

Rule 1: no plagiarism (from colleagues or other sources). Detected cases of plagiarism will lead to a significant penalty of your course grade at the end of the semester.

Rule 2: no late submissions! Even if it is late by one minute, it will be ignored . Learning to plan your schedule according to deadlines is part of your education and an invaluable professional asset.

What to submit: a) the source code of your project *fully documented (with javadoc)*, b) a nicely formatted pdf report of your design decision explanations and class diagrams and c) an executable demo that fully illustrates your program's capabilities *whenever code is requested*.

Question : You are given a finite state machine in the attached digital image. Use the **state design pattern** to implement it in Java and provide a main method where you test all of its transitions. (**100 points**)

Good luck.