

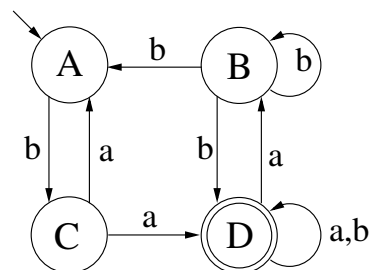
Formal Models SS 2012: Assignment 3

Institute for Formal Models and Verification, JKU Linz

Due 29.03.2012

Exercise 9

Given FA A where $\Sigma := \{a, b\}$ as shown on the right. Draw the oracle-automaton $Oracle(A)$ as defined on lecture slide 8. Make $Oracle(A)$ complete by adding an error state.

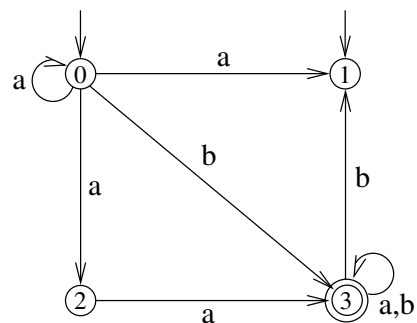


Exercise 10

Given FA A from Exercise 9, draw the *optimized* oracle-automaton $Oracle(A)$ as defined on lecture slide 9. Is $Oracle(A)$ complete? Justify your answer.

Exercise 11

Draw the I/O-automaton for FA A as shown on the right.



Exercise 12

Draw an I/O-automaton modelling the digital circuit shown on the right. Use $\Sigma := \Theta := \{0, 1\}$ as input- and output-alphabet.

