24csu350

Assingment:-04

Exceptional handling and System inTegration

```
#include <iostream>

#include <string>

using namespace std;

class UniException : public exception {

string msg;

public:

UniException(string m) : msg(m) {}

const char* what() const noexcept override { return msg.c_str(); } };

class Student {

public:

string id;

Student(string i) {

if (i.empty()) throw UniException("Invalid Student ID"); id = i;

}

};

class Course {

int capacity, count = 0;

public:

Course(int c) : capacity(c) {} void enroll(Student s) {

if (count >= capacity)

throw UniException("Course is full");count++;
```

```
cout << s.id << " enrolled.\n"; }

};

int main() {

try {

Student s1("S1"), s2("S2"); Course c(1);  // only 1 seat c.enroll(s1);

c.enroll(s2);  // this will throw }

catch (UniException& e) {

cout << "Error: " << e.what() << endl; }

}
```