EduLink: Skills for all

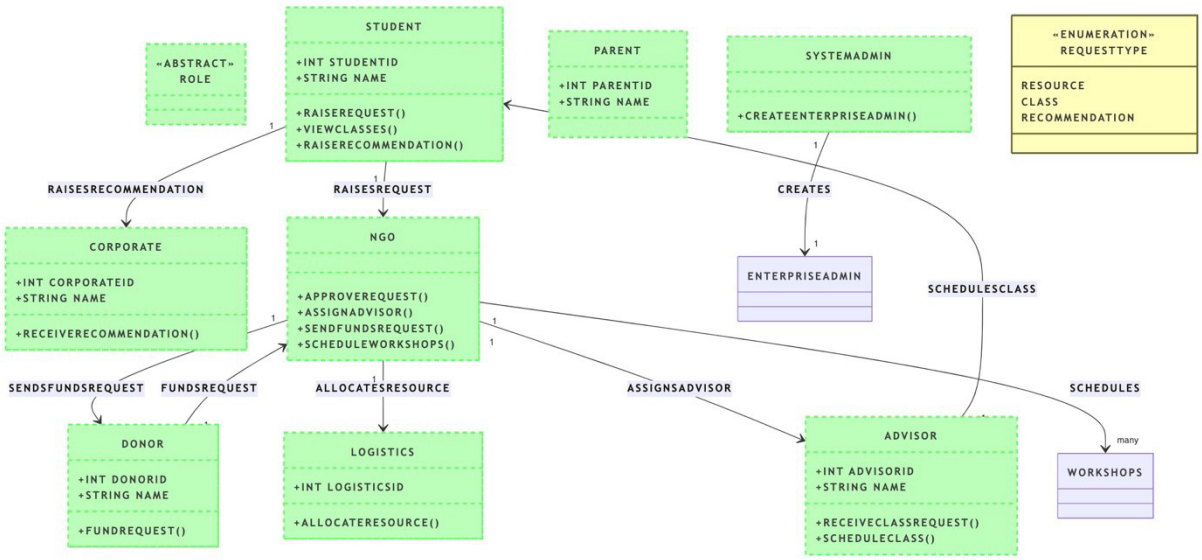
UML DIAGRAM

Diagram Description:

1. EcoSystem:
    - Acts as the central hub and connects to multiple Networks.
    - Manages the overall workflow and shared resources like the WorkQueue.
2. Networks:
    - Each Network represents a distinct entity or area within the system.
    - It contains multiple Enterprises, each fulfilling specific roles or responsibilities.
3. Enterprises:
    - Every Enterprise belongs to a Network and serves as a functional unit, handling specific objectives.
    - Examples of enterprises: NGOs, Corporates, Logistics, Educational Institutes.
    - Each enterprise is connected to its Organization Directory, which manages various organizations within it.
4. Organizations:
    - Organizations operate under their respective enterprises and execute tasks such as managing requests or scheduling events.
    - DiRerent organizations handle distinct tasks based on their roles (e.g., logistics, advisory, or teaching roles).
5. WorkQueue:
    - A centralized system shared across the ecosystem to manage and track requests.
    - Used for tasks such as:
        - Resource allocation.
        - Scheduling classes.
        - Approving or rejecting requests.
    - Ensures workflow transparency and coordination among diRerent entities.
6. Roles:
    - Include Student, Advisor, Donor, Parent, Teacher, Logistics, Corporate, and System Admin.
    - Each role interacts with specific UI Panels, tailored to their responsibilities.
    - The UI panels facilitate:

- Request handling.
- Task tracking.
- Decision-making and updates within their domain.

7. High-Level Flow:
   - The diagram showcases the relationship between high-level components (EcoSystem, Network, Enterprises) and their internal structures (Organizations, WorkQueues).
   - Roles operate at diRerent levels and interfaces within the system, ensuring that responsibilities and workflows are appropriately distributed.



Technical Details

- Development Environment:
  - The project is implemented and run using **Apache NetBeans IDE**. Ensure the IDE is properly configured for Java development.
- Database Management:
  - DB4O (Database for Objects) is used for data persistence.
  - **Important Note**: Due to a known glitch, a new `db4o` database file is created every time the program runs. To avoid conflicts:
    1. Locate and delete the old `db4o` file before restarting the program.
    2. Failing to do so might cause duplicate entries or inconsistent data.

- Email Functionality:
  - Emails are sent automatically for key updates, such as funding approvals, meeting schedules, and recommendations.
- Data Visualization:
  - Pie charts are implemented to represent important data insights, such as funding allocation, resource distribution, and request types.