



COMSATS University
Islamabad
Abbottabad Campus

DEPARTMENT OF SOFTWARE ENGINEERING

SOFTWARE DESIGN ARCHITECTURE

LAB-MID

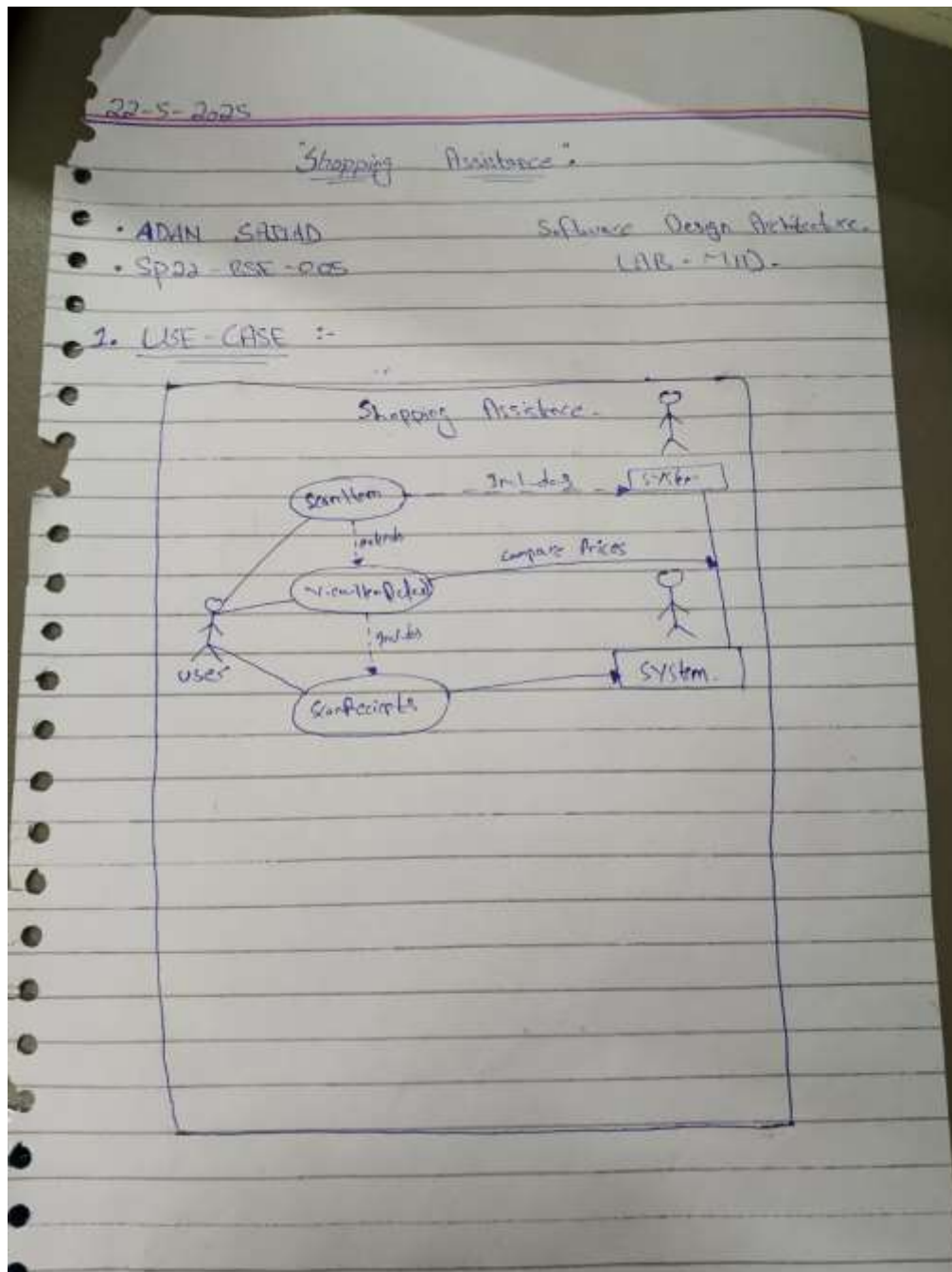
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Submitted To:-

