**Problem statement**

The university will implement a solution to provide students the ability to schedule their courses according to their needs by creating a smart scheduling system.

**Actors:**

1. **Student (S)**: A learner needing an optimized class schedule.
2. **Scheduling System (SS)**: A digital platform managing class allocations.

**Signals:**

1. S to SS: ***submitSchedulePreferences*** *-* signal sent by the student to indicate their preferred time slots, courses, and any constraints.
2. S to SS: ***requestScheduleChange* -** signal sent by the student to ask for modifications to their existing schedule due to conflicts or changes in their availability.
3. SS to S: ***optimizedScheduleGenerated* -** response signal providing the student with an optimized schedule that meets their preferences and avoids conflicts.
4. SS to S: ***scheduleConflictNotification*** **-** signal notifying the student of any scheduling conflicts that could not be resolved and offering alternative options.