UML state diagram tool

1. Problem

Client needs a tool to create UML state diagrams to model any type system.

2. Objectives

To create a program that can visually model UML state diagrams.

3. Functionality

* Client should be able to create state diagrams.
* Client should be able to save the diagram to a file.
* Client should be able to import/load a diagram.
* Client should be able to save a serialization.
* Client should be able to run a simulation of the diagram.

4. Nonfunctional requirements

* Maximum efficiency/ease of use for the user.
* Exceptional system performance.
* Maximum reliability.