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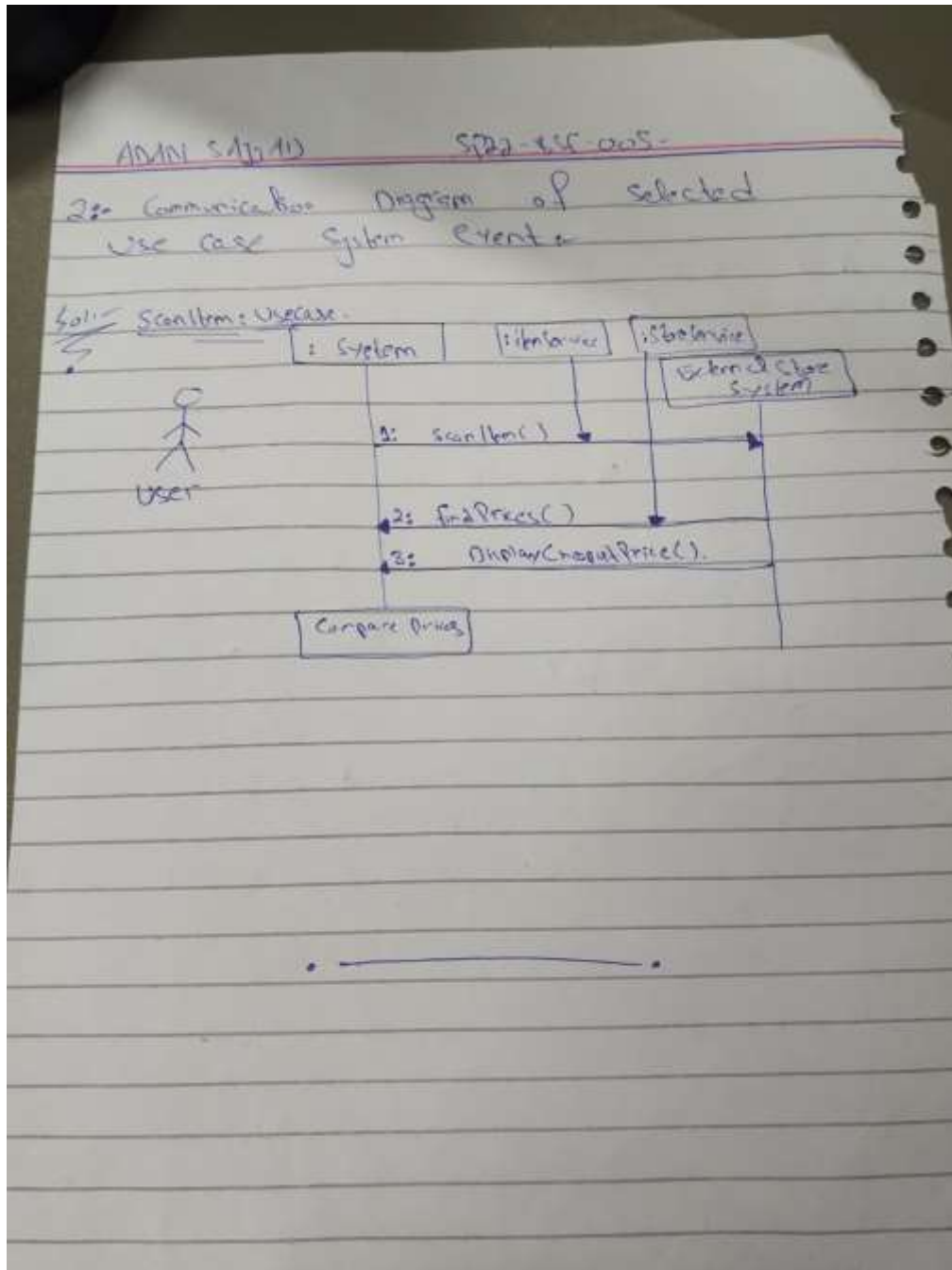
Section: BSE-5B

USE CASE DIAGRAM



COMMUNICATION DIAGRAM

USECASE Selected : ScanItem



PRINCIPLES / PATTERNS Used: -

1. Controller Principle: -

I used a System object to handle the user's action (when the user scans an item).

Instead of letting the user interface directly do all the work, the system receives the request and then controls what happens next.

This makes the design cleaner and more organized.

2. Information Expert Principle: -

We gave each part of the system the job it knows best:

ItemService knows how to get item details so it does that job.

StoreService knows how to find prices from stores so it handles that.

This way, each part of the system is doing the work related to it that makes the system easier to manage and update later.