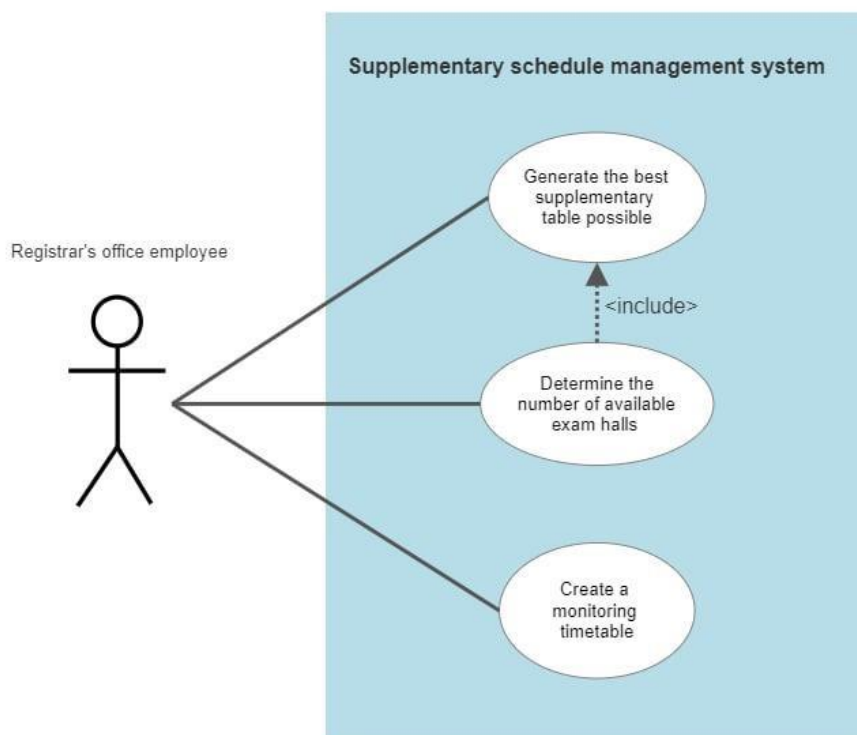# UML Diagram

- **The Purpose of this document is to provide a better understanding of the different aspects related to the system which includes:**

  - Users and their interactions with the system.

  - The interactions between the system and itself.

  - Main Functions of the System and their Attributes.
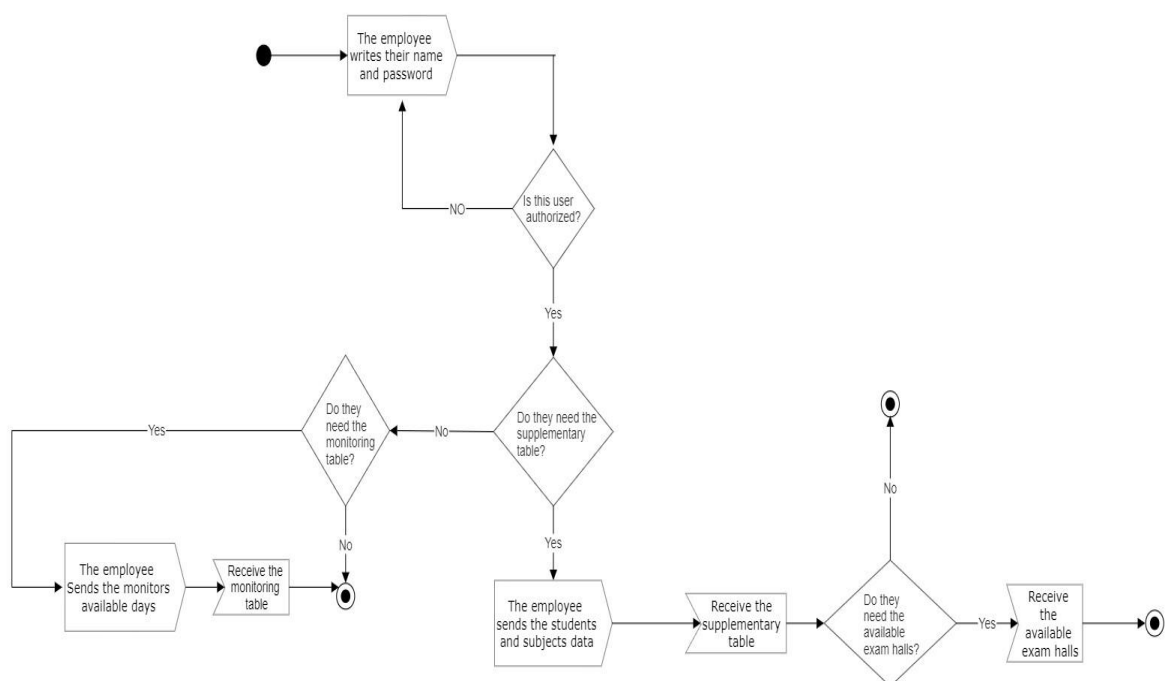
  - Other.

- ## Use Case Diagram:

As the head of the register office, Dr. Rania is in charge of all system operations. She sends requests to inquire about the availability of exam halls, then prepares the timetable for the supplemental exam and monitoring.

