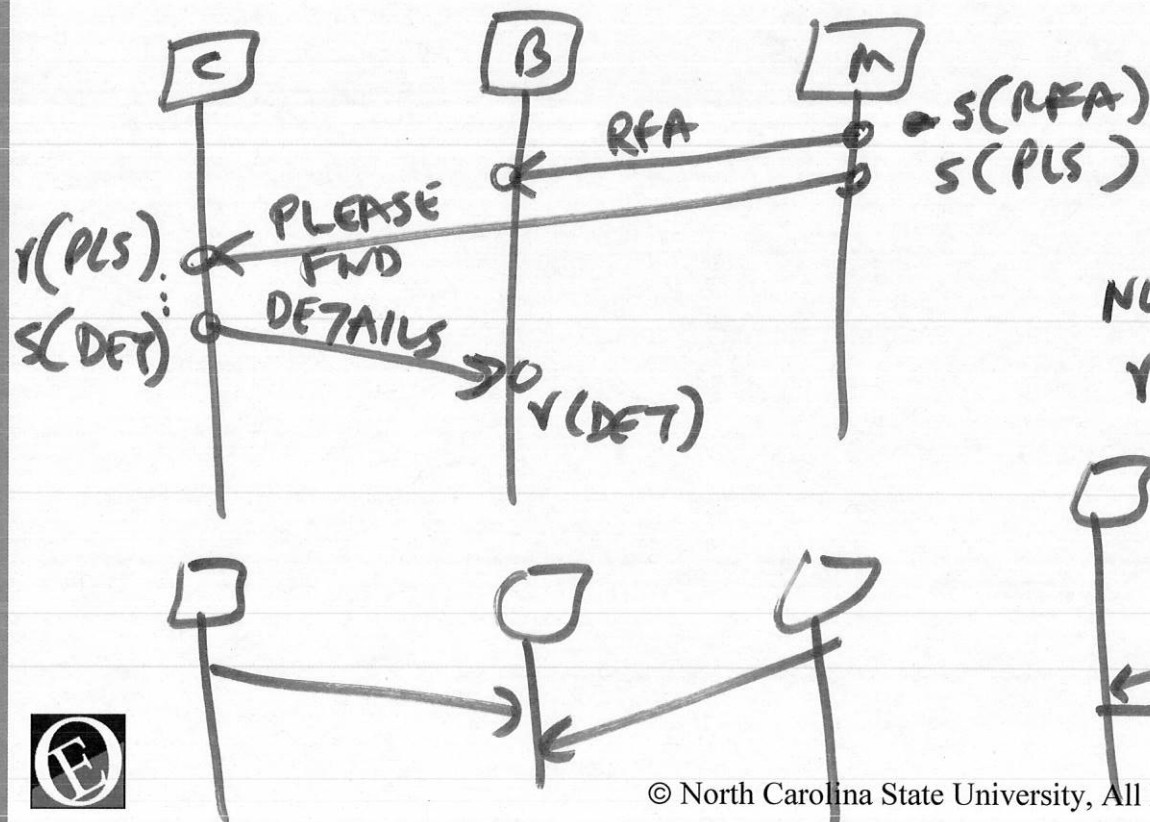




ASYNCH
LOSSLESS

IS THIS OK?

ASSUME ANOTHER PROTOCOL TO INFORM CUSTOMER



NO WAY TO ENSURE
 $\gamma(RFA) < \gamma(DETAILS)$

