

Challenge 1 – State Transition Testing

Group Members:

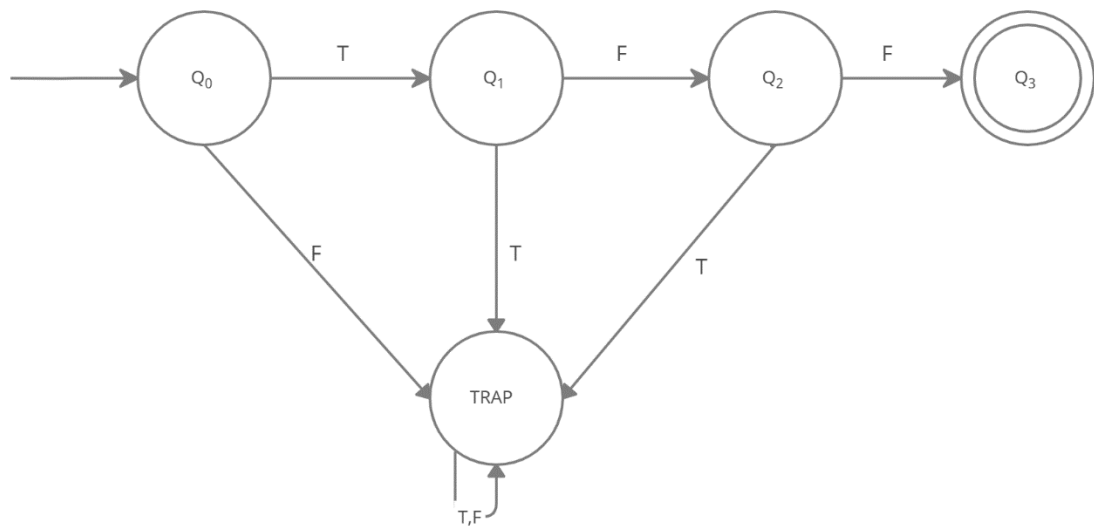
AHMAD KHILFI BIN ZAINI 1723303

MOHAMAT NASRI BIN KARUDIN 1729731

1. Title: Library Book Borrowing System
2. Whether or not the system should accept the request to borrow books from the library depends on three factors:
  - a. Whether or not the visitor is already registered to the system or not
  - b. Whether there are outstanding charges on the visitor
  - c. Whether the number of borrowed books is below 3 books
3. State transition diagram

$L_{\text{accept}} = \{TFF\}$

$L_{\text{reject}} = \{F, TT, TFT\}$



#### 4. State transition table

Condition				
1. Registered visitor?	F	T	T	T
2. Outstanding charge?		T	F	F
3. Beyond max book quota?			T	F
Action				
1. Accept				/
2. Reject	/	/	/	