Design and implement a Student Admission Management System in Java. (Try this definitely !)

Core Classes -

1. Student -id (auto-incremented)

* name(string)
* email (unique)
* marks (int)
* course (enum)
* admissionDate(LocalDate)

1. Course (enum) CORE\_JAVA, DBT, PYTHON , MERN, WEB\_JAVA,DEV\_OPS

Min marks required for admission

Max capacity (total seats available)

Functionalities

1. Admit Student Input: name, email, marks, course Validate: Marks must be ≥ minMarks of the course Course must have available seats If valid -> admit student (add to list + reduce available seats). Otherwise -> reject admission.
2. Cancel Admission Input: email If student found -> remove from list + free up one seat in the course. If not found -> show error.
3. Search Student by Email Input: email If student exists -> display details Else -> show “not found”
4. List All Students
5. List students by Course Input - course name
6. Will add sorting options later....

Exit

Technical Requirements

Use an ArrayListto store all student records.

Ensure email is unique (equals)

Later, the system will be refactored to use HashMap.