- In order to prepare for the exams, she must also inspect the empty halls and make sure they are available for the supplementary exams.
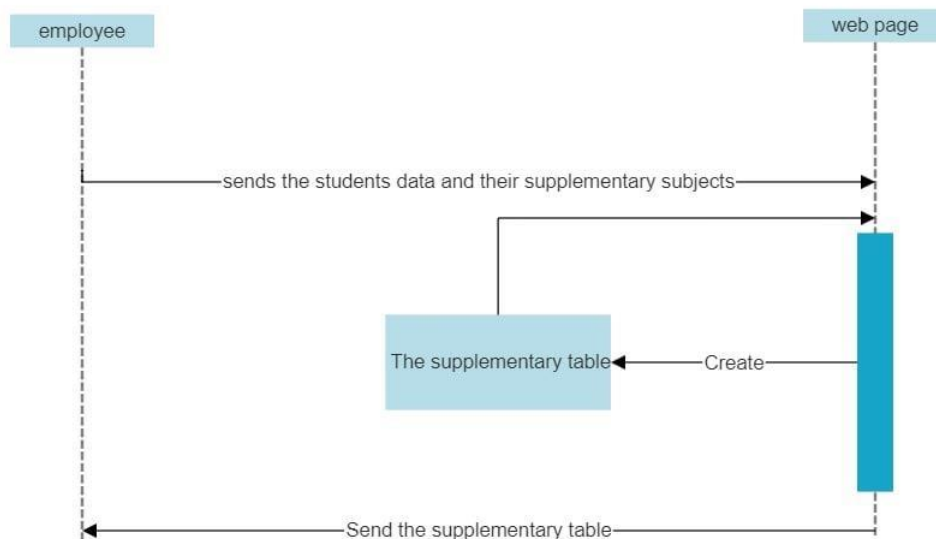
• **<u>Activity Diagram:</u>**

Activity diagram

- **The procedure steps are illustrated in the above diagram.**
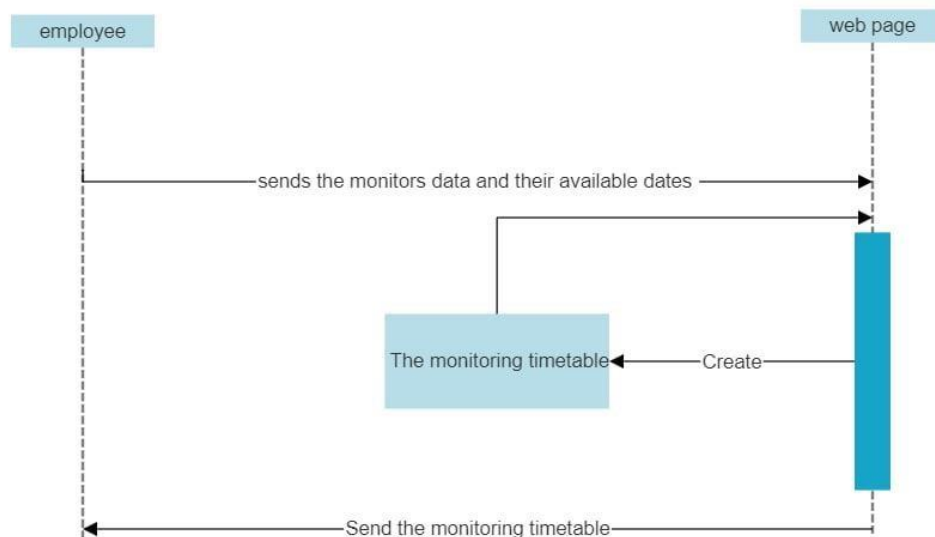
✝ **The system will then construct the ideal monitoring table and additional exam schedule by performing the subsequent steps:**
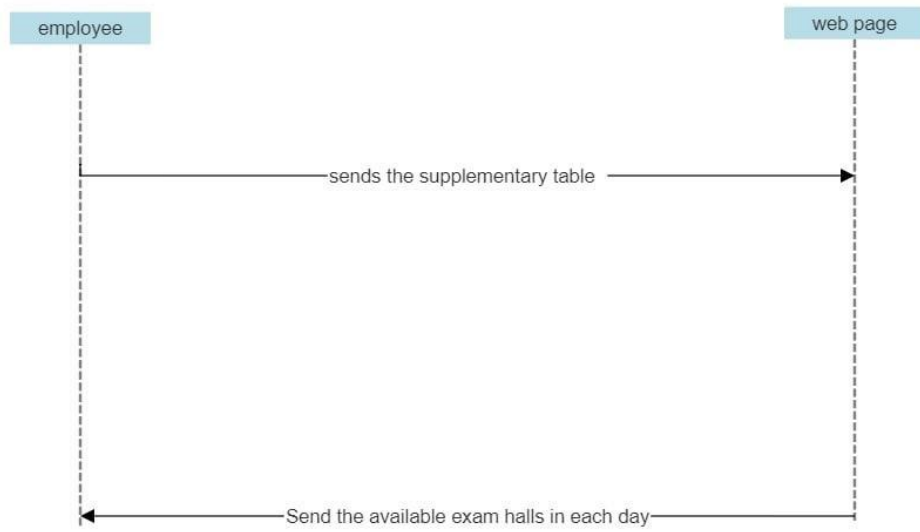
• Sequence Diagram:

Student supplementary table use case sequence diagram.

The Monitoring table use case sequence diagram.

Available exam halls use case sequence diagram.

• Class Diagram:

- **Static view of the application:**

Student
- name: String - index: int - materials: String
+ swap() + newState() + simulatedAnnealing()

Monitors
- monitor_name: String - monitor_phone: int - monitor_avail_sched: array
+ createSchedule()

Exam Halls
- hall_id: int - hall_avail_sched: array
+ createSchedule()