## **GROUP PROJECT**

## **Automata Theory**

# 1. Objectives

The goal of this project is to develop an application to manage and manipulate finite automata. You can use any programming language that you prefer.

## 2. What to Do

#### **Functionalities**

- a. Design a finite automaton (FA)
- b. Test if a FA is deterministic or non-deterministic
- c. Test if a string is accepted by a FA
- d. Construct an equivalent DFA from an NFA
- e. Minimize a DFA

# **Database (optional)**

After designing a FA, it can be saved and stored in a database (you can also use text files). The user should also be able to manage (load, edit, delete) all saved FA's.

## 3. What to Submit

- Source code (well commented)
- Technical report
- Individual reports (individual contribution of each member)

# 4. Key Dates

Project Start Date: 06/04/2023Project Deadline: 07/07/2023

- Presentation Date: TBD